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October 9, 2020

Debra Howland
Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

RE: Docket No. DE 19-057
Public Service Company of New Hampshire d/b/a Eversource Energy
Notice of Intent to File Rate Schedules

Settlement Agreement

Dear Director Howland:

Public Service Company of New Hampshire d/b/a Eversource Energy ("PSNH") is pleased to enclose for filing a comprehensive settlement agreement pertaining to PSNH's permanent rate request in the above-captioned proceeding. The enclosed settlement reflects the agreement of all parties to the case to resolve the matters pertaining to this rate filing and is to be considered by the Commission during the hearings scheduled to begin on October 26, 2020.

If you have any questions, please do not hesitate to contact me. Thank you for your assistance with this matter.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Matthew J. Fossum", written over a light blue horizontal line.

Matthew J. Fossum
Senior Regulatory Counsel

Enclosures
CC: Service List

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY

Docket No. DE 19-057

SETTLEMENT AGREEMENT ON PERMANENT DISTRIBUTION RATES

This Settlement Agreement on Permanent Distribution Rates (“Settlement Agreement”) is entered into this 9th day of October, 2020, by and among Public Service Company of New Hampshire d/b/a Eversource Energy (“PSNH,” the “Company,” or “Eversource”), the Staff of the Public Utilities Commission (“Staff”), the Office of the Consumer Advocate (“OCA”), Clean Energy New Hampshire (“CENH”), New Hampshire Department of Environmental Services (“NHDES”), The Way Home (“TWH”), Acadia Center, Walmart, Inc., AARP New Hampshire (“AARP”), and ChargePoint, Inc. (collectively, “Settling Parties”). This Settlement Agreement resolves all issues among the Settling Parties regarding the Company’s request to establish permanent rates in Docket No. DE 19-057.

SECTION 1. INTRODUCTION AND PROCEDURAL HISTORY

1.1 On March 22, 2019, PSNH filed with the New Hampshire Public Utilities Commission (“Commission”) a Notice of Intent to File Rate Schedules pursuant to N.H. Code Admin. Rule Puc 1604.05 pertaining to a request for temporary rates. On April 26, 2019, the Company filed with the Commission proposed tariffs and rate schedules, testimony, attachments and other information supporting that request. In that submission, PSNH sought an increase in temporary rates of approximately \$33 million effective July 1, 2019, pending the Commission’s determinations on the Company’s permanent rate request. On April 26, 2019, the Company also filed with the Commission a Notice of Intent to File Rate Schedules pertaining to its request for permanent rates.

1.2 On March 25, 2019, the OCA filed a letter of participation in this docket pursuant to RSA 363:28. The Commission granted motions for interventions in this docket on various dates by CENH, NHDES, TWH, Acadia Center, Walmart, Inc., AARP, and ChargePoint, Inc.

1.3 On May 8, 2019 the Commission issued Order No. 26,250, suspending PSNH's proposed tariff for a temporary rate increase pending further investigation.

1.4 On May 28, 2019, the Company submitted its permanent rate filing seeking an increase in rates of approximately \$70 million effective July 1, 2019, inclusive of the temporary rate increase. The request was supported by proposed tariffs and rate schedules, testimony and attachments from 14 witnesses, and other information supporting that request. On June 7, 2019 the Commission issued Order No. 26,256 suspending Eversource's proposed tariff for a permanent rate increase pending further investigation.

1.5 Following discovery and a technical session, on June 13, 2019, PSNH filed a settlement agreement on temporary rates ("Temporary Rates Settlement Agreement") signed by PSNH, Staff, OCA and TWH.¹ On June 27, 2019, the Commission issued Order No. 26,265 approving the Temporary Rates Settlement Agreement for a temporary increase of \$28.3 million in the Company's annual distribution revenues effective for service rendered on and after August 1, 2019. The temporary rates were approved subject to reconciliation based on the outcome of the permanent rate case.

1.6 On June 28, 2019, the Commission approved an initial procedural schedule for adjudication of the Company's permanent rate request that included multiple rounds of discovery, technical

¹ CENH did not object to the Temporary Rates Settlement Agreement but elected not to sign it.

sessions, settlement conferences, Staff and intervenor testimony and Company rebuttal testimony, merits hearings, and an anticipated Commission order by May 20, 2020. Staff, OCA and other intervenors filed testimony on December 20, 2019 and the Company filed its rebuttal testimony on March 3, 2020.²

1.7 On March 24, 2020, the Staff filed a letter in the docket describing the status of the matter and the agreement of the Company to a three-month extension of the procedural schedule to account for the state of emergency declared by Governor Sununu on March 13, 2020, regarding the COVID-19 pandemic. PSNH confirmed its agreement to the three-month extension in a letter filed on March 26, 2020. On April 24, 2020, Governor Sununu issued Exhibit D to Executive Order #29, pursuant to Executive Order 2020-04 (Executive Order #29, Ex. D), extending the Commission's authority to suspend rate schedules by six months, from 12 to 18 months.³

1.8 AARP filed a pleading on April 16, 2020 seeking an order directing PSNH to file supplemental testimony to reflect the impacts of the pandemic. AARP also requested that the Commission stay the effectiveness of the previously approved temporary rates. PSNH filed an objection to these requests on April 27, 2020. The Commission denied the AARP request as to the temporary rates in Order No. 26,363 (June 16, 2020). However, the Commission directed PSNH to file supplemental testimony and, invoking the authority previously granted by the Governor in his emergency directives of April 24, 2020, suspended PSNH's permanent rate schedule for an additional 6 months. This resulted in a full 18-month period of suspension, to

² Pursuant to the Commission's Order No. 26,363, supplemental testimony on return on equity and other topics was also filed on July 16, 2020 by the Company, Staff and OCA.

³ See RSA 378:6, I(a) (ordinarily providing for 12-month suspension period).

November 28, 2020.⁴ The Commission also directed Staff to work with the parties to develop and propose a procedural and hearing schedule in order to resolve this matter as expeditiously as possible.⁵

1.9 On June 19, 2020, Staff submitted a proposed procedural schedule for hearings on the merits. On July 7, 2020, the Commission issued a Secretarial Letter approving Staff's proposed procedural schedule including 20 days of hearings beginning on August 19, 2020 and ending October 30, 2020.⁶

1.10 In the weeks prior to and following the Commission's order extending the suspension period, the Company, Staff and OCA engaged in settlement discussions, which were subsequently expanded to include additional intervenors. Based upon these discussions, the Settling Parties agreed to the terms of this Settlement Agreement, subject to Commission approval. The Settling Parties recommend and request that the Commission approve this Settlement Agreement without modification.⁷

⁴ Order No. 26,363, at 9-10 (June 16, 2020).

⁵ On May 28, 2020, the Commission issued Order No. 26,361 to remove from this docket issues related to rate design for charging electric vehicles ("EV") raised by intervenors to Docket No. IR 20-004, the Commission's investigation of EV charging rates and rate structure. Issues pertaining to EV infrastructure were retained in this docket.

⁶ On July 17, 2020, OCA submitted a motion for rehearing of certain determinations in the July 7 secretarial letter. Specifically, after making various rules-based, statutory and constitutional arguments, OCA asked the Commission to reconsider its decision to hold remote hearings in the rate case and to convene the parties for a prehearing conference. The Commission denied these requests on August 10, 2020 via Order No. 26,392.

⁷ AARP filed a motion on September 25, 2020 seeking certain procedural rulings relative to how the Commission would conduct its hearing on this Settlement Agreement. That motion was withdrawn, without prejudice, on October 5, 2020.

SECTION 2. REVENUE REQUIREMENT INCREASE

2.1 The Company shall be allowed a total revenue increase of \$44.987 million effective for service rendered on and after January 1, 2021, to be reconciled back to July 1, 2019, the effective date of temporary rates, consistent with Order No. 26,265 (June 27, 2019) in this proceeding.

2.2 The agreed-upon revenue increase reflects adjustments that have been made to the revenue requirement in order to reach settlement.

2.3 The Settling Parties agree to the following: (a) a total revenue requirement increase of \$44.987 million which includes a reduction of \$1.1 million as a settlement concession, among other adjustments up and down; and (b) that the Company shall be authorized to establish a regulatory asset in the amount of \$5 million to be recovered over 10 years through an annual amortization of \$500,000 per year following approval of this Settlement Agreement (i.e., over the period July 1, 2019 through June 30, 2029).

2.4 It is explicitly understood and agreed to among the Settling Parties that adjustments made to the revenue requirement for purposes of reaching settlement shall not establish precedent for future rate proceedings.

SECTION 3. PLANT IN SERVICE

3.1 Staff's testimony includes observations and concerns about the Company's documentation of certain capital projects involving their planning, budgeting and management. To address this concern, the Company shall work with Staff and the OCA to develop a regulatory review template to guide the development and production of capital project documentation generated through the Company's capital authorization process. The purpose of the regulatory review template shall be to facilitate the Commission's review of future requests of the Company to recover the costs of

capital investments. To the extent possible pending completion of the business process audit described in Section 3.2 below, the Company, Staff, and the OCA intend to develop the template prior to May 2021 for incorporation in the Company's step adjustment filing due May 1, as described below in Section 10. The template shall be subject to revision in future years based on the recommendations resulting from the business process audit, described below in Section 3.2.

3.2 To further address Staff's concerns regarding the inconsistent documentation of capital projects as described in Section 3.1 above, the Company agrees to a business process audit of the Company, consistent with the one described in Appendix 2 to be conducted and overseen by Staff. The Company may provide input on the list of potential bidders and the scope of services to be provided in the business process audit RFP. Staff's selection decision of an auditor shall be final and shall not be appealable to the Commission by the signatories to the Settlement Agreement.

3.3 The OCA's testimony includes observations and concerns regarding the Company's investments in automated meter reading ("AMR") infrastructure. To address these observations and concerns, the Company shall employ a nine-year depreciable life for its existing AMR infrastructure, using whole life depreciation.

3.4 During the proceeding, the Company provided information relating to its accounting for the retirement of meters that were taken out of service as part of the Company's deployment of automated meter reading ("AMR") meters. The Settling Parties have discussed the meter retirements during discovery, technical sessions, and information exchanges to review the accuracy and validity of the accounting for and the numbers of meters reflected in the settled cost of service in this proceeding. Staff and the OCA continue to have questions regarding the accounting for and the numbers of the meter retirements. As a result, the Company, Staff, and the

OCA shall continue working collaboratively to verify the accuracy of the accounting for and number of meter retirements. To facilitate this discussion, the Company may elect, either on its own or at the request of Staff or the OCA, to hire an independent accounting firm, at the Company's cost, to verify the accuracy of the meter plant account 370, and in particular the retirement entries associated with the meters that were removed as part of the AMR deployment. The scope of this work will include an analysis of meters and transactions currently recorded on the Company's books and records. The independent accounting firm's work may include some or all of the following tasks: (1) obtain an understanding of the addition, unitization and retirement process by selecting transactions, testing these transactions for certain attributes, and identify their existence in the appropriate asset systems; (2) validate the existence of the meter assets included in rate base through a reconciliation of assets to the respective asset systems (Meter Management System and/or Customer Information System); (3) determine that the cost and unit quantity recorded for each asset included in the fixed asset system is appropriate; and (4) determine the appropriateness of "AMR meter" retirements. Nothing in this settlement precludes the Staff or the OCA from petitioning the Commission, after such collaboration, to review the accounting for the retirement of the Company's metering infrastructure, except that any such petition, if filed, must be filed no later than April 30, 2021.

SECTION 4. METERING INFRASTRUCTURE: FEASIBILITY ASSESSMENT

4.1 The OCA's testimony includes observations and concerns regarding the Company's investments in automated meter reading ("AMR") infrastructure. For example, the functionalities provided by AMR infrastructure are limited when compared to those provided by advanced metering, which may be necessary to offer advanced rate designs and other offerings due to their ability to collect and transmit interval data. In light of these observations and concerns, the

Company shall conduct an assessment of the feasibility of deploying advanced metering functionality (“AMF”) in New Hampshire, building upon the work recently conducted by Eversource Energy in Connecticut and filed with the Connecticut Public Utilities Regulatory Authority. The assessment will include the following parameters, with the recognition that conditions in New Hampshire are different than those that prevail elsewhere in the Eversource Energy service territories:

- (a) The assessment shall be performed by an outside consultant mutually agreed to by Staff, the OCA, and PSNH. The outside consultant responsible for the feasibility study in Connecticut shall be evaluated first and, if not mutually agreed to by Staff, the OCA, and PSNH, other consultants shall receive consideration.
- (b) The assessment shall include (but not be limited to) an assumption that AMR meters had not been deployed by PSNH.
- (c) The Settling Parties agree that the assessment shall include the following components:
 - 1. The Assessment shall include a project management phase with a deliverable documenting the detailed project schedule with participation requirements by subject matter experts and stakeholders and weekly reports from the consultant documenting progress on Assessment deliverables highlighting project risks and mitigations;
 - 2. The Assessment shall analyze multiple scenarios, including but not be limited to: (i) a scenario that assumes that previously deployed analog meters remain in service and are manually read; (ii) the Company’s currently deployed meters and its current approach to meter reading; and

(iii) a scenario assuming that the Company's existing AMR meters are replaced with technologies capable of offering advanced metering functionality, considering both full and partial (opt-in) meter deployment scenarios.

3. For each scenario that involves the deployment of new technologies, the assessment shall analyze the effects of all practicable deployment timelines;
 4. For each scenario, the Assessment shall quantify life cycle costs to deploy and maintain new infrastructure over the expected useful life of the assets;
 5. For each scenario, the Assessment shall document life cycle costs and benefits that can be quantified on a net present value basis, as well as those that may be characterized qualitatively;
 6. The Assessment shall examine whether existing broadband or cellular communication networks can be used and meters or other devices offering advanced metering functionality and time varying rates can be offered on an opt-in basis;
 7. The Assessment shall include a sensitivity analysis for the most impactful cost and benefit uncertainties. The scope of work shall include an assessment of New Hampshire customer propensity to adopt opt-in time of use rates and New Hampshire geographic and demographic considerations for AMF deployment; and
 8. The Assessment shall include a review of cybersecurity and confidentiality concerns associated with AMF.
- (d) Quantification of benefits within the no AMR meters scenario identified in item (b) above shall be for illustrative purposes only and shall not be determinative of how

costs and benefits would be quantified within any potential future proposals by PSNH.

- (e) The Company, Staff, and the OCA shall collaborate in good faith and exercise best efforts to mutually agree upon the scope of work based on the foregoing provisions, and each shall have the opportunity to comment on the consultant's draft deliverables. The Company and consultant shall provide periodic updates to the Staff and the OCA and solicit input of the Staff and the OCA on material decisions during development of the assessment.

SECTION 5. MAJOR STORM COST RESERVE

5.1 The Company shall include \$12 million annually in rates for the major storm reserve, consistent with the amount presently included in PSNH's rates.

5.2 Rather than implement a reconciling mechanism for storm costs, the Company shall be permitted to file for a separate, temporary amortization of storm costs for storm events that exceed \$25 million per event which may include a request to recover costs for repair of damage due to such storm events through a surcharge (Storm Cost Adjustment Mechanism).

5.3 The Company shall continue to file reports on storm costs annually on May 1, consistent with current practice. Storms that have 100 percent of costs booked will be included in each storm report and any storms with costs that are not 100 percent booked will be included in the storm report in the year following the booking of all costs.

5.4 The Company shall annually offset the storm cost account #186430 directly with the balance in the funding account #228430, or a related successor account.

SECTION 6. VEGETATION MANAGEMENT PROGRAM

6.1 The Company shall be allowed to include \$27.1 million annually in rates for vegetation management. Of this amount, \$11.6 million annually is associated with enhanced tree trimming (“ETT”) and hazard tree removal; \$14.0 million annually is associated with scheduled maintenance trimming (“SMT”); and \$1.5 million annually is associated with full-width right-of-way (“ROW”) clearing.

6.2 The following terms apply to annual reconciliation of vegetation management program costs:

- (a) The Company may request recovery of its actual annual vegetation management expenses up to 10 percent over, or any amount under, the total amount allowed in base rates (\$27.1 million), credited to or recovered through the annual Regulatory Reconciliation Adjustment Mechanism as further described in Section 9 below.
- (b) The Company shall submit a detailed vegetation management plan on or by November 15th each year starting in November 2020 for the following calendar year’s vegetation work. The Company shall provide a summary of budgeted costs by program (i.e. ETT/Hazard Tree Removal, SMT and Full-Width ROW Clearing). Further details relating to the contents of the vegetation management plan are included as Appendix 3.
- (c) The previous calendar year’s actual vegetation activity shall be reconciled to the budget each year in an annual report submitted to the Commission by March 1. If the actual expense incurred in the prior calendar year is less than the amount in base rates (\$27.1 million) the Company may request either to carry that amount into the

next program year as an offset to the current year's expenditures or to return the under-spent amount to customers as a credit to the Regulatory Reconciliation Adjustment, subject to Commission approval. If the actual expense incurred in the prior calendar year is greater than the amount in base rates, the Company shall be allowed to recover amounts up to 10 percent of the amount in base rates through the Regulatory Reconciliation Mechanism (\$2.71 million + \$27.1 million = \$29.81 million total), subject to Commission approval. Amounts greater than 10 percent over the amount in base rates shall not be recovered through the Regulatory Reconciliation Adjustment Mechanism or any other recovery mechanism.

- (d) The first actual base rate reconciliation to be performed in the March 1, 2021 filing shall reconcile the costs from the period July 1, 2020 through December 31, 2020. The period January 1, 2020 through June 30, 2020 shall be reflected in the Company's recoupment adjustment.

6.3 The Company shall undertake a review of ETT and Hazard Tree Removal activities in an engineering review described in Section 11. The engineering review shall assess the benefits and costs of ETT and Hazard Tree Removal and make recommendations for targeted application of those programs and may result in adjustment to ETT/ Hazard Tree Removal budget after the review has been completed, as determined by the Commission pursuant to Section 11.5 of this Settlement.

SECTION 7. COST OF SERVICE ADJUSTMENTS

7.1 Since the time of restructuring, PSNH has been permitted to defer estimated environmental remediation/manufactured gas plant (“MGP”) costs primarily relating to former generation sites.⁸ The Company shall be allowed to recover the environmental reserve/MGP liability in the Stranded Cost Recovery Charge (“SCRC”) rate at equal cents per kWh across customer classes rather than in distribution rates. To address the shift to the SCRC, the Company has removed an annual amortization of \$2.3 million over four years as of December 31, 2018 from its proposed revenue requirement in this case and shall include it in the SCRC filing following approval of this Settlement Agreement. The amounts to be recovered in the SCRC shall be updated to reflect the actual deferred balance as of the time of the SCRC filing and be amortized over a four-year period. Future environmental costs shall be recovered on a current basis through the SCRC.

7.2 The Company shall use whole life depreciation.

7.3 On a monthly basis, the Company records an accrual for uncollectible expense representing an estimate of the amounts billed to customers but not paid and finally written off after all collection measures are exhausted. This monthly uncollectible expense accrual is calculated using a factor of historical account write-offs divided by revenue and multiplied by the current month retail revenue. Consistent with the Commission’s previously approved method,⁹ an amount equal

⁸ Under the terms of the 1999 PSNH restructuring settlement agreement as approved by the Commission in Docket No. DE 99-099, and as approved in three subsequent rate proceedings (Docket Nos. DE 03-200, DE 06-028, and DE 09-035), PSNH was allowed to defer estimated MGP liabilities as they are accrued for future recovery. The estimated costs were recognized when PSNH’s environmental scientists quantified the costs of site remediation, and when remediation work begins at a site, the reserve account is charged for remediation costs, such as labor and materials. The regulatory asset established for environmental costs, with appropriate carrying charges, is amortized to expense once recovery begins.

⁹ As discussed in the testimony of Eric H. Chung and Troy M. Dixon, Bates pages 092-93, the Company calculated uncollectible expense by taking total test year retail revenue of \$953,681,402 multiplied by a net write off ratio of 0.6571 percent, which represents a 3-year average of actual customer net write-offs as a percentage of retail revenues for the calendar years 2016 through 2018. This resulted in a total uncollectible expense of \$6,266,640.

to 47.7 percent of uncollectible expense shall be allocated to and collected in the default Energy Service Rate, consistent with the Company's initial filing.

SECTION 8. COST OF CAPITAL

8.1 The Company shall be allowed a return on equity of 9.3 percent.

8.2 The Settling Parties have agreed that a capital structure of 54.4 percent equity and 45.6 debt shall be used for purposes of determining the Company's revenue requirement in this proceeding.

8.3 The Company shall be allowed a pre-tax weighted cost of capital of 6.87 percent.

8.4 The capital structure and overall cost of debt has been adjusted to reflect the issuance of \$150 million in long-term debt in August 2020 at favorable rates, which reduced both PSNH's cost of debt and its overall cost of capital.

SECTION 9. ANNUAL REGULATORY RECONCILIATION ADJUSTMENT MECHANISM

9.1 The Company shall be authorized to implement an annual Regulatory Reconciliation Adjustment ("RRA") mechanism, which is intended to allow the Company to request recovery or refund of the limited set of costs identified below:

- (a) Regulatory Commission annual assessments and consultants hired or retained by the Commission and OCA. In accordance with RSA 363-A:6, amounts above or below the total Commission assessment, less amounts charged to base distribution and default Energy Service, shall be recovered through the RRA. The amount in

That amount was then allocated 52.3 percent to distribution and 47.7 percent to energy service based on the ratio of test year distribution revenues to the sum of test year distribution revenues plus test year energy service revenues. This calculation is also provided in Attachment EHC/TMD-1 (Perm), Schedule EHC/TMD-8 (Perm), page 2. The allocation methodology was first established as a result of the settlement order in Docket No. DE 06-028 in which the Company was directed to allocate uncollectible expense using the proportion of distribution and energy service revenues.

base distribution rates pertaining to Commission assessments is \$5,220,056 reflecting the fiscal year 2020 assessment to PSNH and excludes \$10,000 which is to be recovered through the default Energy Service rate per Docket No. DE 14-238 and RSA 363-A:2, III. Additionally, legal and consulting outside service charges related to Commission approved special assessments assessed by the Commission to the Company for the expenses of experts employed by the Commission, Staff, and OCA pursuant to the provisions of RSA 365:37, II, RSA 365:38-a, and RSA 363:28, III shall also be recovered through the RRA. The Settling Parties acknowledge that current base distribution rates do not include any costs associated with consultants hired or retained by the Commission, Staff, and OCA, and any costs incurred within the calendar year shall be included in the RRA for recovery in the year following the year in which they are incurred. To the extent any such costs are recovered through another rate or method, they shall not be recovered through the RRA.

- (b) Vegetation management program variances as described in Section 6 above. The RRA shall include the calendar year over- or under-collection from the Company's Vegetation Management Program. The over- or under-collection shall be credited or charged to the RRA on August 1 of the following year. The Company may request transfer of unspent amounts to the subsequent year's Vegetation Management Program budgets. The amount in base rates shall be \$27.1 million for ETT, Hazard Tree Removal, ROW and SMT programs. The amount to be recovered in the RRA shall be based on the overall vegetation management program variance for the prior calendar year, rather than variances for individual

activities within the overall program. The first RRA shall recover any over/under recoveries for the July 1, 2020 – December 31, 2020 vegetation management program associated with activities related to ETT, Hazard Tree Removal, and ROW clearing consistent with the expenditures noted in extension of the Temporary Rates Settlement Agreement as described in the Staff's March 24, 2020 letter in this docket. The first full year of the \$27.1 million total vegetation management program reconciliation shall begin in the 2021 annual reconciliation.

- (c) Property tax expenses, as compared to the amount in base rates. Consistent with RSA 72:8-e, property tax over- or under-recoveries as compared to the amount in base distribution rates shall be adjusted annually through the RRA. The amount included in base distribution rates for property tax expense shall be \$45,186,407 based on property tax expense as of December 2019, normalized to exclude any credits related to property tax settlement proceeds for tax years preceding the test year. On an annual basis, actual property tax expense for the prior calendar year shall be compared against the amount in base rates and any variances will be reconciled through the RRA mechanism. Annual actual property tax expense shall be normalized to adjust for any credits received due to abatement settlement proceeds received for tax years preceding the test year. The RRA shall recover any over- or under- recoveries beginning in calendar year 2020.
- (d) Lost-base distribution revenues associated with net metering, as calculated consistent with RSA 362-A:9, VII and the Commission's approved method in Order No. 26,029 (June 23, 2017) in Docket No. DE 16-576. The Settling Parties acknowledge that base distribution rates do not include any lost base distribution

- revenue associated with net metering for installations occurring on or after January 1, 2019. The amount of lost base distribution revenue shall be calculated based on the cumulative net metering installations from January 1, 2019 forward unless a different recovery methodology is adopted by the Commission in Docket No. DE 20-136, Recovery Mechanism and Rate Treatment for Net Metering and Group Host Costs, or any other docket. The RRA shall recover lost base distribution revenues beginning as of January 1, 2019.
- (e) Storm cost amortization final reconciliation and annual reconciliation updated for actual cost of long-term debt. The RRA shall be used to reconcile the recovery amount of the storm costs through December 31, 2018, which are included for recovery as part of the temporary rate increase. Consistent with the temporary rate settlement, the \$68.5 million currently being recovered over five years shall be reconciled based on final actual costs, including any audit adjustments, and to reflect the actual cost of debt over time. As part of the temporary rate settlement agreement, PSNH began amortizing the unrecovered storm costs as of December 31, 2018, which were estimated to be \$68,474,355, over a five-year period beginning August 1, 2019. As of August 1, 2019, PSNH began applying a carrying charge on these storms equal to its embedded cost of long-term debt. On an annual basis through July 31, 2024, the RRA shall reconcile the amortization amount to adjust for the Company's actual cost of long-term debt interest rate as filed in the Company's Form F-1 on a quarterly basis.

9.2 The RRA shall be established annually based on a full reconciliation with interest for any over- or under-recoveries occurring in prior year(s). Interest shall be calculated at the prime rate,

to be fixed on a quarterly basis and to be established as reported in *The Wall Street Journal* on the first business day of the month preceding the calendar quarter (“Prime Rate”). If more than one interest rate is reported, the average of the reported rates shall be used. Accumulated Deferred Income Taxes (“ADIT”) shall not be included in the calculation of carrying charges on the over or under recovery of the RRA. ADIT reflects deferred income taxes caused by differences in accounting for expenses for tax purposes as compared to book accounting purposes. The carrying charges applicable to the RRA are intended to represent a proxy (Prime Rate) for the short-term cost to customers of over-collecting, or to the Company of under-collecting expenses. Because, unlike rate base ADIT, the items recovered through the RRA will generally turn around over a much shorter time period than plant-related ADIT, and because the Prime Rate is not intended to reflect the Company’s weighted average cost of capital, the Company will not include ADIT in the calculation of carrying charges for over or under recoveries associated with the RRA. For purposes of billing under the alternative net metering tariff that became effective September 1, 2017, the RRA shall be considered part of the credit to net metering customers, unless determined otherwise by the Commission, either in Docket No. DE 20-136, Recovery Mechanism and Rate Treatment for Net Metering and Group Host Costs, or otherwise.

9.3 By March 1 of each year the Company shall submit a filing containing reports on PSNH’s reliability statistics and vegetation management activities, and requesting the Commission open a new docket to consider the filing and other RRA issues. Such reports shall include information on reliability and vegetation management activities similar to information historically included in the Company’s Reliability Enhancement Plan filings. Further detail regarding the report contents is provided in Appendix 4. The Company shall also include as part of this annual filing the proposed adjustment to the August 1 RRA associated with prior calendar year vegetation management activities, as described in Section 9.1(b) above. On or by May 1 of each year, the Company shall

update its RRA filing with information pertaining to all other components of the RRA filing, along with supporting testimony and exhibits for rates effective August 1.

SECTION 10. STEP ADJUSTMENTS

10.1 The Company shall be allowed three step adjustments as follows:

- (a) Step 1 shall reflect an increase to account for calendar year 2019 plant-in-service and shall be implemented concurrent with the increase in base rates in this proceeding. This first step shall be subject to the following conditions:
 - i. The revenue requirement shall be capped at \$11 million.
 - ii. The step shall include only allowed projects and annual projects and programs closed to plant in 2019, excluding new business/growth-related projects.
 - iii. The rate for the first step shall be designed to recover the value of the step adjustment from January 1, 2021 through July 31, 2021. Beginning August 1, 2021 (the rate effective date of the second step adjustment), the rate shall be adjusted going forward to reflect a 12-month calendar recovery of the first step.
 - iv. The projects and programs that may be included in the step are identified in the listing attached as Appendix 5.
- (b) Step 2 shall reflect an increase for calendar year 2020 plant-in-service and shall be effective August 1, 2021, subject to the following conditions:
 - i. The revenue requirement associated with this step shall be capped at \$18 million.

- ii. This step shall include only allowed projects/programs closed to plant in 2020, excluding new business/growth-related projects.
 - iii. The projects and programs that may be included in this step are identified in the listing attached as Appendix 5. The Settling Parties agree that the Company may substitute projects prior to the commencement of the review period if projects identified in this appendix are not deployed.
- (c) Step 3 shall reflect an increase for calendar year 2021 plant-in-service to be effective August 1, 2022 and shall be subject to the following conditions:
- i. The revenue requirement associated with this step shall be capped at \$9.3 million.
 - ii. This step shall include only allowed projects and programs closed to plant in 2021, excluding new business/growth-related projects.

10.2 For the first step, the following process shall apply. In recognition of the limited time to make changes to the Company's documentation as well as the historical nature of the projects in issue, for the first step increase related to capital investments made in 2019, the Company shall make a filing at or around the time of the filing of this Settlement Agreement with testimony and supporting information describing the capital projects placed in service in calendar year 2019, as well as testimony and supporting information describing the proposed rate impact, using the documentation available at the time of the filing. In addition, the Company's initial filing shall provide a summary list of capital projects, excluding new business projects, showing, at least: the project name and description; initial budget by project; variances from the initial budget; and final actual costs. After the Company's initial filing, and upon the request of Staff, the Company shall provide further information related to a sampling of the Company's projects, including but not

limited to Project Authorization Forms, Supplemental Request Forms, and work order cost detail summarized at the project level by cost category over the life of the project.

10.3 For the second and third steps the following process shall apply. The Company shall make a filing by May 1, 2021, for the second step increase, with rates effective August 1, 2021 and the Company shall make a filing by May 1, 2022, for the third step increase, with rates effective August 1, 2022. Each filing shall include, at least, the following documentation and process steps:

- (a) The Company shall provide the amount of the investments to be included in the step increases (by project) and detailed project descriptions including the initial budget, the final cost, and the date on which each project was booked to plant in-service.
- (b) For each project, all project documents will be provided including, but not limited to, Project Authorization Forms, Supplemental Request Forms, and work order cost detail summarized at the project level by cost category over the life of the project.
- (c) After the Company's initial filing, and upon request of Staff, the Company shall provide additional information to aid in review of the initial filings.
- (d) For the second and third step increases, the Company shall conform the documentation to the template to be agreed to in accordance with Section 3 above, to the extent possible and subject to limitations that may exist in relation to retroactive application of a new format.
- (e) For all steps, including the first step, the Company agrees that if the actual costs are less than budgeted amounts, the actual amounts shall be used to calculate the step

adjustments. If the actual cost of the capital additions exceeds the budgeted amounts, the Company may seek recovery of the excess through the step adjustment process, up to the specified step adjustment caps. If not addressed through the step adjustment, the Company may seek recovery in its next rate case.

- (f) The revenue requirement for the step adjustments shall be calculated in a manner similar to that used in the Company's initial filing at Bates 313-320 (Attachment EHC/TMD-3 (Perm)), except that it will exclude recovery of Enterprise IT Project costs, and Union Contractual Adjustments.
- (g) With respect to timing of filing documentation and the step process, the Company shall file the required documentation and supporting information on or by May 1 of each year for rates effective as of August 1 of each year. The Company acknowledges that: (1) Staff and the OCA require at least 90 days to review the each step; and (2) Staff and the OCA agreement to step adjustments does not foreclose full prudence review during analysis of each step adjustment, including the Company's decision to make an investment and the management of each project.
- (h) Incremental equipment/project costs directly resulting from the Company's recently revised SYSPLAN 008 and SYSPLAN 010 shall be ineligible for recovery within these steps. Project costs relating to asset condition may be recoverable.

10.4 All step increases shall be subject to Staff audit and reconciliation based on the results of the audit, as approved by the Commission.

10.5 Nothing in this Settlement Agreement shall preclude the Settling Parties from disputing the prudence of individual investments requested for recovery within the step increases.

10.6 The Company shall not request recovery of any capital costs associated with plant placed in service outside of the above-described step adjustments until the Company's next distribution rate case filing, which shall be based on a test year ending no sooner than December 31, 2022, and which shall be filed no earlier than the first quarter of 2023.

SECTION 11. ASSESSMENT OF FUTURE DISTRIBUTION INFRASTRUCTURE NEEDS

11.1 The Company's initial petition included proposals related to certain practices and planned capital investments related to system resilience, and the potential acceleration of those investments under what it described as a Grid Transformation Enablement Program. Several parties filed testimony containing observations and concerns regarding those investments. In light of these observations and concerns, at the Company's expense, the Company shall hire an engineering firm to perform a condition assessment of the PSNH distribution infrastructure, including substations, to provide recommendations related to the Company's short and long-term system needs consistent with the requirements of least-cost integrated resource planning.

11.2 As part of the condition assessment, the engineering firm shall review the cost-effectiveness of using: (1) steel poles in right-of-way (ROW); (2) Class 2 poles as a standard pole; (3) composite cross arms; (4) relocated ROW facilities; (5) spacer cable and tree wire; and (6) reconductoring of under-sized wire. The assessment shall also include ETT and Hazard Tree Removal activities.

11.3 The Company intends to continue with its current practices as defined in Section 11.2 above pending the engineering firm's assessment and substantiation of those practices as consistent with good utility practice and least-cost planning, subject to Commission determination.

11.4 At the Company's expense, the Company shall conduct a comprehensive survey of PSNH's customers regarding their prioritization of reliability and resiliency versus cost. The Company shall work collaboratively with Staff and the OCA on development of the survey instruments.

11.5 The New Hampshire-specific engineering assessment and survey shall be submitted by March 31, 2021 as supplemental testimony in the docket for the Company's 2020 least-cost integrated resource plan (LCIRP) filing.

11.6 The Settling Parties agree the Commission may contract with a consultant to review the results of the PSNH consultant's engineering assessment, and perform other engineering work as needed. The costs of such a review shall be recoverable through the RRA mechanism.

SECTION 12. FEE FREE CREDIT/DEBIT CARD PAYMENT

12.1 In recognition of a general transition to "cashless" business transactions, with customers both expecting and preferring to use their credit/debit cards to pay their bills through mobile or on-line applications, as well as customer dissatisfaction with present bill payment options. PSNH proposed implementing a "fee free" option through its payment processing vendor that would allow customers to pay their monthly bills with a credit/debit card without incurring a transaction fee. The Settling Parties agree that PSNH shall implement a modified version of this proposal as described below.

12.2 PSNH shall implement a fee free credit/debit card payment system through its third-party vendor consistent with the proposal described in the testimony of PSNH witness Penelope McLean Conner, subject to the following:

- (a) At this time, fee free credit/debit card payments shall be implemented as an option for residential customers and shall only be available for one-time (i.e., not automatic recurring) payments. Customers who wish to pay by credit or debit card each month shall be required to enter their credit or debit card payment information for each payment made.
- (b) PSNH shall monitor the adoption rate by customers and shall report on the adoption rate to the Staff and OCA. Based upon the information reported, PSNH shall work with the Staff and OCA to determine whether amendments to the fee free program, such as expansion to commercial customers or to allow for recurring payments, should be recommended to the Commission for approval.
- (c) Information on the updated costs and adoption rates of the fee free program are included in Appendix 6.

12.3 The Company may recover \$375,000 of program-related costs in base rates annually beginning January 1, 2021, subject to reconciliation at the time of the Company's next rate case, with carrying charges on the over- or under-recovered balance calculated using the Prime Rate. If the actual costs resulting from customers' adoption of the fee free option exceed the \$375,000 allowed in rates in the first year, the Company shall increase the amount in rates to an amount reflecting the estimated cost, but not more than \$520,500, effective February 1, 2022. Testimony

and supporting materials relating to such increase, if requested, shall be included in the materials submitted with the Company's SCRC filing for effect on February 1, 2022.

SECTION 13. NEW START - ARREARS MANAGEMENT PROGRAM

13.1 Consistent with programs currently offered by PSNH's affiliates in Massachusetts and Connecticut, PSNH proposed implementing the "New Start" program in New Hampshire. New Start is an arrears management program that provides payment assistance for qualifying residential customers struggling with past due utility bills where for every required monthly payment an enrolled customer makes to the Company, a portion of their past due balance will be forgiven. The intent of the program is to: enable the customer to develop consistent bill payment habits; protect the customer from service disconnection while participating in the program; and enable the customer to get a fresh start as the arrears are forgiven with each payment made. The Settling Parties agree that PSNH shall implement the New Start program in New Hampshire.

13.2 Initial programming costs for implementing the New Start program shall be recovered in base rates, rather than through the RRA. The Company may recover \$340,000 of program start-up costs in base rates annually beginning January 1, 2021, subject to reconciliation at the time of the Company's next rate case, with carrying charges on the over-or under-recovered balance calculated using the Prime Rate. The Settling Parties acknowledge that implementing the program will require substantial programming changes, and customer and community education, and that, at present, such implementation is targeted to occur in the first quarter of 2022.

13.3 The Company shall be permitted to recover \$1,077,356 in base rates annually beginning February 1, 2022, subject to reconciliation at the time of the Company's next rate case, with carrying charges on the over- or under-recovered balance calculated using the Prime Rate. This

recovery shall fund a reserve account for funds collected through rates for the program. Testimony and supporting materials relating to implementing this adjustment to base rates shall be included in the materials submitted with the Company's SCRC filing for effect on February 1, 2022.

13.4 A description of the program rules is set out more fully in Appendix 7 and includes the following general requirements:

(a) \$12,000 per customer annual cap on forgiveness.

(b) The program shall be available to any customer whose account is coded "financial hardship" consistent with the Commission's Puc 1200 rules, and whose account has a balance of \$150 or more that is at least 60 days past due.

13.5 The New Start program shall initially be designed for implementation in line with the description in Appendix 7. The Company shall convene a stakeholder group within 60 days of the Commission's approval of this settlement agreement to develop a comprehensive program design for the New Start program and to assist in the long-term monitoring and evaluation of the program. The stakeholder group shall be open to interested members of the Settling Parties, and any other interested parties.

The stakeholder group shall not be considered as attached to the Commission, and the Staff will serve as a non-voting member of the group. Staff will attend meetings at its discretion.

The stakeholder group shall file a report with the Commission within 120 days of the final order in this proceeding to recommend a comprehensive program design. The members of the stakeholder group shall work in good faith through the stakeholder group process to reach consensus on the design of the program. The report shall include the recommendations of the

group and shall describe areas of consensus and any areas of disagreement. In cases of disagreement, a disagreeing member may make its own recommendations to the Commission concerning the program design

The stakeholder group shall determine its purposes and activities, which may include monitoring the program, addressing communication and training for social service agencies, and reviewing communications for customers pertaining to the program. Following completion of agreed business design requirements, the stakeholder group may meet periodically as it deems necessary and proper to review the program and make recommendations on further refinements while maintaining the core program design.

13.6 The Company shall develop a plan and format for quarterly reporting to be included in the stakeholder group report described in Section 13.5 above, utilizing the metrics described in Appendix 7. Such reports shall be filed with the Commission and provided to the stakeholder group on a quarterly basis until such time the stakeholder group determines a different reporting time.

SECTION 14. TARIFFS AND RATE DESIGN

14.1 The Settling Parties agree that the updates to the fees and charges as described in the updates to the Terms and Conditions of the Company's tariff, as well as the updates to the fees and charges pertaining to competitive electric power suppliers, provided in its initial filing should be approved as filed.

14.2 There shall be no tariff provision allowing default Energy Service customers to block incoming enrollments from competitive suppliers as had been proposed in the Company's initial filing.

14.3 The Company shall propose a symmetrical decoupling mechanism in its next rate case.

The Settling Parties acknowledge that provision does not necessarily constitute support of decoupling in principle nor support of any particular version of decoupling by any party, and does not prejudice any party's right to oppose, or to seek to modify, such proposal in the next rate case.

14.4 The Company's customer charge shall remain at the level implemented pursuant to the Temporary Rates Settlement Agreement until the Company's next rate case. Specifically, except for outdoor lighting rates, the base rate increases and any surcharges or sur-credits provided for in this Settlement, shall be collected solely through changes in consumption or demand charges.

14.5 The Settling Parties agree that the revenue increase shall be allocated in equal proportionality among the classes. For clarity, the Company shall directly assign costs to the outdoor lighting classes, and then allocate the remainder of the costs to each customer class on an equal percent basis. Specifically, the Company shall reduce the outdoor lighting class revenue allocation of costs by \$1.356 million and then allocate the total permanent rate increase in equal proportionality among all rate classes. The calculation of the allocation is included in Appendix 10.

14.6 Within six months of the Commission's approval of this Settlement Agreement, the Company shall propose amendments to its tariff to revise its optional time-of-day rate for residential customers. Such proposal shall include, but not be limited to, a two-period rate structure consisting of peak and off-peak periods, with a peak period lasting no more than eight hours. PSNH shall collaborate with interested members of the Settling Parties and other stakeholders in developing the proposal.

14.7 The Company agrees to phase out declining block rates for all rate classes where such rates exist. Half of the differential between the relevant blocks will be eliminated within this rate case, and the remaining half will be eliminated as part of the Company's next rate case.

14.8 The Company shall make the following changes to its tariff relative to outdoor lighting:

- (a) The assumed hours of operation contained in PSNH's Rate OL and Rate EOL shall be adjusted to one-half hour after sunset to one-half hour before sunrise consistent with those times for Concord, New Hampshire specified in the 2020 edition of the Farmer's Almanac and data available from the U.S. National Oceanographic Atmospheric Administration (NOAA). Midnight lighting hours shall be adjusted accordingly. The relevant adjustments shall be made available once necessary programming and bill changes have been implemented.
- (b) PSNH's Rate EOL will also be amended to include language allowing for advanced lighting controls. The relevant adjustments shall be made available once necessary programming and bill changes have been implemented.
- (c) PSNH shall create a new rate which will align more closely with the language of the Liberty Utilities LED-2 rate to allow additional flexibility and options for municipalities to install advanced lights and lighting controls, and to allow municipalities to own and maintain the streetlights in their communities. PSNH shall work with interested parties on final tariff language to implement this provision with a goal of having new tariff language submitted to the Commission for approval during the first quarter of 2021. A framework for this new rate offering is set out in Appendix 8. At the time the new tariff language is submitted, the

Company will also specify the effective dates of the changes set out in Sections 14.8(a) and (b) above.

SECTION 15. RECOUPMENT

15.1 The Excess Deferred Income Tax (“EDIT”) credit associated with Protected Property and Unprotected Pension (amortized over 10 years) shall be incorporated as a component of base rates, resulting in a reduction of the revenue deficiency of approximately \$5.1 million.

15.2 To the extent the Company experiences higher arrearages than anticipated due to the on-going pandemic, those arrearages shall be addressed in a separate docket specific to the costs and issues of the pandemic.

15.3 For EDIT balances not reflected in permanent base rates, the Company shall establish a tax sur-credit mechanism to ensure customers receive the full amount to which they are entitled and that the Company does not credit more than it owes. The sur-credit mechanism will incorporate the following:

- (a) 2018/2019 Federal EDIT balance of \$13.3 million will offset recoupment amount.
- (b) Remaining 5-year Federal EDIT balance of \$5.2 million.
- (c) Total 5-year NH EDIT balance of \$4.9 million.
- (d) Amortize the total balance to be returned via the Tax Cuts and Jobs Act (“TCJA”) sur-credit so that the liability is extinguished by the end of 2023.
- (e) See Appendix 1 for calculation of recoupment amount, net of \$13.3 million and the TCJA sur-credit.

SECTION 16. ELECTRIC VEHICLES

16.1 The Settling Parties acknowledge that matters of rate design regarding electric vehicles have been excluded from this rate case and are only included by reference in this Settlement Agreement with respect to one or more future filings by the Company in a separate docket, as discussed in paragraph 16.2(b) below.

16.2 With respect to make-ready investments supporting electric vehicle charging infrastructure, the Settling Parties agree to the following:

- (a) Within four months following the Commission's approval of this Settlement Agreement, PSNH shall file a proposal for make-ready investments supporting electric vehicle charging infrastructure in New Hampshire and request that the Commission open a new docket to consider the proposal;
- (b) As part of the filing referenced in (a) above, PSNH shall include a proposal for an alternative to demand charges for electric vehicle charging rates unless the Commission determines otherwise in the adjudicative proceeding announced in Order No. 26,394 (August 18, 2020) in Docket No. IR 20-004; and
- (c) PSNH shall collaborate with interested members of the Settling Parties in developing the proposal referenced in (a) above and other stakeholders requesting to be included.

16.3 The Settling Parties expressly acknowledge that this Settlement Agreement does not include or contemplate any specific cost recovery relating to any proposed deployment or development of electric vehicle charging infrastructure. In any future proposal by the Company

to support electric vehicle charging infrastructure, the Company shall include, at a minimum, information on the costs and benefits of such infrastructure which identifies the customers or customer classes to which the costs and benefits apply. The Company shall bear the burden of justifying any cost recovery proposed, and any of the Settling Parties, or other participants to the future proceeding, are free to take any position they choose relative to the proposed infrastructure investment and any proposed cost recovery.

SECTION 17. EFFECTIVE DATE

17.1 This Settlement Agreement is subject to and shall become effective upon Commission approval, with new permanent rates to become effective as of January 1, 2021. The Settling Parties shall use best efforts to obtain Commission approval on or before November 28, 2020.

SECTION 18. GENERAL PROVISIONS

18.1 A timeline of the events and filings contemplated by this Settlement Agreement is included as Appendix 11.

18.2 A revised tariff intended to incorporate the provisions of this Settlement Agreement is included as Appendix 9.

18.3 This Settlement Agreement is expressly conditioned upon the Commission's acceptance of all its provisions, without change or condition. If the Commission does not accept this Settlement Agreement in its entirety, without change or condition, or if the Commission makes any findings that go beyond the scope of this Settlement Agreement, and any of the Settling Parties notify the Commission within five business days of their disagreement with any such changes, conditions, or findings, the Agreement shall be deemed to be withdrawn, in which event it shall be deemed to be null and void and without effect, shall not constitute any part of the record in this proceeding,

and shall not be relied on by Staff or any party to this proceeding or by the Commission for any other purpose.

18.4 Under this Settlement Agreement, the Settling Parties agree to this joint submission to the Commission as a resolution of the issues specified herein only.

18.5 The Settling Parties agree that the Commission's approval of this Settlement Agreement shall not constitute continuing approval of, or precedent for, any particular principle or issue, but such acceptance does constitute a determination that the adjustments and provisions stated in their totality are just and reasonable and consistent with the public interest and that the rates contemplated will be just and reasonable under the circumstances.

18.6 This Settlement Agreement shall not be deemed an admission by any of the Settling Parties that any allegation or contention in this proceeding by any other party, other than those specifically agreed to herein, is true and valid. This Settlement Agreement shall not be construed to represent any concession by any Settling Party hereto regarding positions taken with respect to the Company's proposals in this docket, nor shall this Settlement Agreement be deemed to foreclose any Settling Party in the future from taking any position in any subsequent proceedings. The amounts associated with each of the settlement adjustments detailed herein are liquidated amounts that reflect a compromise of all the issues in this proceeding.

18.7 The pre-filed testimony and supporting documentation previously provided in this proceeding are not expected to be subject to cross-examination by the Settling Parties, which would normally occur in a fully litigated case. The Settling Parties agree that all pre-filed testimony and supporting documentation should be admitted as full exhibits for the purpose of consideration of this Settlement Agreement, and be given whatever weight the Commission deems

appropriate. Consent by the Settling Parties to admit all pre-filed testimony without challenge does not constitute agreement by any of the Settling Parties that the content of the pre-filed testimony is accurate or that the views of the witnesses should be assigned any particular weight by the Commission. The resolution of any specific issue in this Settlement Agreement does not indicate the Settling Parties' agreement to such resolution for purposes of any future proceedings, nor does the reference to any other document bind the Settling Parties to the contents of, or recommendations in, that document for purposes of any future proceeding. The Commission's approval of the recommendations in this Settlement Agreement shall not constitute a determination or precedent with regard to any specific adjustments, but rather shall constitute only a determination that the rates resulting from, and other specific conditions stated in this Settlement Agreement are just and reasonable. The Settling Parties agree to forego cross-examining witnesses regarding their pre-filed testimony and, therefore, the admission into evidence of any witness's testimony or supporting documentation shall not be deemed in any respect to constitute an admission by any party to this Agreement that any allegation or contention in this proceeding is true or false, except that the sworn testimony of any witness shall constitute an admission by such witness.

18.8 The rights conferred and the obligations imposed on the Settling Parties by this Settlement Agreement shall be binding on or inure to the benefit of any successors in interest or assignees as if such successor or assignee was itself a signatory party. The Settling Parties agree to cooperate in advocating that this Settlement Agreement be approved by the Commission in its entirety and without modification.

18.9 The discussions that produced this Settlement Agreement have been conducted on the understanding that all offers of settlement and settlement discussions relating to this docket shall

be confidential, shall not be admissible as evidence in this proceeding, shall be without prejudice to the position of any party or participant representing any such offer or participating in any such discussion, and are not to be used in connection with any future proceeding or otherwise. The content of these negotiations, including any documents prepared during such negotiations for the purpose of reaching a settlement, shall be privileged and all offers of settlement shall be without prejudice to the position of any party presenting such offer.

18.10 This Settlement Agreement may be executed by facsimile and in multiple counterparts, each of which shall be deemed to be an original, and all of which, taken together, shall constitute one agreement binding on all Settling Parties.

SECTION 19. CONCLUSION

19.1 The Settling Parties affirm that the proposed Settlement Agreement will result in just and reasonable rates and should be approved by the Commission.

[signature pages follow]

Attachment A

Public Service Company of New Hampshire
d/b/a Eversource Energy
Docket No. DE 19-057
Exhibit 58
Page 38 of 220

Dated: October 9, 2020

Public Service Company of New Hampshire d/b/a
Eversource Energy



By: _____
Matthew J. Fossum
Its Attorney

Dated: October 9, 2020

Staff of the New Hampshire Public Utilities
Commission



By: _____ for
Suzanne Amidon
Its Attorney

Dated: October 9, 2020

Office of the Consumer Advocate

By: _____
D. Maurice Kreis
Consumer Advocate

Dated: October 9, 2020

Clean Energy New Hampshire

By: _____
Elijah Emerson
Its Attorney

Dated: October 9, 2020

AARP New Hampshire

By: _____
John Coffman/Joseph Donahue
Its Attorney

Attachment A

Public Service Company of New Hampshire
d/b/a Eversource Energy
Docket No. DE 19-057
Exhibit 58
Page 39 of 220

Dated: October 9, 2020

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By: _____
Matthew J. Fossum
Its Attorney

Dated: October 9, 2020

Staff of the New Hampshire Public Utilities
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Suzanne Amidon
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Its Attorney

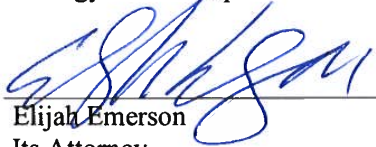
Dated: October 9, 2020

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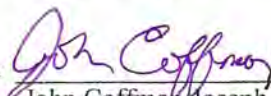
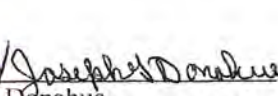
Dated: October 9, 2020

Clean Energy New Hampshire

By: _____
Elijah Emerson
Its Attorney


Dated: October 9, 2020

AARP New Hampshire

By:  
John Coffman/Joseph Donahue
Its Attorneys

Dated: October 9, 2020

The Way Home

By: 
Raymond Burke
Its Attorney

Dated: October 9, 2020

Acadia Center

By: _____
Amy Boyd
Director of Policy and Senior Attorney

Dated: October 9, 2020

NH Department of Environmental Services

By: _____
Christopher Skoglund
Climate and Energy Program Manager

Dated: October 9, 2020

Walmart, Inc.

By: _____
Melissa Horne
Its Attorney

Dated: October 9, 2020

ChargePoint, Inc.

By: _____
Melissa Birchard
Its Attorney


Dated: October 9, 2020

The Way Home

By: _____
Raymond Burke
Its Attorney


Dated: October 9, 2020

Acadia Center


By: _____ for
Amy Boyd
Director of Policy and Senior Attorney


Dated: October 9, 2020

NH Department of Environmental Services


By: _____ for
Craig A. Wright
Director, Air Resources Division


Dated: October 9, 2020

Walmart, Inc.


By: _____ for
Melissa Horne
Its Attorney

Dated: October 9, 2020

ChargePoint, Inc.


By: _____ for
Melissa Birchard
Its Attorney

**DE 19-057 PSNH Rate Case
Settlement Agreement List of Appendices**

1. Recoupment Calculation
2. Business Process Audit Scope
3. Vegetation Management Plan Description
4. Reliability and Vegetation Management Report Description
5. Step Adjustments – Project lists for 2020 and 2021
6. Fee Free Information
7. New Start Information
8. EOL-2 Streetlight Tariff Framework
9. Revised Tariff – Tariff No. 10
10. Rate Allocation and Bill Impact Information
11. Timeline of Filings and Events from Settlement

Attachment A

Public Service Company of New Hampshire
d/b/a Eversource Energy
Docket No. DE 19-057
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Rate Case Settlement Agreement
October 9, 2020
Appendix 1
Page 1 of 1

PSNH Rate Case 19-057

Appendix 1

Temporary Rate Recoupment Calculation		Final Settlement (\$000s)	
1	Revenue Deficiency per Settlement	\$ 44,987	Revised Settlement Revenue Deficiency
2	EDIT Credit in Permanent Rates	5,149	EDIT for Temporary Rate Period to be Refunded as Offset to Recoupment
3	Adjust Fee Free to reflect 1/1/21 Implementation	(375)	Remove Fee Free for Temporary Period
4	Adjust New Start to reflect 1/1/21 Implementation	(502)	Remove New Start Asset Amortization
5	Rev Req net of EDIT	\$ 49,259	Line 1 - Line 4
6	18 Month Factor	1.50	
7	Permanent Revenues for the 18 Month Temporary Rate Period	\$ 73,888	
8			
9	Revenue Deficiency per Temporary Rates	\$ 31,006	Temporary Rate Settlement Increase (28,278 adj to 31,006 to recover 12 months over 11 months)
10	Add Back 12 month TCJA Credit	13,151	Eliminate TCJA Credit from Temp Rate to avoid recovering the credit through recoupment
11	Temporary adjusted for TCJA Credit	\$ 44,157	Line 9 + Line 10
12	Collection Period (Months)	17	
13	Temporary Rates Collected	\$ 62,556	Line 11 / 12months * Line 12
14			
15	Unadjusted Temporary Rate Shortfall	\$ 11,332	Line 9 less Line 13
16			
17	TCJA Credit under recovery	\$ 5,565	TCJA Credit under recovery caused by extension of temporary rate period
18	Adjust Vegetation Mgmt for Recoupment (Table 2)	1,631	Limit recoupment to Veg Mgmt in Temp Rates
19	Vegetation Mgmt Underspend (07/19-12/19)	(11)	Actual Spend of \$7.689M vs \$7.7M in Temp Rates for 7/19-12/19
20	Total Recoupment	\$ 18,517	Sum of lines 17-19
21	Recover Final Year of Consultant Amortization	337	Add back to recoupment; eliminated from revenue requirement
22	EDIT Adjustment	(13,258)	Recoupment Offset per Staff Schedule
23	Net Recoupment	\$ 5,596	Sum of lines 20-22
Table 1: To reconcile TCJA credit provided to customers in temp rates vs TCJA credit owed to customers			
24	TCJA/REP Credit per Temporary Rates	\$ 13,151	12 month credit included as offset to Temporary Rate increase
25	Extend to 18/17 Months	1.42	Extends Annual Credit to 18 Month Temporary Rate Period
26	Total TCJA Credit during Temporary Rate Period	\$ 18,631	Line 24 * Line 25
27	Actual TCJA / REP reconciliation	13,066	Schedule 1, page 2 of APPENDIX 1 - filed as part of 7/22/20 communication
28	Net Overrefund During Temporary Rate Period	\$ 5,565	Line 26 - Line 27
Table 2: To eliminate impact of Vegetation Management on recoupment consistent with Temporary Rate Settlement Agreement			
29	Veg Mgmt for Permanent Rates	13,100	\$11.7M ETT/ETR + \$1.4M ROW
30	18 Month Factor	1.50	
31	Veg Mgmt Revenue Allowed Under Permanent Rates	\$ 19,650	
32			
33	Reconcilable Veg Mgmt from Temp Rates	\$ 15,022	ETT/ETR As Per Temporary Rate Settlement
34	Extend to 18/17 Months	1.42	Extends Annual Credit to 18 Month Temporary Rate Period
35	Veg Mgmt Under Temporary Rates for Full Temporary Rate Period	\$ 21,281	
36	Add Back to Recoupment Calculation	\$ 1,631	Line 35 - Line 31
Table 3: Calculation of Surcredit refunds			
37	Year 1-2 Federal EDIT w/Gross Up	\$ (13,258)	Per Staff Worksheet "Offset Recoupment"
38	Year 3-5 Remaining 5 Year EDIT Balance (Federal) w/Gross Up	(5,153)	Per Staff Worksheet "Surcredit Refund"
39	Year 1-5 Remaining 5 Year EDIT Balance (State) w/Gross Up	(4,887)	Per Staff Worksheet "Surcredit Refund"
40	Total Available EDIT	\$ (23,298)	
41	EDIT Utilized For Recoupment	(13,258)	Year 1-2 Federal EDIT w/Gross Up
42	EDIT for Surcredit	\$ (10,040)	
Table 4: To calculate net of Recoupment and TCJA Surcredit			
43	Recoupment	\$ 5,596	Line 23
44	TCJA Surcredit	(5,020)	Line 42 / 2 years (2021 through 2023)
45	Net year 1 impact of TCJA Surcredit and Recoupment	\$ 576	

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DE 19-057 PSNH Rate Case – APPENDIX 2**Business Process Review Audit**

As specified in Section 3.2 of the Settlement, the Company agrees to a business process audit of the Company to be conducted and overseen by Staff. That business process audit shall be conducted consistent with the process and scope set out in this attachment as specified below.

Process:

1. Staff will draft the RFP with input from the Company.
2. Company, Staff, and OCA will work collaboratively to draft the qualifications that will go into the RFP.
3. The consultant will be hired and supervised by the Commission and Staff, and paid for by the Company.
4. Staff and the Company will have an opportunity to review and comment on the consultant's final report prior to filing with the Commission.

Scope:

1. Review and assessment of the Company's capital planning, budgeting, approval, and management oversight, including:
 - a. Company's budgeting and approval process for capital expenditures.
 - b. Company's information systems used in work planning, tracking, and accounting.
 - c. Initial project design and development of budgets, cost estimates, revised budgets and budget variances.
 - d. Internal accounting for capital projects and administrative support.
 - e. Decision making by project managers involving design changes, engagement and hiring of outside contractors and the Company's oversight of contractors.
 - f. Decision making by project managers in addressing and controlling project costs including factors that necessitate the involvement of upper management.
 - g. Reviews by upper management of project costs and cost overruns and the application of cost controls.
 - h. Compliance of the above-listed items with good utility practices.

2. Review and evaluation of capital project documentation, including:

- a. Compliance with documentation policies and filing requirements.
- b. Initial project assessment and analysis in the PAF including consideration of known and foreseeable costs and risks.
- c. Use of Supplement Requests, including root cause analysis and lessons learned.
- d. Source documentation and supporting documentation.
- e. Recommendations for improving and enhancing the above documentation process.

3. Selective Project Review: The consultant will select a sample of capital projects for 2020 and 2021 to be included as a part of its examination and testing involving the above listed processes.

DE 19-057 PSNH Rate Case – APPENDIX 3**Vegetation Management Plan**

As required by Section 6.2 of the Settlement, in November of each year PSNH is to file a proposed vegetation management plan setting out the proposed vegetation management work for the coming calendar year. That plan filing shall include the following:

- A. A summary of budgeted costs by program (i.e. ETT/Hazard Tree Removal, SMT and Full-Width ROW Clearing).
- B Detailed information on each program as follows:
 - i. ETT/Hazard Tree Removal: Town; Circuit Number; Total Circuit Miles; Scheduled Circuit Miles; and Circuit Ranking by SAIDI and SAIFI (Tree Related only).
 - ii. SMT (Scheduled Maintenance Trimming, Mid-Cycle Trimming, Side Trimming and Customer Request Work, Hot Spot / Trouble Work, and Maintenance ETT): Town; Circuit Number; Total Circuit Miles; and Scheduled Circuit Miles.
 - iii. SMT (ROW Maintenance Mowing and Side Trimming): ROW Number; ROW Name; Voltage; and Total Acreage; and the percentage of the clearing attributable to distribution if transmission ROW.
 - iv. ROW Clearing: ROW Number; ROW Name; Voltage; and Total Miles; ROW Width; and the percentage of the clearing attributable to distribution if transmission ROW.

DE 19-057 PSNH Rate Case – APPENDIX 4**Reliability and Vegetation Management Reports**

As required by Section 9.3 of the Settlement, by March 1 of each year PSNH is to file reports of its reliability statistics and vegetation management activities for the prior calendar. Each report may be filed separately, but both shall be filed no later than March 1. Those reports shall include the following information:

For the Reliability Statistics Report:

1. Executive Summary
2. Reliability graphs (IEEE Criteria)
 - a. SAIFI, SAIDI, CAIDI, CIII – Distribution System Only
 - b. CAIFI, CTAIDI – Distribution System Only¹
 - c. SAIFI, SAIDI, CAIDI, CIII – Distribution System – Tree Related
 - d. SAIFI, SAIDI, CAIDI, CIII – Distribution (excluding Substation) Equipment Failure
 - e. SAIFI, SAIDI, CAIDI, CIII – Substation Equipment Failure
 - f. SAIDI (MED) - Storm MED; Equipment Failure MED; Other MED (Specify)
 - g. SAIDI and SAIFI by cause (Pie Charts)
3. O&M Activities related to reliability for prior year (\$ allocated and \$ spent if available)
 - a. Overhead circuit patrols (circuits to be patrolled planned and circuits patrolled actual)²
 - i. Indicate circuits and type of planned patrol
 - b. Underground circuit patrols including fault indicator replacements
 - c. Pole inspections (Number of poles targeted, and number of poles completed)
 - i. Include % of poles determined to be condemned
 - d. NESC Maintenance Repairs (locations targeted, and locations completed)
4. Capital activities related to reliability for prior year (\$ allocated and \$ spent if available)

¹ Due to Eversource's high penetration of SCADA enabled switches, CAIFI and CTAIDI presents additional representation of interrupted duration and frequency.

² Circuits that are patrolled more than once are considered only one entry and circuits patrolled during emergency outage are not included. Circuit miles patrolled for this report are for planned patrols.

- a. Reject pole replacement (number of poles targeted for replacement and poles replaced)
 - b. Underground Cable Repl. (# of locations and footage targeted and footage completed)
 - c. Other capital reliability projects (over \$100k. Will not include Annual projects)
Typical projects include circuit ties, obsolete equipment replacement, reconductoring to covered conductor, 4 kV conversions, pole top distribution automation, etc. (Description including reliability impact eg. $\$/\Delta CI$ or $\$/\Delta CMI$)
5. Worst Performing Circuit List (Worst 50)
 - a. SAIDI and SAIFI. Circuit SAIDI and SAIFI can be provided as part of the table, but the ranking should be based on system indices.

For the Vegetation Management report:

1. Company Testimony
2. Executive Summary (if not covered in Testimony)
3. Scheduled Maintenance Trimming (Incl. SMT, Midcycle, Hot Spot, Cust Work, METT, ROW Maint. Mowing/Side Trim)
 - a. Proposed budget (each category if applicable)
 - b. Actual spent
 - c. Town/Circuit Designation
 - d. Proposed circuit miles per circuit
 - e. Actual circuit miles per circuit
 - f. ROW Designation (ROW Maint. Mowing/Side Trim)
 - g. Voltage
 - h. Proposed acreage per ROW designation
 - i. Actual acreage per ROW designation
 - j. Percent of the clearing costs attributable to distribution if the ROW is shared with transmission
4. Enhanced Tree Trimming
 - a. Proposed budget
 - b. Actual spent
 - c. Town/Circuit Designation
 - d. Proposed circuit miles per circuit
 - e. Actual circuit miles per circuit
 - f. Circuit Ranking (Tree SAIDI and SAIFI - could be two different rankings)

5. Hazard Tree (Enhanced Tree Removal (“ETR”))
 - a. Proposed budget
 - b. Actual spent
 - c. Town/Circuit Designation
 - d. Actual number of trees removed per circuit

6. Right-of-Way (“ROW”) Clearing
 - a. Proposed Budget
 - b. Actual spent
 - c. ROW Designation
 - d. Voltage
 - e. Proposed circuit feet per ROW designation
 - f. Actual circuit feet per ROW designation
 - g. ROW width per ROW designation
 - h. Percent of the clearing costs attributable to distribution if the ROW is shared with transmission

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
Step Adjustment 1 - Projects Anticipated to be Placed in Service in 2019
Excludes New Business Projects

Line	Project Category	Project Description
1	Annual Blanket Project	DA9R: Non-Roadway Lighting PSNH
2	Annual Blanket Project	DG9R:Distributed Generation Field Design and Construction Reimbursable
3	Annual Blanket Project	DH9R: Line Relocations PSNH
4	Annual Blanket Project	DK9R: Maintain Voltage PSNH
5	Annual Blanket Project	DQ9R: System Repairs/Obsolescence PSNH
6	Annual Blanket Project	DR9R:Reliability Improvements PSNH
7	Annual Blanket Project	DT7P:Purchase Transformers and Regulators
8	Annual Blanket Project	HPS9R/D79R:Roadway Lighting PSNH
9	Annual Blanket Project	INS9R:Insurance Claims PSNH
10	Annual Program Project	6DCIP:NH Avigilon Intrusion Detection
11	Annual Program Project	A04S34:Direct Buried Cable Replacement
12	Annual Program Project	A07X45:Reject Pole Replacement
13	Annual Program Project	A07X98:NESC Capital Repairs
14	Annual Program Project	A08X45:Replace Steel Towers
15	Annual Program Project	A09S12:Replace Failed Cable - Post Tested
16	Annual Program Project	A10X04:Direct Buried Cable Injection
17	Annual Program Project	A12X01:Substation Battery Replacement
18	Annual Program Project	A12X02:Substation Ground Grid Upgrades
19	Annual Program Project	C01SPA01:Joint Poles Purchase & Sale
20	Annual Program Project	C03CTV:Cable TV Project Annual Program
21	Annual Program Project	C03DOT:NHDOT Project Annual Program
22	Annual Program Project	C03TEL:Telephone Projects Annual Program
23	Annual Program Project	CO1PCB:PCB Transformer Changeout Annual Program
24	Annual Program Project	CO1:New Business Specifics Unknown
25	Annual Program Project	DL9R:Distribution Line ROW Annual Program
26	Annual Program Project	DS9RD:Distribution Substation Maintenance Annual Program
27	Annual Program Project	DS9RE:ROW Replace Failed Equipment
28	Annual Program Project	DS9RS:Substation Annual-Substation Engineering group
29	Annual Program Project	DSPP8001:Distributed Generation Engineering Design and Construction
30	Annual Program Project	GF9R:Misc office equipment
31	Annual Program Project	GM9R:Tools/equipment - S/S Operations group
32	Annual Program Project	GT9R:Tools/equipment - Troubleshooter group
33	Annual Program Project	GX9R:Tools/equipment - Field Operations group
34	Annual Program Project	IT6DWANA:Telecom WAN Annual - PSNH
35	Annual Program Project	MINOR9R: Minor Storms Capital PSNH
36	Annual Program Project	NESCR: NESC Patrol/Repair O&M Expense
37	Annual Program Project	NHLC03:NH Line Contractors
38	Annual Program Project	NT006:General Expense
39	Annual Program Project	PW9R:Private Work
40	Annual Program Project	ROWLR:ROW Relocations - Reimbursable

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Step Adjustment 1 - Projects Anticipated to be Placed in Service in 2019
Excludes New Business Projects

Line	Project Category	Project Description
41	Annual Program Project	STORMCAP:NH Storm Capitalization
42	Annual Program Project	UB3CAD:Porcelain Changeout
43	Annual Program Project	VEHICLES:NH Vehicle Purchases Distribution
44	Specific Project	18707:2018 Facilities LOB Building & General Plant
45	Specific Project	18726:ML 2018 PSNH LOB - General Plant
46	Specific Project	18734:Garage Addition
47	Specific Project	18740:Cafe Renovations
48	Specific Project	19707:2019 PSNHD Facilities LOB projects under \$500k
49	Specific Project	19726:ML PSNH-D 2019 LOB - General Plant
50	Specific Project	19757:Bow Mobile Substation Garage Bay
51	Specific Project	A08W49:Keene Downtown UG Replacement Project
52	Specific Project	A09N05:Kingston S/S - Add Breaker Position
53	Specific Project	A12N01A:Berlin 4KV System Reconfiguration
54	Specific Project	A12W05:Replace Laconia Underground Switchgear 70W
55	Specific Project	A13S01:Rimmon S/S Add 2nd 115-34.5KV 44.8M
56	Specific Project	A13X04:Hazard Tree Removal
57	Specific Project	A14N10:Somersworth 34.5 KV OCB Replacement
58	Specific Project	A14N21:Berlin Eastside 34.5KV Line Breaker
59	Specific Project	A14S08:Garvins S/S Rebuild
60	Specific Project	A14W02:Daniel S/S (Webster)-34.5KV S/S Upgrade
61	Specific Project	A15C02A:388 Line Overload Solution Remote E
62	Specific Project	A15CDA:Central Region 2015 Distribution Automation Program
63	Specific Project	A15EDA:Eastern Region 2015 Distribution Automation Program
64	Specific Project	A15NDA:Northern Region 2015 Distribution Automation Program
65	Specific Project	A15SDA:Southern Region 2015 Distribution Automation Program
66	Specific Project	A15X01:Circuit Switcher TB31 Mobile
67	Specific Project	A16C02:12H4 West Side Conversion
68	Specific Project	A16C05:Valley St Area Solution
69	Specific Project	A16C09:Blaine St SS add 34.5-12kv 10MVA tr
70	Specific Project	A16C10:Jackman S/S - Replace Obsolete Equipment
71	Specific Project	A16E06:West Rye S/S Re-build
72	Specific Project	A16N02:Second transformer at Lost Nation S/S
73	Specific Project	A16X01:ESCC Control of Generation
74	Specific Project	A16X02:Circuit Tie 3271x2/311x1
75	Specific Project	A16X04:CAIDI Improvement
76	Specific Project	A16X05:NH Energy Park: audio visual equipment
77	Specific Project	A16X06:NH SOC/ESCC Backup
78	Specific Project	A16X08:1250 Hooksett Rd - AV Project
79	Specific Project	A17C04:Greggs S/S Removal
80	Specific Project	A17C13:Blaine St S/S Line Work
81	Specific Project	A17C17:Circuit Tie 3115X12 to 3615X1

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Step Adjustment 1 - Projects Anticipated to be Placed in Service in 2019
Excludes New Business Projects

Line	Project Category	Project Description
82	Specific Project	A17C21:Pine Hill S/S PLC Auto Scheme Replacement
83	Specific Project	A17C26:328 Line Reconductor
84	Specific Project	A17E01:Rye Area 4KV Study
85	Specific Project	A17E09:Rochester 4KV Conversion
86	Specific Project	A17E20:Ocean Rd S/S 34.5KV OCB Replacement
87	Specific Project	A17N02:Messer St - Replace TB70
88	Specific Project	A17N22:Beebe River S/S Cap Switcher Replacement
89	Specific Project	A17N24:Laconia S/S 24 VDC Control System & Relay
90	Specific Project	A17VRP:G&W Viper Warranty Replacement
91	Specific Project	A17W19:North Rd S/S Equipment Replacement
92	Specific Project	A17W23:Monadnock S/S Cap Switcher Replacement
93	Specific Project	A17X01:Mobile 115-34.5KV Substation
94	Specific Project	A18C21:Manchester Airport Duct Relocation
95	Specific Project	A18DA:Distribution Automation - Pole Top
96	Specific Project	A18E12:Circuit Ties 3172X1 - 3112X3
97	Specific Project	A18E16:West Rd Overloaded Steps
98	Specific Project	A18E23:Rochester Comcast Make Ready
99	Specific Project	A18N27:Laconia S/S Replace LTC Controls
100	Specific Project	A18VRP:Viper Replacement Project-Betterment
101	Specific Project	A18W10:55H1 Peterborough URD
102	Specific Project	A18W11:316X1 Circuit Tie Eastman Development
103	Specific Project	A18W13:Route 9 Roxbury-Sullivan 10439
104	Specific Project	A18W15:316 Line Rebuild
105	Specific Project	A18W22:Peterborough Roadway and Bridge Project
106	Specific Project	A18X01:Direct Buried Cable Replacement
107	Specific Project	A18X08:S Milford Relay Replacement
108	Specific Project	A18X20:CAIDI Improvement
109	Specific Project	A18XDA:Distribution Automation - Substation
110	Specific Project	A19C05:Reconductor Copper St Anselm Drive
111	Specific Project	A19C25:Reconductor Bedford Road, 360X7
112	Specific Project	A19DA:Distribution Automation - Pole Top
113	Specific Project	A19E11:Circuit Ties-Wakefield 362 to 3157
114	Specific Project	A19E26:Convert Four Rod Road in Rochester
115	Specific Project	A19E39:Replace Failed Cabbie Spring Rd Rye
116	Specific Project	A19LS:Distribution Automation - Line Sensors
117	Specific Project	A19N09:Relocate 1W1 Main Line onto Route 3
118	Specific Project	A19N50:346X1 Defective SPCA Replacement
119	Specific Project	A19S08:Relocate 3168X Bridge St S/S
120	Specific Project	A19S27:Relocate 314 Line around Heron Pond
121	Specific Project	A19S46:South Ave Derry Step Overload
122	Specific Project	A19W03:Replace Open Wire with Spacer Cable Route 63

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Step Adjustment 1 - Projects Anticipated to be Placed in Service in 2019
Excludes New Business Projects

Line	Project Category	Project Description
123	Specific Project	A19W10: Relocate Feed to Hinsdale Wastewater
124	Specific Project	A19X20: Replace Lattice Steel Towers
125	Specific Project	A19X221: Animal Protection at Thornton S/S
126	Specific Project	A19X32: NH Lateral Initiative
127	Specific Project	A19X64: S/S Security Upgrades CIP5 NH
128	Specific Project	C18ETT: NH ETT 2018
129	Specific Project	C18HAZ: Hazard Tree Removal
130	Specific Project	C18ROW: NH Full Width ROW Clearing
131	Specific Project	D1249A: Webster S/S Expansion/Cap Bank Sared Assets-CE
132	Specific Project	D1276A: Distribution Design for F107 Project
133	Specific Project	D1338A: Distribution Design L176 Line Replacement
134	Specific Project	DPMNHAMP: UCONN Damage Prediction Model Expansion
135	Specific Project	IASC1904: 1580 CIP PSP Expansion
136	Specific Project	IT18450: 2018 Win10 PC Lifecycle - PSNH
137	Specific Project	MS17N006: NH 2017 Storm Event N: Oct 29
138	Specific Project	NHMTR17: NH Capital Meter Annual Project
139	Specific Project	NHMTR18: NH Annual Meter Project for 2018
140	Specific Project	NHMTR19: NH Annual Meter Project for 2019
141	Specific Project	R15CDA: REP3 - 2015-2016 Central Region Distribution Automation
142	Specific Project	R15CTC: Circuit Tie Construction
143	Specific Project	R15DBI: Direct Buried Cable Injection
144	Specific Project	R15DBR: REP3 Direct Buried Cable Replacement
145	Specific Project	R15EDA: REP 3 2015-2016 Eastern Region Distribution Automation
146	Specific Project	R15HLDR: Hit List Reliability Enhancements
147	Specific Project	R15HLR: Heather-Lite Replacement
148	Specific Project	R15NDA: REP3 - 2015-2016 Northern Region Distribution Automation
149	Specific Project	R15NESC: NESC Capital Repairs
150	Specific Project	R15POR: Porcelain Change-out
151	Specific Project	R15RPR: Reject Pole Replacement
152	Specific Project	R15RWM: ROW System Hardening
153	Specific Project	R15SDA: REP3 - 2015-2017 Southern Region Distribution Automation
154	Specific Project	R15SSAI: 4 & 12 kV Substations
155	Specific Project	R15TDA: Telecom Expansion to Support Distribution Automation
156	Specific Project	R15WDA: REP3 - 2015-2016 Western Region Distribution Automation
157	Specific Project	R16LS: 2016 Line Sensor Project
158	Specific Project	R17CTC: REP 4 Circuit Ties
159	Specific Project	R17DA: REP 4 Pole Top Distribution Automation
160	Specific Project	R17HLDR: REP 4 Circuit Reliability Improvements
161	Specific Project	R17RWH: REP 4 ROW System Hardening
162	Specific Project	R18CTC01: W185 - 4W1 Circuit Tie
163	Specific Project	R18CTC02: 3178X Circuit Tie Hinsdale

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Excludes New Business Projects

Line	Project Category	Project Description
164	Specific Project	R18ETT:NH REP ETT
165	Specific Project	R18HAZ:NH Hazard Tree Removal
166	Specific Project	STRM0617N:NH STORM CAP: Oct 29, 2017 event
167	Specific Project	STRM0618C:NH STORM CAP: Mar 7-8, 2018 event
168	Specific Project	STRM0618D:NH STORM CAP: Apr 4-5, 2018 event
169	Specific Project	UB1412:2014 Distribution Automation Deployment
170	Specific Project	UB1501:Replace Defective Viper Reclosers
171	Specific Project	UB1502:399 Line Relocation Pointe Place

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Excludes New Business Projects

Line	Project Category	Project Description
1	Annual Blanket Project	DA9R: Non-Roadway Lighting PSNH
2	Annual Blanket Project	DG9R:Distributed Generation Field Design and Construction Reimbursable
3	Annual Blanket Project	DH9R: Line Relocations PSNH
4	Annual Blanket Project	DK9R: Maintain Voltage PSNH
5	Annual Blanket Project	DQ9R: System Repairs/Obsolescence PSNH
6	Annual Blanket Project	DR9R:Reliability Improvements PSNH
7	Annual Blanket Project	DT7P:Purchase Transformers and Regulators
8	Annual Blanket Project	HPS9R/D79R:Roadway Lighting PSNH
9	Annual Blanket Project	INS9R:Insurance Claims PSNH
10	Annual Program Project	6DCIP:NH Avigilon Intrusion Detection
11	Annual Program Project	A04S34:Direct Buried Cable Replacement
12	Annual Program Project	A07X45:Reject Pole Replacement
13	Annual Program Project	A07X98:NESC Capital Repairs
14	Annual Program Project	A08X45:Replace Steel Towers
15	Annual Program Project	A09S12:Replace Failed Cable - Post Tested
16	Annual Program Project	A10X04:Direct Buried Cable Injection
17	Annual Program Project	A12X01:Substation Battery Replacement
18	Annual Program Project	A12X02:Substation Ground Grid Upgrades
19	Annual Program Project	C01SPA01:Joint Poles Purchase & Sale
20	Annual Program Project	C03CTV:Cable TV Project Annual Program
21	Annual Program Project	C03DOT:NHDOT Project Annual Program
22	Annual Program Project	C03TEL:Telephone Projects Annual Program
23	Annual Program Project	CO1PCB:PCB Transformer Changeout Annual Program
24	Annual Program Project	DL9R:Distribution Line ROW Annual Program
25	Annual Program Project	DS9RD:Distribution Substation Maintenance Annual Program
26	Annual Program Project	DS9RE:ROW Replace Failed Equipment
27	Annual Program Project	DS9RS:Substation Annual-Substation Engineering group
28	Annual Program Project	DSPP8001:Distributed Generation Engineering Design and Construction
29	Annual Program Project	E03CTV:Expense Portion of CATV Projects
30	Annual Program Project	GE9R:Tools and Equipment - Engineering
31	Annual Program Project	GF9R:Misc office equipment
32	Annual Program Project	GM9R:Tools/equipment - S/S Operations group
33	Annual Program Project	GT9R:Tools/equipment - Troubleshooter group
34	Annual Program Project	GX9R:Tools/equipment - Field Operations group
35	Annual Program Project	IT6DWANA:Telecom WAN Annual - PSNH
36	Annual Program Project	MINOR9R: Minor Storms Capital PSNH
37	Annual Program Project	NHLC03:NH Line Contractors
38	Annual Program Project	NHTOOLS:NH-Tools/equipment-Transportation group
39	Annual Program Project	ROWLR:ROW Relocations - Reimbursable
40	Annual Program Project	STORMCAP:NH Storm Capitalization
41	Annual Program Project	UB3CAD:Porcelain Changeout
42	Annual Program Project	VEHICLES:NH Vehicle Purchases Distribution
43	Specific Project	18707:2018 Facilities LOB Building & General Plant

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
Step Adjustment 2 - Projects Anticipated to be Placed in Service in 2020
Excludes New Business Projects

Line	Project Category	Project Description
44	Specific Project	18726:ML 2018 PSNH LOB - General Plant
45	Specific Project	19707:2019 PSNHD Facilities LOB projects under \$500k
46	Specific Project	19720:Nashua Renovation
47	Specific Project	19726:ML PSNH-D 2019 LOB - General Plant
48	Specific Project	19781:Front Office Renovation
49	Specific Project	20707:PSNH-D Fac 2020 LOB
50	Specific Project	20715:PSNH-D ML 2020 LOB
51	Specific Project	20739:Berlin NH Yard Paving
52	Specific Project	20749:1250 Hooksett Rd. Parking Lot
53	Specific Project	20755:Bow Mobile Substation Expansion
54	Specific Project	20CGVE06:2020 Customer Group Vehicles for NH
55	Specific Project	A08N10:Portsmouth S/S - Add Transformer
56	Specific Project	A08W49:Keene Downtown UG Replacement Project
57	Specific Project	A14N08:Gorham S/S-Generation Divestiture
58	Specific Project	A14N21:Berlin Eastside 34.5KV Line Breaker
59	Specific Project	A14W01:Emerald Street S/S
60	Specific Project	A14W02:Daniel S/S (Webster)-34.5KV S/S Upgrade
61	Specific Project	A14W18:North Keene S/S New Distribution Circuit
62	Specific Project	A15CDA:Central Region 2015 Distribution Automation Program
63	Specific Project	A15EDA:Eastern Region 2015 Distribution Automation Program
64	Specific Project	A15NDA:Northern Region 2015 Distribution Automation Program
65	Specific Project	A15SDA:Southern Region 2015 Distribution Automation Program
66	Specific Project	A16C06:324 Line Rebuild at Industrial Ave
67	Specific Project	A16C08:Brook St S/S - 13TR1 Replacement
68	Specific Project	A16C09:Blaine St S/S add 34.5-12kv 10MVA transformer
69	Specific Project	A16C10:Jackman S/S - Replace Obsolete Equipment
70	Specific Project	A16N01:11W1 - Replace Submarine Cable
71	Specific Project	A16N02:Second transformer at Lost Nation S/S
72	Specific Project	A16S02:Reconductor Lines 3110, 353, 3445X
73	Specific Project	A16W01:Claremont Area Substation Upgrades
74	Specific Project	A16X01:ESCC Control of Generation
75	Specific Project	A16X04:CAIDI Improvement
76	Specific Project	A17C04:Greggs S/S Removal
77	Specific Project	A17C10:Brook St Replace G&W Switchgear
78	Specific Project	A17C12:3.74 Primary Voltage Conversion Navigator Rd
79	Specific Project	A17C13:Blaine St S/S Line Work
80	Specific Project	A17C17:Circuit Tie 3115X12 to 3615X1
81	Specific Project	A17C21:Pine Hill S/S PLC Auto Scheme Replacement
82	Specific Project	A17C26:328 Line Reconductor
83	Specific Project	A17C30:Pack Monadnock Rebuild Single-Phase Line
84	Specific Project	A17E01:Rye Area 4KV Study
85	Specific Project	A17E05:Twombly S/S Rebuild
86	Specific Project	A17E09:Rochester 4KV Conversion
87	Specific Project	A17E20:Ocean Rd S/S 34.5KV OCB Replacement

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
Step Adjustment 2 - Projects Anticipated to be Placed in Service in 2020
Excludes New Business Projects

Line	Project Category	Project Description
88	Specific Project	A17N02:Messer St - Replace TB70
89	Specific Project	A17N18:Laconia S/S Equipment Replacement
90	Specific Project	A17N22:Beebe River S/S Cap Switcher Replacement
91	Specific Project	A17S03:Millyard S/S Replacement
92	Specific Project	A17VRP:G&W Viper Warranty Replacement
93	Specific Project	A17W19:North Rd S/S Equipment Replacement
94	Specific Project	A17W23:Monadnock S/S Cap Switcher Replacement
95	Specific Project	A18C02:Bedford S/S PLC Automation Scheme
96	Specific Project	A18C07:Eddy S/S Control House
97	Specific Project	A18DA:Distribution Automation - Pole Top
98	Specific Project	A18E04:Cocheco St Rebuild
99	Specific Project	A18E09:Replace 386 Relay at Rochester S/S
100	Specific Project	A18E12:Circuit Ties 3172X1 - 3112X3
101	Specific Project	A18E23:Rochester Comcast Make Ready
102	Specific Project	A18N03:White Lake S/S Rebuild
103	Specific Project	A18N05:Pemi S/S Upgrade
104	Specific Project	A18N27:Laconia S/S Replace LTC Controls
105	Specific Project	A18VRP:Viper Replacement Project-Betterment
106	Specific Project	A18W06:Monadnock S/S Replace Transformer TB40
107	Specific Project	A18W13:Route 9 Roxbury-Sullivan 10439
108	Specific Project	A18W17:Emerald St Line Work
109	Specific Project	A18W22:Peterborough Roadway and Bridge Project
110	Specific Project	A18X08:S Milford Relay Replacement
111	Specific Project	A18X18:ROW Hardening/Reconductoring
112	Specific Project	A18X26:Mobile Substation 46x34.5kV-12.47/7.2
113	Specific Project	A18X28:44 & 60 West Penn Telecom
114	Specific Project	A18XDA:Distribution Automation - Substation
115	Specific Project	A19C25:Reconductor Bedford Road, 360X7
116	Specific Project	A19C33:Animal Protection at Rimmon S/S
117	Specific Project	A19C54:Pettingill Switchgear Reconfiguration
118	Specific Project	A19DA:Distribution Automation - Pole Top
119	Specific Project	A19E07:Downtown Portsmouth UG System Improvements
120	Specific Project	A19E11:Circuit Ties-Wakefield 362 to 3157
121	Specific Project	A19E26:Convert Four Rod Road in Rochester
122	Specific Project	A19E41:Replace LTC Controls at Madbury S/S
123	Specific Project	A19E52:Dover Underground Backfeed Relocation
124	Specific Project	A19E63:Jackson Hill S/S Fence & Grounding Replacement
125	Specific Project	A19LS:Distribution Automation - Line Sensors
126	Specific Project	A19N09:Relocate 1W1 Main Line onto Route 3
127	Specific Project	A19N12:Circuit Ties - Laconia 310 to 345
128	Specific Project	A19N50:346X1 Defective SPCA Replacement
129	Specific Project	A19S06:Replace Conductor Route 13 Amherst
130	Specific Project	A19S08:Relocate 3168X Bridge St S/S
131	Specific Project	A19S27:Relocate 314 Line around Heron Pond

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
Step Adjustment 2 - Projects Anticipated to be Placed in Service in 2020
Excludes New Business Projects

Line	Project Category	Project Description
132	Specific Project	A19S40:Amherst S/S - PLC Automation Replacement
133	Specific Project	A19S46:South Ave Derry Step Overload
134	Specific Project	A19W03:Replace Open Wire with Spacer Cable Route 63
135	Specific Project	A19W10: Relocate Feed to Hinsdale Wastewater
136	Specific Project	A19W55:Jackman S/S LTC Control Replacement
137	Specific Project	A19W56:317 Line Reconstruction
138	Specific Project	A19X01:Replace Degraded Manholes
139	Specific Project	A19X20:Replace Lattice Steel Towers
140	Specific Project	A19X22:Install Animal Protection
141	Specific Project	A19X220:Animal Protection at Tasker Farm S/S
142	Specific Project	A19X222:Animal Protection at Amherst S/S
143	Specific Project	A19X223:Animal Protection at Valley St S/S
144	Specific Project	A19X24:NESC Capital Repairs
145	Specific Project	A19X32:NH Lateral Initiative
146	Specific Project	A19X351:Long Hill S/S 34.5kV Cap Bank Switch
147	Specific Project	A19X3601:Reeds Ferry S/S OCB Replacement
148	Specific Project	A19X58:Replace Lattice Steel Towers
149	Specific Project	A19X61:High Impedance Ground Fault Detection NH
150	Specific Project	A19X64:S/S Security Upgrades CIP5 NH
151	Specific Project	A19XDA:Distribution Automation - Substation
152	Specific Project	A20C16:Bouchard St Replace Cable and Switchgear
153	Specific Project	A20C23:335X1 Extend 19.9kV 1Phase to S. Bow Rd
154	Specific Project	A20C24:Install PM Step Transfer Route 13 Goffstown
155	Specific Project	A20C40:Manchester Network Cable Replacement
156	Specific Project	A20DA:Distribution Automation Pole Top
157	Specific Project	A20E04:North Dover Conversion
158	Specific Project	A20E25:Offload 63W1 at E. Northwood
159	Specific Project	A20LS:Distribution Automation Line Sensor
160	Specific Project	A20N01:Rebuild Berlin Underground System
161	Specific Project	A20N11:Voltage Conversion Lost Nation Rd
162	Specific Project	A20N15:43W1 (13W1) Construct Circuit Tie
163	Specific Project	A20N29:Laconia Comcast Non-Billable 2020
164	Specific Project	A20N30:Laconia Comcast Billable 2020
165	Specific Project	A20N31:Gilford Comcast Non-Billable 2020
166	Specific Project	A20N32:Gilford Comcast Billable 2020
167	Specific Project	A20S06:3159X Extend 3 Phase Boston Post Rd
168	Specific Project	A20S17:DB Cable Replacement Maple Hill Acres
169	Specific Project	A20S19:South Milford S/S
170	Specific Project	A20S22:Range Rd Windham Conversion
171	Specific Project	A20W07:Mason Rd Relocate 1500' Main Line to Roadside
172	Specific Project	A20W08:3155X6 Feed from the 3155X9
173	Specific Project	A20W09:Rte 9 Relocate 2800' Main Line to Roadside
174	Specific Project	A20W13:3410 and 315 Circuit Tie
175	Specific Project	A20W14:24X1 and 313X1 Circuit Tie

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
Step Adjustment 2 - Projects Anticipated to be Placed in Service in 2020
Excludes New Business Projects

Line	Project Category	Project Description
176	Specific Project	A20W33:Pack Monadnock Summit Solution
177	Specific Project	A20W34:Byrd Ave S/S Upgrades
178	Specific Project	A20W35:Spring Street S/S Upgrades
179	Specific Project	A20X21:NH Distribution Management System
180	Specific Project	A20X220:Animal Protection at Bedford S/S
181	Specific Project	A20X221:Animal Protection at Mammoth S/S
182	Specific Project	A20X222:Animal Protection at Weare S/S
183	Specific Project	A20X223:Animal Protection at Timber Swamp S/S
184	Specific Project	A20X26:Spare 345-34.5kV Transformer
185	Specific Project	A20X38:2020 Circuit Patrol Repairs
186	Specific Project	C18ETT:NH ETT 2018
187	Specific Project	D1276A:Distribution Design for F107 Project
188	Specific Project	D1328AH:Distribution Design P134 Line
189	Specific Project	D1328I:Distribution Design Y138 Line
190	Specific Project	D1382A:Rochester S/S Relays
191	Specific Project	IASC2006:PSNH Security Capital Project 2020
192	Specific Project	IT19433:Lifecycle PC Replacements-237
193	Specific Project	IT20437:2020 Modern Desktop - PSNH-Distribution
194	Specific Project	NHEDVH20:NH Distribution Vehicle Purchase
195	Specific Project	NHMTR18:NH Annual Meter Project for 2018
196	Specific Project	NHMTR19:NH Annual Meter Project for 2019
197	Specific Project	NHMTR20:NH Annual Meter Project for 2020
198	Specific Project	NHRMTR17:NH Remote Disconnect 2017-2018
199	Specific Project	NHTRN20:NH Training Annual Capital Project
200	Specific Project	R15CDA:REP3 - 2015-2016 Central Region Distribution Automation
201	Specific Project	R15DBR:REP3 Direct Buried Cable Replacement
202	Specific Project	R15NDA:REP3 - 2015-2016 Northern Region Distribution Automation
203	Specific Project	R15POR:Porcelain Change-out
204	Specific Project	R15RPR:Reject Pole Replacement
205	Specific Project	R15RWM:ROW System Hardening
206	Specific Project	R15SDA:REP3 - 2015-2017 Southern Region Distribution Automation
207	Specific Project	R15TDA:Telecom Expansion to Support Distribution Automation
208	Specific Project	R15WDA:REP3 - 2015-2016 Western Region Distribution Automation
209	Specific Project	R18CTC01:W185 - 4W1 Circuit Tie
210	Specific Project	R18CTC02:3178X Circuit Tie Hinsdale
211	Specific Project	STRM0617N:NH STORM CAP: Oct 29, 2017 event
212	Specific Project	TCORP1NH:Transport NW Refresh Phase 1 NH

DE 19-057 – APPENDIX 6**Fee Free Credit/Debit Card Payment**

As noted in Section 12 of the Settlement, PSNH shall implement a fee free credit or debit card option for residential customers to use to make non-recurring credit or debit card payments without incurring a transaction fee. Information on the program, its costs, and presumed adoption rates is included in this appendix.

As described in the Company's Testimony of Penelope McLean Conner May 28, 2019 at Bates Pages 759-772 the Company sought to offer fee free credit/debit cards to residential customers. For purposes of settlement, the Settling Parties agreed that a fee free program will be implemented with the following criteria. The program will be implemented consistent with Ms. Conner's testimony, and limited to residential customers for one-time payments. Automatic recurring payments will not be supported, meaning that customers will be required to enter their credit or debit card payment information for each payment transaction. The Company will report information on the migration of customers to this option to inform potential future decisions on whether to continue, alter, or eliminate the fee free program.

As part of this submission, the Company herein provides updated fee free credit card utilization rates as a percentage of total customer payments based on actual participation rates in the Company's affiliate's Connecticut residential fee free program and with input from peer utilities:

- Using information from Eversource's affiliate in Connecticut, the percent of payments made via credit card increased by 1.3% the year following removal of the fees. This review

excluded the COVID pandemic period because it is not representative of normal customer behavior.

- Based on information provided by Unitil, which has offered a fee free option for over 10 years, Unitil reports a steady state percentage of total customer payments made via credit card compared to all payments of approximately 18%.

Based upon this information, the Company has updated the adoption assumptions for the program in New Hampshire, resulting in lower adoption assumptions and, therefore, lower cost estimates for the first four years of the program than those provided in the initial rate case filing. The updated yearly adoption rates as a percent of total payments are 5%, 6.3%, 7.6% and 8.9% for years 1 through 4, respectively. The updated net cost for the first four years is \$2,081,987 or \$520,497 per year on average as shown in the chart below. The Company's revenue requirement is revised from \$706,764 per year as proposed in the initial filing to \$375,000 to reflect the costs presumed for the first year of the program. Should the actual costs resulting from customers' adoption of the fee free option exceed the \$375,000 allowed in rates in the first year, the Company shall increase the amount in rates to an amount reflecting the estimated cost, but not more than \$520,500, effective February 1, 2022.

NH Net Cost Savings Calculation (Residential Only)				
Year	Fee Free Penetration Rate %	Price	Total Offsetting Savings	Net Cost
1	5.00%	\$ 389,901	\$ 15,443	\$ 374,458
2	6.30%	\$ 491,276	\$ 19,458	\$ 471,817
3	7.60%	\$ 592,650	\$ 23,474	\$ 569,176
4	8.90%	\$ 694,024	\$ 27,489	\$ 666,535
Total		\$ 2,167,851	\$ 85,864	\$ 2,081,987

DE 19-057 – APPENDIX 7**New Start - Arrears Management Program**

As stated in Section 13 of the Settlement, PSNH shall implement an arrears management program known as “New Start.” New Start is an arrearage management program offered by PSNH that provides payment assistance for qualifying residential customers struggling with past due utility bills. A general description of the program’s rules and requirements, and a list of the agreed upon reporting metrics, is set out in this Appendix as follows.

Program Rules

To be eligible for New Start in New Hampshire, each customer:

- Must be a residential customer with active service;
- Have an account balance that is greater than or equal to \$150 and the \$150 is at least 60 days overdue; and
- Has provided the utility with evidence of “financial hardship” through their current enrollment or their household’s current enrollment in the Low Income Home Energy Assistance Program, the Electric Assistance Program, the Gas Residential Low Income Assistance Program, the Neighbor Helping Neighbor Program, their successor programs, or any other federal, state or local government program or government funded program of any social service agency which provides financial assistance or subsidy assistance for low income households based upon a written determination of household financial eligibility as outlined in Puc 1202.09.

Residential customers with a certified medical emergency must also qualify as financial hardship and meet the eligibility criteria as described above in order to participate in the New Start program. A medical emergency alone does not qualify.

New Start Reporting

Once established, PSNH will provide regular reporting on the activities of the New Start program. PSNH will base its reports on the below described metrics:

- i. Number of customer accounts verified financial hardship.
 - The total number of customers who are verified financial hardship as of the end of a month.
- ii. Number of customers enrolled in the program.
 - The total number of customers enrolled in the New Start program as of the end of a month.
- iii. Number of customers who successfully completed the program.
 - The number of customers who have completed the program during the month.
- iv. Number of customers dropped from the program.
 - The number of customers removed from the program for missed payments and all other reasons during the month.
- v. Number of customers who re-enroll in the program after being dropped and length of time before re-enrollment.
 - The number of customers who have re-enrolled on New Start and the average number of months since being dropped from the program.
- vi. Number of customers who newly enroll in the program after successful completion and length of time before new enrollment.
 - The number of customers who have enrolled in New Start after successfully completing the program within the last 3 years, and the average length of time between completion and new enrollment.
- vii. Number of customers who remain on a budget plan after automatic enrollment upon completion and for how long.
 - The number of customers who remain on the budget for each of the following periods of time: 1-3 Months, 3-6 Months, 6-9 Months, 9-12 Months, 12-18 Months, 18-36 Months.
- viii. Total dollar amount of arrearages forgiven.
 - The total amount of dollars forgiven by month.

- ix. Average dollar amount per participating customer of arrearages forgiven.
 - The average dollar amount of arrears forgiven for customers who received forgiveness during a month.
- x. Comparison of disconnections for financial hardship customers before and after program start.
 - The number of 2019 financial hardship residential customers disconnected and eligible for disconnection by month, and the number of financial hardship residential customers disconnected and eligible for disconnection after the program starts.
- xi. Comparison of lead-lag before and after program start.
 - The comparison of the number of days revenue outstanding for hardship customers not on New Start compared to those that are on New Start.
- xii. Comparison of bills behind for hardship customers before and after program start.
 - The average amount of delinquency in dollars and days aged in 2019 compared to months after the program starts.
- xiii. Quantification of impact of program on field visits and customer service.
 - The number of field visits per month, and customer satisfaction metrics.
- xiv. Quantification of impact of program on reconnections.
 - The number of credit reconnects and subsequent enrollment or re-enrollment on the New Start program.
- xv. Quantification of impact of program on uncollectible.
 - The 12-month rolling Net Write-Off as a Percent of Revenue lagged 6 months. This indicates the percentage of revenue is written off less any recoveries.
- xvi. The dollars of bills for current service by month.
 - The total budget amount billed to New Start customers during a month.
- xvii. The dollars of actual receipts from customers by month.
 - The total amount of payments made by New Start customers during a month.
- xviii. The number of accounts receiving a bill by month.
 - The number of accounts on the New Start program that were sent a bill during a month.
- xix. The number of accounts making a payment by month.
 - The number of accounts on the New Start program that made any amount of payment during a month.

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- xx. The number of accounts that are either one or two payments behind on the New Start Program.
- xxi. The dollars of New Start budget arrears of customers that are either one or two payments behind on the program.
- xxii. The average arrears of accounts with arrears (other than their New Start arrears) by month.
 - The average New Start budget arrears for customers that are one or two payments behind on the program (xxi divided by xx).
- xxiii. The number of accounts with a \$0 balance by month.
 - The number of accounts that are current on the New Start program, where the owed balance is less than or equal to the current bill.

DE 19-057 – APPENDIX 8**Outdoor Lighting**

As noted in Section 14 of the Settlement, PSNH shall be creating a new rate (“EOL-2”) to allow additional flexibility and options for municipalities to install advanced lights and lighting controls, and to allow municipalities to own and maintain the streetlights in their communities. Additionally, PSNH shall work with interested parties on final tariff language to implement this provision. Included below is a framework for the structure of that new rate offering which will form the basis for the final tariff language to be presented to the Commission.

	Current EOL Tariff	New Tariff (EOL-2)
Purchase of Lights	Customer purchases LED lights, pays for undepreciated value of existing lights at NBV.	Customer purchases lights from Company at undepreciated value of existing lights at NBV.
New Asset Treatment	Turned over to Company at \$0 NBV.	Customer maintains ownership.
New installation?		
Installation of LED Lights	Company or Customer can install. Customer responsible for all installation costs.	Customer installs. Customer responsible for ¹ all installation costs.
Contractor Approval Required	Yes	Yes
Maintenance Responsibility	Company	Customer – Fixture (OH) or Base/pole/head only (UG) (see Ownership Line of Demarcation)
Ownership Line of Demarcation	N/A – Company maintains ownership of all assets	Customer owns fixture ² while Company owns bracket, service wire, etc. up to but excluding fixture (OH). ³
Responsibility of Replacement of Asset due to Accident or Property Damage	Customer responsibility at \$95 per fixture per visit plus cost of materials. Company would update with the rates in the new Tariff.	Propose to update to \$189 for cost of removal and installation of each light (fixture). If customer only wants us to remove, then \$90 per light.
Clear, ongoing Company responsibilities?	Customer pays cost of removal if replaced	Customer pays cost of removal if replaced

- 1 Potential fees for remove and/or replacement services
- 2 Clarify details; contrast with CT customer-owned lighting, where Eversource owns & maintains the secondaries & customer is responsible for the bracket (and fixture) & the secondary wire inside the bracket. Eversource connects our secondary to this wire which is the demarcation point.
- 3 Similarly, for UG service, Company facility ownership demarcation required (e.g., up to but excluding base)

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DOCKET NO. DE 19-057

SETTLEMENT APPENDIX 9
PROPOSED TARIFF CHANGES

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NHPUC NO. 10 – ELECTRICITY DELIVERY
SUPERSEDING NHPUC NO. 9 – ELECTRICITY DELIVERY

NHPUC NO. 10 – ELECTRICITY DELIVERY

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
DBA EVERSOURCE ENERGY

TARIFF FOR ELECTRIC DELIVERY SERVICE

in

Various towns and cities in New Hampshire,
served in whole or in part.

(For detailed description, see Service Area)

Issued: October 9, 2020

Issued by: /s/Joseph A. Purington
Joseph A. Purington

Effective: January 1, 2021

Title: President and Chief Operating Officer

Attachment A

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
DBA EVERSOURCE ENERGY

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NHPUC NO. 10- ELECTRICITY DELIVERY
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
DBA EVERSOURCE ENERGY

TERMS AND CONDITIONS FOR DELIVERY SERVICE

1. Service Area

The territory authorized to be served by this Company and to which this Tariff applies is as follows:

Albany#	Bridgewater#	Danbury#	Freedom#
Alexandria*	Bristol#	Danville**	Fremont#
Allenstown#	Brookfield#	Deerfield*	Gilford#
Alstead**	Brookline	Deering	Gilmanton
Alton**	Cambridge	Derry#	Gilsum
Amherst	Campton*	Dover	Goffstown
Andover**	Candia*	Dublin	Gorham
Antrim	Canterbury*	Dummer	Goshen*
Ashland**	Carroll	Dunbarton#	Grafton#
Atkinson*	Charlestown*	Durham#	Grantham#
Auburn#	Chatham	Easton*	Greenfield
Barnstead*	Chester*	Eaton#	Greenland
Barrington	Chesterfield	Effingham	Greenville
Bath#	Chichester*	Enfield**	Green's Grant
Bedford	Claremont#	Epping#	Hampstead#
Belmont#	Clarksville*	Epsom*	Hampton**
Bennington	Colebrook*	Errol	Hancock
Berlin	Columbia*	Exeter**	Hanover**
Bethlehem#	Concord**	Farmington#	Harrisville
Boscawen**	Conway*	Fitzwilliam	Haverhill*
Bow**	Cornish*	Francestown	Hebron#
Bradford	Croydon#	Franconia	Henniker
Brentwood*	Dalton	Franklin#	Hill**

Company serves over 90 percent of the customers in this municipality. (See Note)

* Company serves less than 90 percent but more than 10 percent of the customers in this municipality. (See Note)

** Company serves less than 10 percent of the customers in this municipality. (See Note)

Note: Limited areas of towns so identified above are as shown on the maps filed separately with the Commission and incorporated in this Tariff by reference.

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Issued by: Joseph A. Purington

Effective: January 1, 2021

Title: President and Chief Operating Officer

Attachment A

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
DBA EVERSOURCE ENERGY

Hillsborough	Meredith**	Pembroke#	Stratford
Hinsdale	Merrimack	Peterborough	Stratham**
Hollis	Middleton	Piermont*	Sugar Hill
Hooksett	Milan	Pinkham's Grant	Sullivan
Hopkinton#	Millsfield	Pittsburg#	Sunapee*
Hudson	Milford	Pittsfield#	Surry#
Jaffrey	Milton	Plainfield*	Sutton#
Jefferson	Mont Vernon	Plymouth**	Swanzy
Keene	Nashua	Portsmouth	Tamworth#
Laconia#	Nelson	Randolph	Temple
Lancaster	New Boston	Raymond*	Thornton
Landaff*	New Castle	Richmond	Tilton
Lee*	New Durham*	Rindge	Tuftonboro*
Lempster**	New Hampton*	Rochester	Troy
Lincoln**	New Ipswich	Rollinsford	Unity*
Lisbon#	New London	Roxbury	Wakefield#
Litchfield	Newbury	Rye	Warner
Littleton**	Newfields	Salisbury*	Washington
Londonderry	Newington	Sanbornton#	Waterville**
Loudon	Newmarket	Sandown*	Weare
Lyman#	Newport#	Sandwich*	Webster*
Lyme*	North Hampton	Seabrook**	Wentworth's Location
Lyndeboro	Northfield*	Sharon	Westmoreland
Madbury	Northumberland	Shelburne	Whitefield
Madison#	Northwood#	Somersworth	Wilmot**
Manchester	Nottingham*	Springfield*	Wilton
Marlboro	Orange**	Stark	Winchester
Marlow#	Orford*	Stewartstown*	Windham#
Martin's Location	Ossipee*	Stoddard	Windsor
Mason	Pelham**	Strafford	

Company serves over 90 percent of the customers in this municipality. (See Note)

* Company serves less than 90 percent but more than 10 percent of the customers in this municipality. (See Note)

** Company serves less than 10 percent of the customers in this municipality. (See Note)

Note: Limited areas of towns so identified above are as shown on the maps filed separately with the Commission and incorporated in this Tariff by reference.

Issued: October 9, 2020

Issued by: Joseph A. Purington

Effective: January 1, 2021

Title: President and Chief Operating Officer

NHPUC NO. 10 - ELECTRICITY DELIVERY
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
DBA EVERSOURCE ENERGY

2. Definitions

The following words and terms shall be understood to have the following meanings when used in this Tariff, including in any agreements entered into under this Tariff:

Application: A request by a Customer for Delivery Service pursuant to the provisions of this Tariff.

Commission: The State of New Hampshire Public Utilities Commission.

Company: Public Service Company of New Hampshire dba Eversource Energy.

Customer: Any person, firm, corporation, cooperative marketing association, utility or government unit or sub-division of a municipality or of the state or nation supplied with Delivery Service by the Company. Each Delivery Service account shall be considered a separate and distinct Customer.

Customer Choice Date: May 1, 2001.

Default: A Supplier's or its Market Participant member's failure or inability to maintain good standing with ISO-NE pursuant to the terms of ISO-NE Inc. Transmission, Markets, and Service Tariff, including a Financial Assurance Default, or the Supplier's or Market Participant member's failure or inability to maintain good standing with the requirements of the Commission.

Default Energy Service ("Default Service"): Electric energy, capacity and ancillary services supplied to a Customer by the Company. Service shall be supplied during periods in which a Customer is not receiving Self-Supply Service or Supplier Service. Default Service shall be provided in accordance with Default Energy Service Rate DE and shall be provided in conjunction with the applicable Delivery Service Rate Schedule.

Delivery Service: The delivery of electric power by the Company to a Customer under this Tariff.

Electronic Enrollment: A request submitted electronically to the Company by a Supplier for the initiation of Supplier Service to a Customer.

Energy Service Provider ("Supplier"): Any entity registered with the Commission and authorized by the Commission to supply electricity to retail users of electricity in the state of New Hampshire.

Eversource Energy System Companies: The operating companies of Eversource Energy other than Public Service Company of New Hampshire.

FERC: The Federal Energy Regulatory Commission.

Financial Assurance Default: A Supplier's or its Market Participant member's failure or inability to meet financial requirements as determined by ISO-NE.

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Force Majeure: Any cause beyond the reasonable control of, and without the fault or negligence of, the Party claiming Force Majeure. It shall include, without limitation, sabotage, strikes or other labor difficulties, soil conditions, riots or civil disturbance, acts of God, acts of public enemy, drought, earthquake, flood, explosion, fire, lightning, landslide, sun storms or similarly cataclysmic occurrence, or appropriation or diversion of electricity by sale or order of any governmental authority having jurisdiction thereof. Economic hardship of either Party shall not constitute a Force Majeure under this Tariff.

Information and Requirements for Electric Supply: The booklet prepared by the Company to establish standardized rules and regulations for the installation of electric service connections within the Company's Service Area.

ISO-NE: The Independent System Operator of New England, the NEPOOL operating center that centrally dispatches the electric generating and transmission facilities owned or controlled by NEPOOL participants to achieve the objectives of the NEPOOL Agreement.

ISO-NE Rules: The Restated NEPOOL Agreement, ISO Tariff, ISO Manual and Participant's Agreement or by ISO-NE.

Local Network: The transmission and distribution facilities which are owned, leased and maintained by the Company, which are located in the states of New Hampshire and Maine and that are used to provide Delivery Service under this Tariff. The Local Network does not include any capacity or transmission or distribution facilities owned, leased or supported by the Eversource Energy System Companies.

Market Participant: An entity that has registered with ISO-NE to participate in New England's suite of wholesale electricity markets. They may produce, buy, sell, or transport wholesale electricity in the region.

Metering Domain: Connection points created within the ISO-NE settlement power system model that facilitate the calculation of the unmetered load asset value to ensure all generation and load is accounted for in the New England control area.

NEPOOL: The New England Power Pool.

Parties or Party: The Company and/or one or more Customers under this Tariff.

Payment Agent: Any third-party authorized by a Customer to receive and pay the bills rendered by the Company for service under this Tariff.

PTF Facilities: All pool transmission facilities included in the NEPOOL Open Access Transmission Tariff on file with the FERC.

Rate Schedule: The Rate Schedules included as part of this Tariff.

Restated NEPOOL Agreement ("NEPOOL Agreement"): An agreement between the NEPOOL participants dated September 1, 1971 and restated December 31, 1996, as amended from time to time.

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Self-Supply Service: Electric energy and capacity purchased by a Customer directly from the Independent System Operator of New England or the New England Power Pool.

Settlement Agreement: The 2015 Public Service Company of New Hampshire Restructuring and Rate Stabilization Agreement as approved by the Commission in Order No. 25,920.

Supplier-Rendered Energy Service (“Supplier Service”): The sale of energy and capacity including ancillary services to a Customer by a Supplier.

Suspension or Suspended: An action taken by ISO-NE to remove a Supplier, or its Market Participant member, from active Market Participant status.

Tariff: This Delivery Service Tariff and all Rate Schedules, appendices and exhibits to such Tariff.

3. General

The Company undertakes to render dependable Delivery Service in accordance with this Tariff, of which these Terms and Conditions are a part, as on file from time to time with the Commission and legally in effect; such undertaking being subject to the applicable rules and regulations of the Commission and to the Company's “Information and Requirements for Electric Supply”.

Although the Company will endeavor to make the service rendered as continuous and uninterrupted as it reasonably can, Delivery Service is subject to variations in its characteristics and/or interruptions to its continuity. Therefore, the characteristics of the Delivery Service may be varied and/or such service to any Customer or Customers may be interrupted, curtailed, or suspended in the following described circumstances; the obligations of the Company to render service under this Tariff are subject to such variance, interruption, curtailment, or suspension:

- (a) When necessary to prevent injury to persons or damage to property.
- (b) When necessary to permit the Company to make repairs to or changes and improvements in a part or parts of the Company's electrical facilities; such action to be taken upon reasonable notice to the Customers to be affected, if practicable, or without any notice in an emergency when such notification would be impracticable or would prolong a dangerous situation.
- (c) When conditions in a part or parts of the interconnected generation-transmission system of which the Company's facilities are a part make it appear necessary for the common good.
- (d) When such variance, including a reversal of supply, or such interruption, curtailment or suspension is a result of Force Majeure as defined in this Tariff and any cause except willful default or neglect on the Company's part.

The Company shall not be responsible for any loss, cost, damage or expense to persons and/or property resulting therefrom.

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The Company does not undertake to regulate the voltage or frequency of its service more closely than is standard commercial practice or required by the rules of the Commission. If the Customer requires regulation of voltage or frequency that is more refined, the Customer shall furnish, install, maintain and operate the necessary apparatus at the Customer's expense.

4. Availability

Delivery Service shall be available to a Customer who has made an Application and has satisfied all of the requirements of this Tariff. Delivery Service shall be available solely for the delivery of electricity from a Supplier to a Customer or for the delivery of Default Service or Self-Supply Service to a Customer.

In the event that a conflict arises between this Tariff and the Terms and Conditions specifically related to transmission service under the ISO-NE Transmission, Markets, and Services Tariff ("ISO-NE Tariff"), including Schedule 21-ES, or successor thereto, then such ISO-NE Tariff will apply.

In the event a conflict arises between this Tariff and the Settlement Agreement, then the Settlement Agreement will take precedence over this Tariff.

In the event that a Customer is not receiving Self-Supply Service and is not receiving Supplier Service from a Supplier for any reason, the Company will arrange Default Service provided the Customer has satisfied all the requirements for service under this Tariff.

5. Application, Contract and Commencement of Service

Application by the Customer for Delivery Service may be made to the Company at any time. Whether or not an Application for service is made by the Customer and accepted by the Company, the rendering of the service by the Company and its use by the Customer shall be deemed a contract between the parties and subject to all provisions of the Tariff, as in effect from time to time, applicable to the service.

Except as otherwise specifically provided for under a rate, all rates are predicated on a period of service at one location of not less than twelve (12) consecutive months with monthly billing and monthly payment. The rendering of bills to Customers under this Tariff shall be performed exclusively by the Company.

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6. Selection of Supplier or Self-Supply Service by a Customer

Any Customer requesting or receiving Delivery Service under this Tariff is responsible for selecting or changing a Supplier or selecting Self-Supply Service. The Company shall process a change in or initiation of Supplier Service or Self-Supply Service within two business days of receiving a valid Electronic Enrollment from a Supplier or notice from the Customer in the case of Self-Supply Service. The Supplier or the Customer in the case of Self-Supply Service must satisfy all the applicable requirements of this Tariff and the Commission's rules prior to the commencement of Supplier Service or Self-Supply Service. The date of change in, or initiation of, Supplier Service or Self-Supply Service shall commence upon the next meter reading date for the Customer provided the Company receives and successfully processes the Electronic Enrollment from a Supplier or notice from the Customer in the case of Self-Supply Service at least two business days prior to the regularly scheduled meter reading cycle date for the Customer.

The Company shall accept no more than one Supplier for a Customer during any particular monthly billing cycle.

For a new service location for which a Customer requests Delivery Service, the Company must receive an Electronic Enrollment from a Supplier to enable the rendering of Supplier Service in conjunction with Delivery Service or notice from the Customer to enable the rendering of Self-Supply Service in conjunction with Delivery Service. If an Electronic Enrollment has not been received by the Company from a Supplier for any reason or notice has not been received from the Customer to enable the rendering of Self-Supply Service, energy and capacity shall be provided under Default Energy Service.

If an Electronic Enrollment fails to meet the requirements of this Tariff, the Company shall, within one business day of receipt of the Electronic Enrollment, notify the Supplier requesting service of the reasons for such failure.

The Customer or its designee shall ensure that all information provided to the Company for Delivery Service is accurate and shall provide the Company with prompt notification of any changes thereto. The Customer's Supplier shall also ensure that all information contained in the Supplier's Electronic Enrollment is accurate and shall provide the Company with prompt notification of any changes thereto.

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7. Termination of Supplier Service or Self-Supply Service

To terminate Supplier Service from a particular Supplier, a Customer may either have the Supplier of record send to the Company a "Supplier Drops Customer" transaction, in accordance with the Terms and Conditions for Energy Service Providers section of this Tariff, or request Supplier Service from an alternative Supplier. Supplier Service from the Supplier of record shall terminate on the next meter read date provided the Company has received either a valid "Supplier Drops Customer" notice from the Supplier of record or a valid Electronic Enrollment from a new Supplier at least two business days prior to the regularly scheduled meter read date.

To terminate Self-Supply Service, a Customer may either provide notice to the Company or request Supplier Service from a Supplier. Self-Supply Service shall terminate on the next meter read date provided the Company has received notice from the Customer or has received a valid Electronic Enrollment from a Supplier at least two business days prior to the regularly scheduled meter read date.

8. Unauthorized Switching of Suppliers

The Company is not responsible for any loss or damage (direct, indirect or consequential) to any persons resulting from the Company's processing of an unauthorized Electronic Enrollment received from a Supplier.

9. Conditions of Delivery Service

Under the NEPOOL Agreement, the day-to-day operation of the generation and transmission systems of NEPOOL Participants, including the Company, is subject to ISO-NE dispatch and control. It is understood that occasions may arise where ISO-NE imposes limitations on service rendered under this Tariff in order to reliably operate the regional bulk power system in accordance with ISO-NE Operating Procedures. The Company shall not be liable for any actions taken by ISO-NE in the performance of the Company's duties under the NEPOOL Agreement and related operating guidelines and procedures.

10. Deposits, Payments, Refusal or Discontinuance of Service

Until a Customer has established satisfactory credit relations or when unsatisfactory credit relations exist, the Company may require security in the form of a cash deposit or an irrevocable written guarantee of a responsible third party. Cash deposits should not be less than \$10.00 nor more than the estimated bill for Delivery Service and Default Service for a period of two (2) high use months. The highest use month will not be used in determining the amount of deposit.

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Interest on all deposits shall be accrued at a rate equal to the base rate on corporate loans at large United States money center commercial banks (the Prime Rate), from the date of deposit to the date of termination. The monthly simple interest rate on deposits shall be fixed on a quarterly basis for quarterly periods ending March, June, September and December of each calendar year and shall be established as one-twelfth (1/12) of the annual Prime Rate reported in The Wall Street Journal on the first business day of the month preceding the calendar quarter. If more than one Prime Rate is reported in The Wall Street Journal, the average of the reported rates shall be used. Deposits plus accrued simple interest thereon, less any amount due the Company, will be refunded to the Customer when satisfactory credit relations have been established, or upon termination of service. The refund of accrued interest amounts shall be made by the Company pursuant to the rules of the Commission. When a deposit or balance of a deposit cannot be refunded because the Company is unable to locate the Customer, no additional interest shall be accrued on the deposit.

Charges for service under rates in this Tariff are predicated upon monthly billing, which as far as practicable will be thirty (30) days apart and will be due upon presentation of bill. The Company may discontinue service for non-payment after a bill, or a portion thereof, becomes thirty (30) days overdue, or for other good cause, in accordance with applicable statutes and the rules and regulations of the Commission in effect at the time. Service to the Customer may be discontinued at the location where the Company furnished the service for which the overdue bill was rendered; or, if service is no longer being furnished to the Customer at that location, the Company may discontinue service at the current location, if the debt is uncontested and accrued within the past three years, subject to the Commission's Rules and Regulations.

When service has been disconnected for nonpayment, the Company may make a reasonable charge for reconnection before service is restored.

Except as otherwise specifically provided in any agreement between the Company and the Customer, charges for service furnished under this Tariff shall continue until such time as the Company shall receive reasonable notice from the Customer of a desire to terminate the service. The date of termination shall be the date specified by the Customer but not sooner than four business days from the date the Customer notified the Company.

The Company may require an applicant, as a condition of new service, to enter into a reasonable repayment plan for an uncontested debt owed to the Company within the past three years. Uncontested debt shall include any amounts for services provided by the Company before the Customer Choice Date and/or any amounts for Delivery Service and any Default Service furnished to the applicant. The Company may require the applicant to pay a security deposit or provide a written third-party guarantee as allowed under the rules and regulations of the Commission.

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11. Returned Payment Charge for Insufficient Funds

The Company shall assess a returned payment charge of \$13 per returned payment to any Customer whose payment to the Company is dishonored by the Customer's financial institution when presented by the Company. Receipt of a check or payment instrument that is subsequently dishonored by the Customer's financial institution shall not be considered a valid payment.

12. Failure of Payment Agent to Remit Payment

A Customer who has elected to use a Payment Agent shall be treated in the same manner as other Customers in the Company's application of the applicable statutes, rules and regulations of the Commission and the terms and conditions of this Tariff, notwithstanding any failure of the Payment Agent to remit payment to the Company or any failure of the Payment Agent to forward to the Customer any Company notices, bill inserts or other written correspondence. The Customer shall be solely responsible for all amounts due, including, but not limited to, any late payment charges.

13. Refusal to Serve

The Company reserves the right to refuse to supply Delivery Service to new Customers or to supply additional load to any existing Customer if it is unable to do so under a Rate Schedule or if it is unable to obtain the necessary equipment and facilities or capital required for the furnishing of such service. The Company may refuse to supply Delivery Service to load of unusual characteristics which might affect the cost or quality of service supplied to other Customers of the Company. The Company may require a Customer having such unusual load to install special regulating and protective equipment in accordance with the Company's specifications as a condition of service.

The Company reserves the right to reject any Application for service if the amount or nature of the service applied for, or the distance of the premises to be served from an existing suitable distribution line, or the difficulty of access thereto, is such that the estimated income from the service applied for is insufficient, under any of the Company's applicable rates, to yield a reasonable return to the Company, unless such Application is accompanied by (a) a cash payment or (b) an undertaking satisfactory to the Company guaranteeing a stipulated revenue for a definite period of time, or both (a) and (b).

14. Maximum Demand

The "Maximum Demand" or "Customer's Load," which shall be stated in kilowatts or kilovolt-amperes as specified in the applicable Rate Schedule, is defined as the greatest rate of taking Delivery Service during a specified interval.

Where a Rate Schedule requires determination of maximum demand, it shall be determined by measurement or estimated as provided by the Rate Schedule or, where applicable, by the provisions of the following paragraph of this section. The Company shall not be obligated, for any reason, to use the demand values measured or estimated by any other entity in the determination of maximum demand.

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When the nature of the Customer's load is of an intermittent, instantaneous or widely fluctuating character such as to render demand meter readings of doubtful value as compared to the actual capacity requirements, the demand may be determined on the basis of a time interval less than that specified, or on the basis of the minimum transformer capacity necessary to render the Delivery Service, or the minimum protective device rating necessary to permit continuous uninterrupted service. In all such instances, the Company will record the basis of demand determination.

15. Meters

The Company will provide each Customer with proper metering equipment subject to the ability of the Company to obtain the same.

The Company shall own and maintain the metering equipment necessary to measure Delivery Service under this Tariff. Each meter location shall be designated by the Company and the Company shall have priority over any other entity with respect to placement of Company-owned metering equipment.

Any Customer requesting non-standard metering equipment, the cost of which exceeds the cost of the metering equipment necessary for the rendering of Delivery Service under the applicable Rate Schedule, shall be responsible for the additional cost of the requested metering equipment including any incremental labor costs associated with installation of the requested metering equipment. Any such metering equipment must be approved by the Company.

Each unit of a new or renovated domestic structure with more than one dwelling unit will be metered separately and each meter will be billed as an individual customer. Where an individual household or business enterprise, occupation or institution occupies more than one unit of space, each unit will be metered separately and considered a distinct Customer, unless the Customer furnishes, owns and maintains the necessary distribution circuits by which to connect the different units to permit delivery and metering at one location of all the energy used.

The Company may for its own convenience install more than one meter per Customer, but in such cases the meter readings will be cumulated when billing.

In cases of non-access or where a meter fails to register the full amount of electricity consumed, the amount of the bill will be estimated by the Company, based upon the use recorded during previous months, or upon the best information available.

The Company may estimate, rather than meter, demand and kilowatt-hours used by a Customer where the demand and kilowatt-hour usage are constant and known or for locations which, in the Company's judgment, are unsafe or impractical to separately meter or to access on a regular basis by Company personnel.

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16. Customer Use of Electricity

In recognition of the fact that the wiring and facilities for the use of electricity on the Customer's premises are owned by and under the control of the Customer, the Company shall not be responsible for any loss, cost, damage, or expense to persons and/or property resulting from the use of or presence in the Customer's wiring or appliances, electricity delivered in accordance with the provisions of these Terms and Conditions and the Company's "Information and Requirements for Electric Supply"

If the Customer's requirements for electricity or use of service, or installation of Customer-owned equipment (including but not limited to motors, generation, meters, or capacitors) results in or is anticipated to result in damage to the Company's apparatus or facilities or electrical disturbances to other customers on the Company's distribution system, the Customer shall be responsible for the cost to the Company of repairing, replacing or upgrading the Company's facilities. If the Customer fails to correct for the interference with the operation of the Company's distribution system or with the electrical supply to other Customers, the Company reserves the right to refuse service or to disconnect service upon proper notice.

17. Compliance

Service hereunder is subject to the Customer's compliance with the following conditions:

- (a) The Customer shall comply with or perform all of the requirements or obligations of this Tariff and the Company's "Information and Requirements for Electric Supply".
- (b) The Customer shall allow the Company reasonable access to the Company's facilities located on the Customer's premises.
- (c) The Customer shall comply with any applicable orders and regulations of the Commission.
- (d) The Customer shall not cause or allow to exist any unauthorized or fraudulent use or procurement of the Delivery Service or any tampering with the connections or other equipment of the Company, or any condition on the Customer's premises involving the Delivery Service which is dangerous to health, safety or the electric service of others or which represents a clear and present danger to life, health, or physical property, or to the Company's ability to serve its other Customers.
- (e) The Customer shall notify the Company when the Customer no longer desires Delivery Service.

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18. Resale of Delivery Service

No customer shall sell, resell, assign or otherwise dispose of all or any part of the Delivery Service purchased from the Company without the written consent of the Company. The sale of electric vehicle charging services electricity to a third party from an electric vehicle charging station shall not be considered resale of electricity.

19. Company Property

The Company shall have the right to install, maintain and operate such Company-owned facilities on the premises of the Customer as in its judgment may be required to render Delivery Service to the Customer in accordance with this Tariff, whether such facilities shall be overhead or underground and whether the premises of the Customer are owned or leased to the Customer, and shall have the free right at all reasonable times to enter upon said premises for the purpose of maintaining, repairing, replacing or removing such facilities. Normally such facilities will consist of, but they shall not be limited to, overhead or underground service wires or cables extending to a Company-owned meter or meters and associated equipment.

Customer must provide, without expense or cost to the Company, the necessary permits, consents or easements satisfactory to the Company in order to install, maintain, repair, replace, or remove the Company's facilities on the Customer's property or property owned by others on which facilities are placed to serve the Customer.

If the Customer is a tenant or a mortgagor and his right of occupancy does not include authority to grant the Company the foregoing rights, he shall obtain his landlord's or his mortgagee's authority to grant the foregoing rights, and the Company may require that such authority be evidenced in writing by the landlord or mortgagee.

In the case of underground facilities, the Customer shall not erect or maintain or permit to be erected or maintained any building or structure over such facilities and shall not plant or permit to be planted any trees over such facilities.

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20. Holidays

The following New Hampshire legal holidays shall be recognized as holidays for purposes of billing service in off-peak periods:

<u>Holiday</u>	<u>Day Celebrated</u>
*New Year's Day	January 1st
Martin Luther King, Jr. Civil Rights Day	Third Monday in January
Washington's Birthday	Third Monday in February
Memorial Day	Last Monday in May
*Independence Day	July 4th
Labor Day	First Monday in September
Columbus Day	Second Monday in October
*Veterans Day	November 11th
Thanksgiving Day	When appointed
*Christmas	December 25th

* If these days fall on Sunday, the following day shall be considered the holiday.

21. Conjunctional Service

Conjunctional Service is a Customer's use of Delivery Service under this Tariff for delivery of either Supplier Service or Default Service which supplements or is in addition to any other source of electric service connected on the Customer's side of the meter. Conjunctional Service must be taken in accordance with the Company's "Information and Requirements for Electric Supply" and the Company's technical guidelines and requirements pertaining to Qualifying Facilities ("QFs", as defined in Sections 201 and 210 of Title II of the Public Utility Regulatory Policies Act of 1978) filed with the Commission in compliance with Commission Order No. 14,797. Conjunctional service is available to QFs and to other Customers who are not QFs who have available another source of electric service connected on the Customer's side of the meter.

All Conjunctional Service furnished by the Company to Customers under this Tariff shall be taken by the Customers under the Rate Schedule which would otherwise be available for Delivery Service applicable to the total internal load of the Customer.

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22. Conditions Under Which This Tariff is Made Effective

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Joseph A. Purington

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23. Customer Choice of Rate

Upon a Customer's request, the Company shall provide information as to what may be the most advantageous rates and charges available to the Customer under this Tariff. However, the responsibility for the selection of a rate lies with the Customer and the Company does not warrant or represent in any way that a Customer will save money by taking service under a particular rate. The Company will not be liable for any claim that service provided to a Customer might have been less expensive or more advantageous to such Customer if supplied under another available rate.

24. Statement by Agent

No representative of the Company or Eversource Energy System Companies has the authority to modify any rule, provision or rate contained in this Tariff, or bind the Company for any promise or representation contrary thereto.

25. Third Party Claims and Non-Negligent Performance

Each Party agrees to indemnify and hold the other Party and its affiliated companies and the trustees, directors, officers, employees, and agents of each of them (collectively "Affiliates") harmless from and against any and all damages, costs (including attorneys' fees), fines, penalties, and liabilities, in tort, contract, or otherwise (collectively "Liabilities") resulting from claims of third parties arising, or claimed to have arisen, from the acts or omissions of such Party in connection with this Tariff. Each Party hereby waives recourse against the other Party and its Affiliates for, and releases the other Party and its Affiliates from, any and all Liabilities for or arising from damage to its property due to a non-negligent performance by such other Party.

26. Charges for Temporary Services

The Company shall have the right to charge the Customer for the total cost incurred in constructing and removing temporary services at locations under construction where the temporary service will not be converted to a permanent service. Such costs shall include the costs of labor, overheads and all materials except for the costs of transformers and meters. The Company shall not charge for the construction and removal of such temporary service whenever the temporary service is to be replaced at approximately the same location with a permanent service when construction is completed, provided that the permanent service is run from the same pole and utilizes the same material which was utilized for the temporary service.

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27. Underground Service

Underground electric distribution facilities will be provided by the Company, in accordance with the provisions of the Company's "Information and Requirements for Electric Supply" and this Tariff, when feasible and practicable and when consistent with the normal availability of Company personnel, the orderly scheduling of construction projects, and all as reasonably determined by the Company. Subject to the above-stated limitations on the availability of underground facilities, such facilities will be provided by the Company on a consistent and equitable basis to all who qualify.

28. Diversion and Metering Tampering

If a Customer receives unmetered service as the result of any tampering with a meter or other Company equipment, the Company may take appropriate immediate corrective action without notice to the Customer, including making changes to the meter or other equipment. In addition, the Customer shall be subject to a meter diversion charge of \$250, and may be required to reimburse the Company for lost revenue associated with the unmetered service, including late payment charges, damages to equipment, expenses incurred during the investigation, and may be subject to criminal prosecution.

29. Stranded Cost Recovery Charge

The Stranded Cost Recovery Charge (SCRC) is the portion of the unbundled retail delivery service bill that is a non-bypassable charge as provided by RSA 369-B:4, IV and RSA 374-F:3, XII to recover the portion of the Company's Part 1 and Part 2 Stranded Costs that are allowed by the Settlement Agreement. The SCRC include the RRB Charge defined in RSA Chapter 369-B, over-market or under-market IPP and Power Purchase Agreement costs, Non-Securitized Stranded Costs, and other costs and expenses allowed or as authorized by the Commission.

Part 1 of the SCRC is the RRB Charge, and is the source of payment for Rate Reduction Bonds issued pursuant to RSA Chapter 369-B. One or more special purpose financing entities shall own the right to receive all collections in respect to the Part 1 charge. The Company will collect the RRB Charge in Part 1 of the SCRC on behalf of such special purpose financing entities. The special purpose financing entities' ownership of the RRB Charge recovered via Part I of the SCRC will be reflected by an appropriate notation on customers' bills. Part 1 of the SCRC will be billed until the rate reduction bonds issued by the special purpose financing entities and all on-going RRB Costs are paid in full.

Part 1 of the SCRC shall be adjusted as necessary via the True-Up mechanism approved by the Commission in its Order No. 26,099 in Docket No. DE 17-096, and such changes in Part 1 shall become effective as set forth in that Order.

Part 2 will recover all other non-securitized stranded costs and charges as approved by the Commission and will continue for as long as there are such costs to be recovered by the Company.

The SCRC shall be non-bypassable per RSA 369-B:4, IV and RSA 374-F:3, XII, and shall be collected from each retail customer of the Company. If a retail customer located in the Company's service territory purchases or otherwise obtains retail electric service from any person other than the Company, including, without limitation, any successor referred to in RSA 369-B:8

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the servicer or such new electricity service provider or successor shall collect the SCRC, from the retail customer by or on behalf of the Company and remit those revenues to the Company as a condition to the provision of retail electric service to such retail customer. Any retail customer that fails to pay the SCRC shall be subject to disconnection of service to the same extent that such customer would, under applicable law and regulations, be subject to disconnection of service for failure to pay any other charge payable to the Company.

The revenue requirement necessary to recover all Part 1 and Part 2 stranded costs will be allocated among rate classes as follows:

Rate Class	Percentage of Total Revenue Requirement
Residential Service (R, R-OTOD)	48.75
General Service (G, G-OTOD)	25.00
Primary General Service (GV, B*)	20.00
Large General Service (LG, B**)	5.75
Outdoor Lighting Service (OL, EOL)	0.50

*Rate B customers who would qualify for Rate GV except for their own generation.

**Rate B customers who would qualify for Rate LG except for their own generation.

The actual SCRC will vary by the rate schedule, may vary by separately metered rate options contained in certain rate schedules, may vary by time of use, and may include demand- as well as kWh-based charges. The Company, every six months, shall compare the amount to be recovered through the SCRC, as defined under the Settlement Agreement and this Tariff with the revenue received from the billing of the SCRC. Any difference between the amount to be recovered by Part 2 of the SCRC during any six month period and the actual revenue received during that period shall be refunded or recovered by PSNH with a return during the subsequent six month period by reducing or increasing Part 2 of the SCRC for the subsequent six month period. The return will be calculated using the Stipulated Rate of Return set forth in the Settlement Agreement.

If any customer class is materially reduced or consolidated to zero, its applicable allocation factor will be reallocated on a pro-rata basis between remaining rate classes based on the then current allocation responsibility.

The SCRC also includes the Regional Greenhouse Gas Initiative ("RGGI") refund as required by RSA 125-O:23,II and Order No. 25,664 dated May 9, 2014, which directs the Company to refund RGGI auction revenue it receives to its Customers through the SCRC.

The SCRC also includes the costs of implementing 2018 N.H. Laws, Chapter 340, "AN ACT requiring the public utilities commission to revise its order affecting the Burgess BioPower plant in Berlin, ..." per Order No. 26,332 ("Ch. 340" costs). The revenue requirement necessary to recover Ch. 340 stranded costs will be allocated on an equal cents/kWh basis for all customer classes. Any difference between the amount of Ch. 340 costs to be recovered during any six month period and the actual revenue received during that period shall be refunded or recovered by

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PSNH with a return during the subsequent six-month period by reducing or increasing Ch. 340 costs for the subsequent six-month period. The return will be calculated using the Stipulated Rate of Return set forth in the Settlement Agreement. Ch. 340 costs will continue for as long as there are such costs to be recovered from or refunded to customers by the Company.

The overall average SCRC by rate class and by component effective August 1, 2020 through January 31, 2021 are as follows:

Rate Class	Part 1 ¢/kWh	Part 2 ¢/kWh	Ch. 340 ¢/kWh	RGGI ¢/kWh	Total ¢/kWh
Residential Service	1.005	-0.507	0.607	-0.130	0.975
General Service	0.941	-0.534	0.607	-0.130	0.884
Primary General Service	0.777	-0.443	0.607	-0.130	0.811
Large General Service	0.293	-0.202	0.607	-0.130	0.568
Outdoor Lighting Service	1.196	-0.726	0.607	-0.130	0.947

30. Transmission Cost Adjustment Mechanism

The Transmission Cost Adjustment Mechanism ("TCAM") will recover, on a fully reconciling basis, the costs incurred by the Company for transmission related services. These costs include charges under the ISO-NE Tariff; charges billed to the Company by Other Transmission Providers; third party charges billed to the Company for transmission related

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services such as charges relating to the stability of the transmission system which the Company is authorized to recover by order of the regulatory agency having jurisdiction over such charges; and transmission-based assessments or fees billed by or through regulatory agencies, including those associated with the ISO-NE, regional transmission organization ("RTO") and the FERC. For purposes of this mechanism, "Other Transmission Providers" shall be defined as any transmission provider and any regional transmission group, an independent system operator, an RTO and their successors, or other such body with the oversight of regional transmission, in the event that any of these entities are authorized to bill the Company directly for their services.

The TCAM rates shall be established annually based on a forecast of includable costs, and shall also include a full reconciliation with interest for any overrecovery or underrecovery occurring in the prior year. The Company may file to change the TCAM rates at any time if a significant overrecovery or underrecovery occurs. Interest on overrecoveries or underrecoveries shall be calculated at the prime rate.

Any changes to rates determined under the TCAM shall only be made following a notice filed with the Commission setting forth the amount of the increase or decrease, the new rates for each rate class, and the effective date of such new rates.

31. System Benefits Charge

On and after the Customer Choice Date, and subject to Commission review, all Customers shall be obligated to pay the following System Benefits Charge in addition to all other applicable rates and charges under this Tariff. The System Benefits Charge shall appear separately on all Customer bills.

System Benefits Charge..... 0.743 cents per kilowatt-hour

32. Regulatory Reconciliation Adjustment

The Regulatory Reconciliation Adjustment ("RRA") mechanism, shall recover or refund the reconciled costs associated with the following elements:

- (a) Regulatory Commission annual assessments and consultants hired or retained by the Commission and OCA.
- (b) Vegetation management program variances.
- (c) Property tax expenses, as compared to the amount in base rates.
- (d) Lost-base distribution revenues associated with net metering, as calculated consistent with RSA 362-A:9, VII and the Commission's approved method in Order No. 26,029 (June 23, 2017) in Docket No. DE 16-576.
- (e) Storm cost amortization final reconciliation and annual reconciliation updated for actual cost of long-term debt.

The RRA shall be established annually based a full reconciliation with interest for any over- or under-recoveries occurring in prior year(s). Interest shall be calculated at the prime rate, to be fixed on a quarterly basis and to be established as reported in The Wall Street Journal on the first business day of the month preceding the calendar quarter. If more than one interest rate is reported, the average of the reported rates shall be used. There will be no adjustment for Accumulated Deferred Income Tax ("ADIT") in the interest calculation. For purposes of billing under the alternative net metering tariff that became effective September 1, 2017, the RRA will be considered part of the credit to net metering customers.

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33. Late Payment Charge

The rates and charges billed under this Tariff are net, billed monthly and payable upon presentation of the bill. However, Customers who receive Delivery Service under Residential Rate R, Residential Time-of-Day Rate R-OTOD, General Service Rate G, or General Service Time-of-Day Rate G-OTOD may elect to pay for all service rendered under these rates, as well as Default Energy Service, on a Level Payment Plan available upon application to the Company.

For Customers rendered Delivery Service under Primary General Delivery Service Rate GV or Large General Delivery Service Rate LG or Backup Delivery Service Rate B, all amounts previously billed but remaining unpaid after the due date printed on the bill shall be subject to a late payment charge of one and one-half percent (1 ½ %) thereof, such amounts to include any prior unpaid late payment charges. For all other Customers, all amounts previously billed but remaining unpaid after the due date printed on the bill shall be subject to a late payment charge of one percent (1%) thereof, such amounts to include any prior unpaid late payment charges. The late payment charge is not applicable to a) residential Customers who are taking service under the statewide Electric Assistance Program (EAP) as approved by the Commission; b) residential Customers receiving protection from disconnection of service under any enhanced winter protection programs offered by the Company; c) residential Customers whose electric bill is paid on their behalf (whether in part or in whole) through the Low Income Home Energy Assistance Program (LIHEAP); and d) past due balances of Residential Rate R, Residential Time-of-Day Rate R-OTOD, General Service Rate G, General Service Time-of-Day Rate G-OTOD, Outdoor Lighting Rate OL, or Energy Efficient Outdoor Lighting Rate EOL Customers who are abiding by the terms of an extended payment arrangement agreed to by the Company.

34. Loss of Service Investigation Charge

For Customers rendered Delivery Service under Primary General Delivery Service Rate GV, Large General Delivery Service Rate LG or Backup Delivery Service Rate B:

If at the request of a Customer, the Company responds to investigate any loss of electric service at the Customer's premises, and finds the interruption of service has been caused by the Customer's equipment, the Company shall charge the Customer for the total cost incurred to investigate the loss of service.

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35. Rates for Purchases from Qualifying Facilities

Availability:

This short-term purchase arrangement shall be available to Qualifying Facilities (QFs) interconnected with the Company. Qualifying Facilities shall mean small power producers and cogenerators that meet the criteria specified by (i) FERC in 18 C.F.R. §§ 292.203 (a) and (b); or; (ii) the definition of "limited producer" or "limited electrical energy producer" in NHRSA 362-A:1-a and who meet the requirements of RSA 362-A:3, II.

Nothing shall prohibit the Company from separately contracting for generation purchases from QFs. Nothing herein shall be construed to affect, modify or amend terms and conditions of an existing Qualifying Facility's contract or rate order with respect to the sale of its energy or capacity.

Selling Options:

QFs may sell to the Company or wheel through the Company. All generation sold to the Company shall be resold at the ISO-NE market clearing price and subject to appropriate charges as if the power was wheeled through the Company and sold directly to ISO-NE.

Metering:

Generators selling to the Company shall install metering as specified by the Company to satisfy ISO-NE requirements as they may change from time to time. Projects shall be charged a standard monthly service fee for metering service as approved by the appropriate regulatory agency.

Net Metering:

Projects 1,000 kilowatts and under using renewable generation shall have the option of being served under the Net Energy Billing Service as specified by NH RSA 362-A:9 and the rules promulgated by the appropriate regulatory agency.

Projects receiving a utility net metering capacity allocation prior to March 2, 2017 and not in excess of the applicable net metering cap will continue to be billed and receive credit for their generation in accordance with RSA 362-A:9 and Puc 903.02(f) and Puc 903.02(g) (the "Standard Net Metering Tariff") through December 31, 2040.

Projects receiving a utility net metering capacity allocation beginning on March 2, 2017 and ending on August 31, 2017 and not in excess of the applicable net metering cap will continue to be billed and receive credit for their generation in accordance with the interim alternative net metering tariff adopted by the Commission in Order No. 25,972 (December 21, 2016) (the "Interim Net Metering Tariff") through December 31, 2040.

Projects receiving a utility net metering capacity allocation on or after September 1, 2017 will be billed and credited under the "Alternative Net Metering Tariff" provisions described below once the Company is capable of implementing these provisions. Until such time, customers will be billed and credited under the Standard Net Metering Tariff. Customers receiving a net metering capacity allocation while this Alternative Net Metering Tariff is in effect will be entitled to the net metering design and structure then in effect through December 31, 2040.

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1. Eligibility

A customer-generator whose facility has a total peak generating capacity less than or equal to 100 kilowatts is eligible to participate as a small customer-generator.

A customer-generator whose facility has a total peak generating capacity greater than 100 kilowatts up to and including 1,000 kilowatts is eligible to participate as a large customer-generator if they consume at least twenty percent (20%) of their actual or estimated annual system electric production on-site and behind the meter. Otherwise, the customer must register as a group host under RSA 362-A:9, XIV. A large customer-generator meeting the on-site consumption threshold may switch to the Alternative Net Metering Tariff upon written notice of such election to the Company.

2. Metering

The Company will install a bidirectional meter to record in separate channels the quantities of electric imports from the distribution utility grid and electric exports to the distribution utility grid over a billing period. At the time of interconnection, a customer may request, at no cost, installation of a Company-owned production meter. The Customer must provide and install an appropriate meter socket in a physical location acceptable to the Company.

3. Billing

Customers will be billed in accordance with the delivery and energy service rate schedules that would apply in the absence of generation, except as specifically provided otherwise hereunder.

During each billing period, credits for electricity exports will be issued in the form of monetary bill credits which will carry forward on a customer's account from month to month until used. Customers may receive a cash payment for any accumulated excess credit when they move or discontinue service, or on an annual basis if they have accumulated a credit balance in excess of \$100 as of the end of the March billing cycle.

Small customer-generators will be assessed the Stranded Cost Recovery Charge and System Benefits Charge based on the full amount of their electricity imports without any netting of exports during the billing period.

All other kilowatt-hour-based rate components will be assessed on the customer's net energy usage, which is the quantity of kilowatt-hours equal to electric imports minus electric exports (if positive).

If such net energy usage is less than zero, customers that receive Default Energy Service from the Company will receive a monetary bill credit for their net electric exports during each billing period calculated at twenty-five percent (25%) of any Distribution charges assessed on a per-kilowatt-hour basis; any Transmission charges assessed on a per-kilowatt-hour basis; and the Default Energy Service Rate.

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If net energy usage is less than zero, customers that do not receive Default Energy Service from the Company will receive a monetary bill credit for their net electric exports during each billing period calculated at twenty-five percent (25%) of any Distribution charges assessed on a per-kilowatt-hour basis; and any Transmission charges assessed on a per-kilowatt-hour basis.

Large customer-generators will be assessed all charges associated with their rate class based on the full amount of their electricity imports without any netting of exports during the billing period. Customers who receive Default Energy Service from the Company will receive a monetary bill credit for their electric exports during each billing period calculated at the Default Energy Service Rate.

For both Small and Large customer-generators, a competitive Energy Service Provider may determine the terms, conditions and prices under which it agrees to provide generation supply to and purchase net generation output from the customer-generator.

4. Grandfathering Provisions

Subsequent sales or other transfers of ownership of a net-metered system or the property upon which the system is located shall not impact the terms and conditions under which the customer-generator is rendered net metering service. New owners shall be allowed to continue to take service under the same terms and conditions in effect at the time of such sale or transfer until 2040, in accordance with RSA 362-A:9,XV and Order No. 25,972, or pursuant to Order No. 26,029, provided that the system is not moved to a different location by the purchaser, transferee, or otherwise.

Residential small customer-generators may expand their systems without limitation, provided that the expansion does not result in total system capacity in excess of 100 kW.

Non-residential small customer-generators may expand the capacity of their systems by an amount up to the greater of either 20 kW or 50 percent of the system capacity allocated into the standard net metering program prior to September 1, 2017, or the original capacity of a system installed under the alternative net metering tariff effective as of September 1, 2017, as applicable, provided that in neither case can any such expansion have the effect of increasing the system's capacity to an amount in excess of 100 kW.

Non-residential large customer-generators may expand the capacity of their systems by an amount up to the greater of either (1) 50 kW, or (2) a capacity amount such that the expanded system is sized to produce 110 percent of the customer-generator's annual kilowatt-hour on-site usage, as clearly demonstrated through the customer-generator's documentation of any consecutive 12-months within the previous two years.

In neither case, can any such expansion have the effect of increasing the system's capacity to a level in excess of one megawatt. Expansion of a net-metered system by or for a commercial or industrial customer-generator smaller than the applicable limitation will allow the customer-generator to continue to be grandfathered, while any such expansion in excess of the applicable limitation will result in the entire net-metered system losing its net metering grandfathered status.

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Any system modifications must be reported to the Company within 30 days of modification or earlier if so required under the Company's distributed generation interconnection procedures.

5. Renewable Energy Certificates

The Company will offer to serve as independent monitor for a customer-generator who elects to receive a Company-owned production meter. The Company will report the electricity production of such customer-generator at least quarterly to NEPOOL-GIS at no cost to the customer. The Company will file an application on behalf of the customer for Commission certification of the eligibility of the installation to produce renewable energy certificates pursuant to RSA 362-F and the Commission's Puc 2500 rules. Any customer requesting a Company-owned production meter or requesting the Company to serve as the independent monitor must respond in a timely manner to requests for information from the Company.

Rates:

Qualifying Facilities selling their output to the Company will be eligible to receive Short Term Avoided Cost Rates equal to the payments received by the Company for the sale of QF generation to the ISO-NE power exchange, adjusted for line losses, wheeling costs and administrative costs incurred by the Company for the transaction. Projects shall be charged a standard monthly service fee for billing service as approved by the appropriate regulatory agency.

Wheeling Charges:

The Company reserves the right to impose any appropriate wheeling charges (including distribution wheeling charges) for generation transmitted through the Company and sold to ISO-NE and others as may be approved by the appropriate regulatory agency.

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36. Line Extensions

In areas in which Delivery Service by the Company is authorized, the Company will extend its single-phase or three-phase distribution facilities or upgrade its single-phase distribution facilities to three-phase distribution facilities to a maximum of 5,280 feet in length to serve Customers under Residential Delivery Service Rate R and Rate R-OTOD and General Delivery Service Rate G and Rate G-OTOD, at their request. Extensions or upgrades greater than 5,280 feet in length will be constructed at the discretion of the Company.

Additionally, per RSA 370:12, customers requiring a line extension on private property may opt to hire and pay a private line contractor, licensed by the state and approved by the Company, to construct a required overhead or underground power line extension on private property. The contractor shall supply and install all materials as specified by the Company. Line extensions must be designed by the Company and built to its specifications in order for the Company to assume ownership of the line. The Company has the right to not accept a customer built line extension that does not conform to the Company's specifications. Customers may not contract with private line contractors to construct line extensions along public ways.

1. Location of Distribution Facilities

The order of preference for the location of line extensions are (i) along public ways; (ii) along private roads maintained year-round; (iii) along private roads maintained on a seasonal basis; (iv) over rights of way accessible by standard Company equipment; and (v) over rights of way not accessible by standard Company equipment. The Company may choose a higher preference location even if a lower preference location may result in a shorter line extension. The final placement of all line extensions must be preapproved by the Company.

2. Calculation of Line Extension Construction Costs

Definitions

Overhead Service Drop: The final span of cable providing secondary voltage to a Customer's meter or point of attachment location, whichever is applicable, from a utility pole. The maximum length of an overhead service drop is determined by the characteristics of the Customer's load and the terrain over which the overhead service drop passes.

Underground Service Drop: The final run of cable providing secondary voltage to a Customer's meter from a transformer or from a secondary conductor located on the Company's distribution system.

Distribution Facilities Provided by the Company at No Charge to the Customer

There shall be no separate charge for a pole-mounted transformer which the Company determines is needed to adequately serve a Customer's load and up to 300 feet of distribution facilities. The 300 feet of distribution facilities must include the length of an Overhead or Underground Service Drop currently being installed to serve a customer premise.

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Additional Distribution Facilities

Any overhead or underground distribution facilities required to serve a Customer in addition to a pole-mounted transformer and up to 300 feet of distribution facilities as defined above, are subject to the charges specified below.

Adding Additional Phases to Existing Overhead Single-phase Facilities

The estimated cost in excess of 300 feet of distribution facilities, including the length of an Overhead Service Drop shall be derived based on the Customer-specific job requirements and shall include all costs related to the construction of the distribution facilities, including but not limited to design and inspection and construction labor; researching and recording easements; materials; traffic control; tree trimming; blasting and overheads.

Overhead Single-Phase Facilities

The estimated cost shall be derived by multiplying the length of the distribution facilities by the average cost per foot of overhead single-phase distribution facilities based on the following schedule of charges. The length of the distribution facilities shall be based on the length of single-phase primary and secondary line to be installed in excess of 300 feet, including the length of an Overhead Service Drop.

Effective Dates

Overhead, Single-Phase
Average Cost per Foot

April 1, 2020 – March 31, 2021
April 1, 2021– Forward

\$29.51
See section “Average Cost per Foot Effective
From April 1, 2021– Forward”

Overhead Three-Phase Facilities

The estimated cost in excess of 300 feet of distribution facilities, including the length of an Overhead Service Drop shall be derived based on the customer-specific job requirements and shall include all costs related to the construction of the distribution facilities, including but not limited to design and inspection and construction labor; researching and recording easements; materials; traffic control; tree trimming; blasting and overheads.

Underground Single-Phase Facilities

The estimated cost shall be derived by multiplying the length of the distribution facilities by the average cost per foot of underground single-phase distribution facilities based on the following schedule of charges and adding the result to the excess cost of any padmounted transformers to be installed. The length of the distribution facilities shall be based on the length of single-phase primary and secondary line to be installed in excess of 300 feet, including the length of an Underground Service Drop. The excess cost of a padmounted transformer is the amount by which the cost of a padmounted transformer exceeds the cost of an equivalent pole-mounted transformer. The Company will determine the excess cost on the basis of average cost formulas consistently and equitably applied to all underground installations.

Effective Dates

April 1, 2020 – March 31, 2021
April 1, 2021 – Forward

Underground, Single-Phase
Average Cost per Foot

\$16.22
See section “Average Cost per Foot Effective
From April 1, 2021 – Forward”

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Underground Three-Phase Facilities

The estimated cost in excess of 300 feet of distribution facilities, including the length of an Underground Service Drop shall be derived based on the customer-specific job requirements and shall include all costs related to the construction of the distribution facilities, including but not limited to design and inspection and construction labor; researching and recording easements; materials; traffic control; tree trimming; blasting, overheads and the excess cost of any padmounted transformers to be installed. The excess cost of a padmounted transformer is the amount by which the cost of a padmounted transformer exceeds the cost of an equivalent pole-mounted transformer. The Company will determine the excess cost on the basis of average cost formulas consistently and equitably applied to all underground installations.

Average Cost per Foot Effective From April 1, 2021 - Forward

The Company will update the overhead single-phase and underground single-phase average cost per foot figures for effect on April 1 based upon a sampling of actual line extensions completed in the preceding three calendar years using the methodology contained in the Settlement Agreement in Docket No. DE 08-135 and as approved by the Commission in its Order No. 25,046 dated November 20, 2009. All costs related to the construction of the distribution facilities will be included in the average cost per foot figures, including but not limited to design and inspection and construction labor; researching and recording easements; materials; traffic control; tree trimming; blasting and overheads.

3. Customer Responsibilities

- i) Payments: The Customer is responsible to pay to the Company their proportional share of any line extension construction costs in accordance with any line extension agreements in effect when service is requested by the Customer (for line extensions constructed after September 1, 2016) prior to the start of the Company's construction. In addition, the Customer is responsible to pay to the Company any line extension construction costs as defined in section 2 above and any special costs as defined in section ix below prior to the start of the Company's construction if the total cost is \$3,000 or less. If the total cost is greater than \$3,000, the Customer has the option to either pay the total amount prior to the start of construction, or to sign an agreement to pay the amount in excess of \$3,000 in 60 equal monthly payments, plus interest at the rate of interest applicable to the Company's Customer deposit accounts at the time of execution of the agreement ("Line Extension Monthly Surcharge"). The Company reserves the right to place a lien on the property until such time that the payment obligation is fulfilled. The Customer must agree, as a condition of the line extension monthly payment option, that if the Customer sells, leases or otherwise transfers control and use of the home to another individual ("New Occupant"), and such "New Occupant" opens a new account with the Company, the Customer will obtain an agreement from the "New Occupant" to pay the remaining balance as prescribed in the agreement that would have been owed by the Customer at that location. Unless the "New Occupant" signs a new superseding payment agreement with the Company, the original Customer will remain personally liable for the balance owed to the Company. Any retail Customer that fails to pay the Line Extension Monthly Surcharge shall be subject to disconnection of service to the same extent that such Customer would, under applicable law and regulations, be subject to disconnection of service for failure to pay any other charge payable to the Company..

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Joseph A. Purington

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- ii) Easements: The Customer is responsible to provide, without expense or cost to the Company, the necessary permits, consents or easements for a right-of-way satisfactory to the Company on the Customer's property for the construction, maintenance and operation of the Company's distribution facilities, including the right to cut and trim trees and bushes.
- iii) Environmental Permits: The Customer is responsible to provide, without expense or cost to the Company, the necessary environmental permits for the construction, maintenance and operation of the Company's distribution facilities on the Customer's property.
- iv) Plans: The Customer is responsible to provide the Company with details of the intended installation, including property lines, building locations, service entrance specifications and major electrical load information.
- v) Other Documents: If the Customer intends to use an existing easement area to cross the property of others with the Company's distribution facilities, the Customer is responsible to provide evidence that the easement permits the installation of such facilities by the Company.
- vi) Code Compliance: The Customer is responsible to obtain the necessary approvals from the local inspection authorities before the Customer's service entrance equipment is connected to the Company's distribution system.
- vii) Site Plans: Developers must provide to the Company a site plan or other documentation identifying the maximum number of lots or self-contained living units. The developer shall also provide the Company additional notice should the number of lots or living units increase or decrease from the initial documentation. The developer is responsible to pay any additional costs, including design costs, resulting from changes to the number of lots or units developed subsequent to the original documentation. Upon request, all other Customers requesting service shall provide a site plan for the Company to design the distribution facilities.
- viii) Underground Distribution Facilities: The Customer shall furnish to the Company's specifications all trench excavation, back-fill, conduit, duct bank, manholes, vaults, pedestals and transformer foundations necessary for the installation of underground electric distribution facilities. Underground distribution facilities shall be provided in accordance with the Company's "Information and Requirements for Electric Supply".
- ix) Special Costs: The Customer shall pay for all costs incurred by the Company for extensions that require construction which would result in special costs, such as railroad or National Forest crossings, crossing rivers and ponds, crossing wetlands, extending to an island, use of submarine cable or any additional costs incurred to protect the environment and comply with the Company's environmental policy and procedures.
- x) The Customer shall be responsible for any other requirements as specified in the Company's "Information and Requirements for Electric Supply".

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4. Company Responsibilities

The Company shall be responsible for:

- i) Constructing and maintaining the electric distribution facilities to serve the Customer's premises.
- ii) Trimming trees and bushes to the Company's standards along the route of the overhead distribution facilities, including the Overhead Service Drop serving the Customer's premises.

All distribution facilities constructed under the provisions of this line extension section shall be and shall remain the property of the Company. The Company shall not be required to install distribution lines, transformers, Service Drops or meters under the above terms in locations where access is difficult by standard Company distribution construction and maintenance vehicles, where the service does not comply with the Company's environmental policy and procedures, where it is necessary to cross a body of water or to serve airport lighting, beacon lighting, street lighting or where the business to be secured will not be of reasonable duration or will tend in any way to constitute discrimination against other Customers of the Company.

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37. Interconnection Standards For Generating Facilities

Any person or entity planning to operate a generating facility and connect it to the Company's facilities must receive approval from the Company prior to connecting the generating facility to the Company's facilities. A generating facility is any device producing electrical energy which can range in size from a small, residential photovoltaic solar installation to a large commercial generating facility. Inverter-based generating facilities sized up to 100 KVA must meet the requirements contained in the Company's "Interconnection Standards for Inverters Sized Up to 100 KVA", as approved by the Commission. The Standards provide information on the application process, time-lines and technical requirements and are available at the Company's web site at www.eversource.com. For all other generating facilities, the Company must be contacted for site specific interconnection requirements prior to interconnecting the generating facilities with the Company's facilities.

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TERMS AND CONDITIONS FOR ENERGY SERVICE PROVIDERS

The following terms and conditions shall apply to Energy Service Providers (“Suppliers”) doing business within the Company’s Service Area and to Customers where specified.

1. Obligations of Suppliers

- a. At all times, the Supplier must meet the registration and licensing requirements established by law and/or by the Commission and must comply with all applicable rules promulgated by the Commission.
- b. The Supplier or the Customer in the case of Self-Supply Service must be either a member of NEPOOL or have an agreement in place with a NEPOOL member whereby the NEPOOL member agrees to take responsibility for all the NEPOOL load obligations, including but not limited to losses and uplift costs, associated with supplying energy and capacity to the Customer’s delivery point.
- c. The Supplier or the Customer in the case of Self-Supply Service shall be responsible for providing all the capacity and energy needs of the Customer and shall be responsible for any and all losses which include all distribution and transmission losses along the Local Network from the PTF Facilities to the Customer’s delivery point.
- d. The Supplier shall provide the Company with at least 30 days’ notice prior to either the cancellation of an agreement for load responsibility with NEPOOL or a NEPOOL member, or the termination of business in the Company’s Service Area. The Supplier shall accept load responsibility for all its Customers, or have an agreement with a NEPOOL member which provides for accepting load responsibility for all its Customers, until the first meter read date for each respective customer occurring two business days after notice to the Company or transmittal of any Electronic Data Interchange (“EDI”) to the Company.
- e. In the case of Self-Supply Service the Customer shall provide the Company with at least 30 days’ notice prior to the cancellation of an agreement for load responsibility with either NEPOOL or a NEPOOL member. The Customer shall accept load responsibility or have an agreement with a NEPOOL member which provides for accepting load responsibility for the Customer until the Customer’s first meter read date occurring at least two business days after notice has been received by the Company from the Customer.
- f. The Supplier shall satisfy all the EDI standards as approved by the Commission. A Supplier shall be required to complete testing of EDI transactions prior to the rendering of Supplier Service to any Customer.
- g. The Supplier shall be responsible for reviewing and confirming the accuracy of all data provided to, or made available for, inspection to the Supplier by the Company during the load estimation, load reporting, billing and other processes described in these Terms and Conditions and/or ISO-NE’s Rules.

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- g. Each Supplier shall be required to enter into a service contract with the Company that resolves issues associated with, among other things, information exchange, problem resolution and revenue liability. This contract must be entered into prior to initiation of Supplier Service to any Customer in the Company's Service Area.
- h. The Supplier shall be responsible for obtaining the Customer's authorization, in accordance with the Commission's rules, prior to the commencement of Supplier Service.
- i. The Supplier shall be responsible for obtaining the Customer's written authorization for the release of the Customer's load history to the Supplier by the Company.

In the event a Supplier doing business in the Company's Service Area fails to comply with the obligations specified above, the Supplier shall promptly notify the Company or the Company will promptly notify the Supplier. The Supplier shall undertake best efforts to re-comply with its obligations under this Tariff and the Commission's rules in a timely manner. Until the Supplier has re-satisfied its obligations, the Company reserves the right to deny any new customer enrollments from the Supplier. In the event the Supplier is unable or unwilling to re-satisfy its obligations, the Company may transfer the Suppliers' Customers to service under Default Service after notification to the Commission.

2. Services and Schedule of Charges

Where applicable, the Customer and/or Supplier will be obligated to pay the following fees and charges to the Company for the following services:

(a) Customer Usage Data

Suppliers will be provided with monthly usage data, at no charge, via an EDI transaction in accordance with the guidelines adopted by the Commission. The Supplier is responsible for obtaining the Customer's written authorization to release this information and will be required to maintain the confidentiality of the Customer information. The Supplier may not sell or provide this information, in whole or in part, to another party.

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(b) Interval Data Services

The Company will provide the following Interval Data Services for Suppliers and Customers who wish to acquire, develop or analyze time interval meter data from the Company's meter installed at the Customer's service location. The following services are limited to those service locations with interval data recorders installed. The interval data will be provided in 30 minute intervals.

The Supplier is responsible for obtaining the Customer's authorization to release his/her meter data and shall maintain the confidentiality of Customer information. The Supplier may not sell or provide this information, in whole or in part, to another party.

1. Interval Data Access Service

(i) Subscription Service for Interval Data via Electronic Mail (E-mail), U.S. Mail or Internet Server

The Company will provide the monthly interval data in an electronic format to the Customer or Supplier via E-Mail, U.S. Mail, or the Company will post the monthly interval data files to an internet server designated by the Company. The Customer or Supplier is responsible for downloading the file containing the interval data from the internet server.

Single Delivery Service Account.....\$25.00 per Month*

*At Supplier's option, a \$300 annual charge may be assessed in lieu of the \$25 monthly charge.

(ii) One-Time Request for Interval Data

If available, the Company will provide a Customer's historical interval data in an electronic format to the Customer or Supplier at the following rate:

Single Delivery Service Account.....\$50.00 per Request

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2. Load Pulse Outputs Service

This service is offered to Customers or Suppliers who desire a pulse output from the Company's meter. The Company will acquire and install the equipment to allow the Customer or Supplier to interface with the Company's metering equipment and enable the Customer or Supplier to have access to load pulse output. Pulses representing kilowatt-hours are usually requested, but other electrical quantities such as kilovar-hours are also available. The Customer or Supplier has the option to connect this output to their own interval data recorder or other load monitoring or load management devices. The Customer or Supplier is responsible for connecting their own devices to the load pulse output. The one-time fee for this service is as follows:

Load Pulse Output
Up to Two Metered Quantities.....\$800 per Isolation Relay Device

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(c) Supplier Customer Service

The Company will provide Customer Service, as an optional service, to Suppliers who have entered into a written agreement for Billing and Payment Service with the Company and who have entered into a written agreement for Supplier Customer Service with the Company for a minimum of one year. Customer Service is defined as processing of standard Customer informational requests on behalf of a Supplier including Supplier balances, rate information, resolving disputes and processing Customer enrollment. This service is available for Supplier's Customers located within the Company's Service Area. This service includes inbound calls and does not include outbound telemarketing service to potential Customers or promoting new Supplier services to existing Customers. The charges shall be assessed monthly and based on minutes of call handling time as follows:

Supplier Customer Service Charge\$1.10 per minute

Nothing herein shall prohibit the Company and Supplier from negotiating an annual per customer fee for Customer Services. The Supplier will be responsible for establishing a separate toll free number to allow the number of calls to be tracked as well as allowing for individualization of services.

(d) Billing and Payment Service

The Company will provide Billing and Payment Service as an option to Suppliers who have entered into a written agreement for Billing and Payment Service with the Company for a minimum of one year. The monthly Billing and Payment Service Charge, listed below, is for billing arrangements which can be accommodated by the Company's billing systems without significant programming changes:

Billing and Payment Service Charge\$ 0.07 per bill rendered
Minimum Billing and Payment Service Charge\$ 100.00 per month

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The Company shall also provide, at its option, Billing and Payment Service for Supplier pricing options which require programming changes to the Company's billing systems. Suppliers will be assessed a one-time setup charge at the following rate to enable non-standard Supplier billing arrangements by the Company:

Programming Setup Charge.....\$95.00 per hour

Any request by the Supplier for Rate Maintenance and Error Correction service provided by the Company in support of Billing and Payment Service will be billed on a monthly basis using the hourly rate below. Rate Maintenance and Error Correction will include maintaining Supplier rates and pricing options in the Company's billing systems and calculating Customer billing adjustments due to Supplier errors in pricing.

Rate Maintenance and Error Correction Charge.....\$53.00 per hour

Customer payments received by the Company shall be applied to balances due to the Company and the Supplier in the following order:

(1) utility outstanding deposit obligations, (2) any utility current payment arrangement obligations, (3) any utility budget billing arrangement obligations, (4) utility and supplier aged accounts receivables, with a priority for the utility aged receivables, (5) utility and supplier current charges, with a priority for the utility's current charges, and (6) any miscellaneous nonelectric service product or services.

(e) Off-Cycle Meter Reading

In the event of non-payment by a Customer receiving Delivery Service under Large General Delivery Service Rate LG, a Supplier shall be permitted to request an off-cycle meter reading by the Company pursuant to the notice requirements and terms provided in Rule Puc 2004.12. Suppliers will be assessed the following charge:

Off-Cycle Meter Reading Charge (if telemetered) \$53 per meter
Off-Cycle Meter Reading Charge (if non-telemetered) \$84 per meter

3. Initiation and Termination of Supplier Service

(a) Initiation

To initiate Supplier Service to a Customer, the Supplier shall submit an Electronic Enrollment which shall comply with the EDI standard, as may be amended from time to time.

If the information on the Electronic Enrollment passes validation, the Company will send the Supplier a "Successful Enrollment" notice. Supplier Service shall commence on the date of the Customer's next meter read date, provided that the Supplier has submitted the Electronic Enrollment to the Company at least two business days prior to the scheduled meter read date. If the Company receives more than one Electronic Enrollment for the same Customer for the same enrollment period, the first successfully processed Electronic Enrollment shall be accepted. All subsequent Electronic Enrollments received during that enrollment period shall be rejected.

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If a Supplier's Electronic Enrollment fails to meet the requirements of this Tariff, the Company shall, within one business day of receipt of the Electronic Enrollment, notify the Supplier through an EDI Error notice.

(b) Termination

To terminate Supplier Service with a Customer, the Supplier of record shall submit electronically to the Company a valid "Supplier Drops Customer" transaction. Supplier Service shall terminate on the date of the Customer's next meter read date, provided that the "Supplier Drops Customer" transaction is submitted and successfully processed at least two business days prior to the Customer's scheduled meter read date. If the "Supplier Drops Customer" transaction is not received at least two business days prior to the scheduled meter read date, Supplier Service will terminate on the subsequent meter read date. The Company shall send a "Confirm Drop Date" transaction to the Supplier of record. The Supplier of record will be responsible for notifying the Customer of the termination date.

In cases where the Company uses estimated energy and demand values for billing purposes and the estimated bill coincides with the termination of Supplier Service, the Supplier shall agree to accept the estimated metering values as final values. The Company shall not be obligated to reconcile the estimated values after actual meter reading values are available.

(c) Customer Moves

If a Customer of record moves within the Company's Service Area and the Customer or designee notifies the Company prior to the initiation of Delivery Service at the new service location that he/she wishes to continue Supplier Service with the Supplier of record, the Company shall send a "Customer Move" notice to the Supplier and no Electronic Enrollment is necessary for the continuation of Supplier Service.

If a Customer of record initiates Delivery Service at a new service location, in addition to another established account within the Company's Service Area, the Customer shall be responsible for selecting a Supplier for the new service location. If an Electronic Enrollment is not received by the Company at least two business days before the initiation of Delivery Service, the Customer will be rendered energy and capacity under Default Service.

Unless the Company is notified otherwise by the Customer, the Company treats all applications for Delivery Service as a new Customer to the Service Area and the Customer will be rendered energy and capacity under Default Service at the new service location. In the event the Company is informed that the new application for Delivery Service is a Customer of record on or after the date Delivery Service is initiated, the Supplier will be notified either by the Customer Usage Information or the Customer Usage and Billing Information EDI transactions, if and when Delivery Service is terminated at the prior service location.

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(d) Other

In the event a Delivery Service account is terminated by either the Customer or the Company, such termination will be shown on either the Customer Usage Information or the Customer Usage and Billing Information EDI transactions.

4. Exclusion of Supplier From Providing Service Within the State of New Hampshire or From the Regional Market

In the event of a Supplier's Default that has led to a Suspension from regional market participation by ISO-NE or another event causing a Supplier to be unable to provide service to its customers in New Hampshire, the Company shall transfer all Customers of the Supplier to Default Energy Service as of the effective date provided by ISO-NE or the Commission, as applicable, otherwise known as the transfer date. Such Suppliers will be assessed a customer transfer charge. Transferred Customers shall remain on Default Energy Service until the Company receives a valid Electronic Enrollment from a registered Supplier or notice from the Customer in the case of Self-Supply Service. The Company shall require a new signed service agreement with any Supplier that has been Suspended and has subsequently been reinstated by ISO-NE, or if another event caused a Supplier to be unable to provide service to its customers and that event was subsequently cured. Electronic Enrollments from Suppliers reinstated by ISO-NE or the Commission shall be effective no sooner than thirty days from the transfer date provided by ISO-NE or the Commission, unless agreed to by the Company.

Customer Transfer Charge: \$64 per service account

5. Interruption, Disconnection and Refusal of Delivery Service

Any interruption, disconnection and refusal of Delivery Service by the Company shall be in accordance with this Tariff and the rules of the Commission. The Company shall not be liable for any revenue losses to Suppliers as a result of an interruption or disconnection of Delivery Service to an existing Customer.

In the event the Company refuses to supply or expand Delivery Service for any reason, the Company shall not be responsible for any losses or damages (direct, indirect or consequential) to a Supplier resulting from the corresponding loss of compensation.

6. Metering

The Company shall meter each Customer in accordance with Tariff provisions. Each Customer shall be metered or its load estimated such that the loads can be reported to the ISO-NE for inclusion in the Supplier's, or applicable NEPOOL member's, load calculations.

In the event a Supplier utilizes the Company's meter readings for billing purposes, the Company shall not be responsible for any loss or damage to a Supplier resulting from a failure of the Company's metering equipment to partially or fully register the amount of electricity consumed by a Customer.

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Should a Supplier install metering equipment or any other equipment on Customer-owned facilities which interferes with the operation of the Company's metering equipment or any other Company-owned equipment, the Supplier shall undertake best efforts to remedy the interference in a timely manner and shall compensate the Company for any damages resulting from the interference. Failure to remedy the interference may result in the termination of Delivery Service after 30 days' notice to the Supplier and Customer.

The Company is not obligated to use metering data registered by Supplier-owned metering equipment for the purpose of billing Delivery Service under this Tariff or for reporting load to ISO-NE.

7. Determination of Hourly Loads for ISO-NE Reporting (Estimation)

The determination and subsequent reporting of Supplier loads (which includes the coincident peak capacity values) shall be in accordance with NEPOOL/ISO-NE Market Rules and Procedures, and State regulations. Each Supplier's loads will be assigned to a specific load asset (as registered with ISO-NE) and the corresponding hourly values will be reported to ISO-NE for financial settlement of the wholesale electricity market, and appropriate regulatory bodies. Courtesy copies of this data may be provided to each Supplier.

Load settlement is performed using a combination of actual hourly interval meter data and estimated data. The multi-step process includes the determination of the (i) Retail Territory Load (as said term is defined in Section A below), (ii) Customer loads, and (iii) Supplier loads, as well as any adjustments to those values. A description of each of these steps follows.

(a) Determination of the Retail Territory Load (Real Time Market Settlement)

On an hourly basis, the Company will calculate an aggregate value representing the load of its Customers served below the 345kV transmission system (the "Retail Territory Load") at the PTF boundary with the Company Metering Domain(s). The Retail Territory Load will consist of the five components below as represented in the ISO-NE settlement system:

- (1) Total metered output of generation connected to the Company Metering Domain
- (2) Plus net imports into the Company Metering Domain
- (3) Less net exports from the Company Metering Domain
- (4) Less non-retail loads (e.g. wholesale load served to municipalities)
- (5) Less the Company Metering Domain's low voltage PTF losses as estimated by ISO-NE.

(b) Determination of Customer Load

The Customer hourly loads shall be determined from either actual hourly interval data or estimated from rate class profiles.

When utilizing average rate class profiles, the Company shall calculate the usage factor for each Customer that reflects the Customer's usage relative to the average usage for the rate class. This Customer usage factor shall be used to scale the class load profile when estimating the Customer's hourly load.

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The Company will increase the hourly loads by a distribution loss factor, to account for losses between the Customer meter and the ISO-NE reporting point, the PTF boundary. The distribution loss factors used are for approximation purposes only and are to be used exclusively for the calculation of the Customers loads. Any potential difference between these loss factors and actual hourly losses will be captured in the allocation of residual, as described below.

(c) Determination of Supplier Loads

Each Customer, including those on Default Energy Service or Self-Supply, will be assigned their associated Supplier code from the billing database. The Customer loads from Section (b) above will be summed, for each hour, by this Supplier code. For each hour, the difference between the Retail Territory Load and the sum of the loads from Section (b) above will constitute the “residual”. The loads from Section (b) above will be adjusted by the residual. The residual will be allocated proportionally to each Supplier’s share of the profiled loads from Section (b) above.

The sum of the loads plus any residual will constitute the Supplier hourly loads. The sum of the Supplier hourly loads in a Metering Domain will equal the Retail Territory Load of the same Metering Domain.

To refine the estimates of the Supplier’s loads that result from the estimated hourly loads, a monthly calculation shall be performed to incorporate the most recent Customer usage information, which is available after the monthly meter readings are processed.

(d) Reporting of Supplier Loads for the ISO-NE Settlement Processes

In accordance with the ISO-NE rules and procedures, as amended from time to time, the Company will report to ISO-NE the Supplier hourly loads in the time period specified by the ISO-NE Rules for the initial settlement.

Subsequently, in accordance with the ISO-NE’s rules and procedures that pertain to the resettlement processes, the Company will submit to ISO-NE any revised hourly values for assets reflected in the ISO-NE settlement system that are used to determine the Retail Territory Load for each hour of each day. The Company will also submit to ISO-NE any revised hourly energy quantities for each Supplier for each resettlement process.

As wholesale electricity market changes are implemented, the Company will comply with all such applicable market changes when determining the Retail Territory Load. The Company also shall determine and report the Supplier loads consistent with applicable market rules and procedures.

(e) Data Review

The process of Supplier load estimation involves statistical samples and estimating error. The Company shall not be responsible for any estimating reporting, settlement or other types of errors associated with, or resulting from, this process, and the Company shall not be liable to any Supplier or any third party for any costs or losses that are associated with such errors. Each Supplier is solely responsible for checking and ensuring the accuracy of all such data.

The terms above are also applicable to Customers who are receiving Self-Supply Service.

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8. Liability

The Company shall have no liability with respect to any transaction or arrangement by or between a Customer and Supplier.

The Company and the Supplier shall indemnify and hold the other and their respective affiliates, and the directors, officers, employees, and agents of each of them (collectively, "Affiliates") harmless from and against any and all damages, costs (including attorneys' fees), fines, penalties, and liabilities, in tort, contract, or otherwise (collectively, "Liabilities"), resulting from claims of third parties arising, or claimed to have arisen, from the acts or omissions of such party in connection with the performance of its obligations under this Tariff. The Company and the Supplier shall waive recourse against the other party and its Affiliates for or arising from the non-negligent performance by such other party in connection with the performance of its obligations under this Tariff.

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DBA EVERSOURCE ENERGY

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Rate R

RESIDENTIAL DELIVERY SERVICE RATE R

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Delivery Service in individual urban, rural and farm residences and apartments. Service under this rate is available to those Customers who receive all of their electric service requirements hereunder, except that controlled electric service for thermal storage devices is available under Load Controlled Delivery Service Rate LCS and outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.

This rate is not applicable to commercial purposes except as specified hereafter. Multiple use of Delivery Service within the residence through one meter shall be billed in accordance with the predominant use of the demand. When wired for connection to the same meter, Delivery Service under this rate shall include the residence and connecting and adjacent buildings used exclusively for noncommercial purposes.

The use of single-phase motors of 3 H.P. rating or less is permitted under this rate provided such use does not interfere with the quality of service rendered to other Customers. Upon written application to the Company, the use of larger motors may be authorized where existing distribution facilities permit.

CHARACTER OF SERVICE

Delivery Service supplied under this rate will be single-phase, 60 hertz, alternating current, normally three-wire at a nominal voltage of 120/240 volts.

RATE PER MONTH

Customer Charge \$13.81 per month

Energy Charges:

Per Kilowatt-Hour

Distribution Charge..... 4.811¢

Regulatory Reconciliation Adjustment.....X.XX¢

Transmission Charge 3.011¢

Stranded Cost Recovery.....0.982¢

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Issued by: /s/ Joseph A. Purington
Joseph A. Purington

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Title: President, NH Electric Operations

Attachment A

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Rate R

WATER HEATING - UNCONTROLLED

Uncontrolled water heating service is available under this rate at those locations which were receiving service hereunder on July 1, 2020 and which have continuously received such service since that date, and when such service is supplied to approved water heaters equipped with either (a) two thermostatically-operated heating elements, each with a rating of no more than 5,500 watts, so connected or interlocked that they cannot operate simultaneously, or (b) a single thermostatically-operated heating element with a rating of no more than 5,500 watts. The heating elements or element shall be connected by means of an approved circuit to a separate water heating meter. Delivery Service measured by this meter will be billed monthly as follows:

Meter Charge \$4.87 per month

Energy Charges:

Distribution Charge.....	2.161¢ per kilowatt-hour
Regulatory Reconciliation Adjustment.....	X.XX¢ per kilowatt-hour
Transmission Charge.....	2.331¢ per kilowatt-hour
Stranded Cost Recovery.....	0.982¢ per kilowatt-hour

WATER HEATING - CONTROLLED

Controlled off-peak water heating is available under this rate for a limited period of time at those locations which were receiving controlled off-peak water heating service hereunder on Customer Choice Date and which have continuously received such service hereunder since that date. Service under this rate at such locations shall continue to be available only for the remaining life of the presently-installed water heating equipment. No replacement water heaters shall be permitted to be installed for service under this rate at locations which otherwise would qualify for this service.

For those locations which qualify under the preceding paragraph, controlled off-peak water heating service is available under this rate when such service is supplied to approved storage type electric water heaters having an off-peak heating element with a rating of no more than 1,000 watts, or 20 watts per gallon of tank capacity, whichever is greater. The off-peak element shall be connected by means of an approved circuit to a separate water heating meter. Electricity used will be billed monthly as follows:

Meter Charge \$6.38 per month

Energy Charges:

Distribution Charge.....	1.141¢ per kilowatt-hour
Regulatory Reconciliation Adjustment.....	X.XX¢ per kilowatt-hour
Transmission Charge	2.331¢ per kilowatt-hour
Stranded Cost Recovery.....	0.568¢ per kilowatt-hour

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Rate R

ELDERLY CUSTOMER DISCOUNT

Eligible Customers may receive an Elderly Customer Discount of ten percent (10%) from bill amounts computed under this rate for service rendered at their principal residence.

Eligible Customers are those Customers 70 years of age or older who are owners or renters of their principal residence or who normally pay a substantial portion of the cost of maintaining their principal residence who were receiving the Elderly Customer Discount pursuant to an applicable rate on February 1, 1982, and who have continuously received the Elderly Customer Discount since that date; provided that when an eligible Customer who has been receiving the discount deceases, a surviving spouse who would otherwise be eligible for the discount will be deemed to be an eligible Customer.

The covered provisions of this rate shall include all provisions relating to rates and charges (including the Customer charge and any meter charge) except for charges under the provision entitled "Service Charge", line extension surcharges, or any charges under Default Service. The covered provisions shall also include service under Load Controlled Delivery Service Rate LCS.

SERVICE CHARGE

When the Company establishes or re-establishes a Delivery Service account for a Customer at a meter location, the Company will be entitled to assess a service charge in addition to all other charges under this rate. The service charge will be \$10.00 if the Company does not have to send an employee to the meter location to establish or re-establish Delivery Service. When it is necessary for the Company to send an employee to the meter location to establish or re-establish Delivery Service, the service charge will be \$35.00. When it is necessary for the Company to send an employee to the meter location outside of normal working hours to establish or re-establish Delivery Service, the service charge will be \$80.00. The Company will be entitled to assess an \$26.00 service charge when it is necessary to send an employee to the Customer location to collect a delinquent bill. This charge shall apply regardless of any action taken by the Company including accepting a payment, making a deferred payment arrangement or leaving a collection notice at the Customer's premises.

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Rate R-OTOD

RESIDENTIAL TIME-OF-DAY DELIVERY SERVICE RATE R-OTOD

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Delivery Service in individual urban, rural and farm residences and apartments. Service under this rate is available at the Customer's option to those Customers who have completed a written Application for Service and signed a Service Agreement and who receive all of their Delivery Service requirements hereunder, except that outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.

This rate is not applicable to commercial purposes except as specified hereafter. Multiple use of service within the residence through one meter shall be billed in accordance with the predominant use of the demand. When wired for connection to the same meter, service under this rate shall include the residence and connecting and adjacent buildings used exclusively for noncommercial purposes.

The use of single-phase motors of 3 H.P. rating or less is permitted under this rate provided such use does not interfere with the quality of service rendered to other Customers. Upon written application to the Company, the use of larger motors may be authorized where existing distribution facilities permit.

LIMITATIONS ON AVAILABILITY

The availability of this rate to particular Customers is contingent upon the availability of time-of-use meters and personnel to administer the rate, all as determined by the Company.

Because the Company's distribution system and Customer service facilities have a limited electrical capacity, large and/or intermittent and irregular electrical loads can result in the overloading and damaging of said facilities and can adversely affect the quality of service to other Customers of the Company. Therefore, service under this rate shall not be available where, in the Company's judgment, sufficient distribution system capacity and Customer service facilities do not exist in order to supply the electrical requirements of the applicant unless the Service Agreement provides for a suitable cash payment or a satisfactory revenue guarantee to the Company, or both. Further, in the event that a Customer receiving service under this rate shall propose to materially increase the amount of Delivery Service required, the Customer shall give the Company prior written notice of this fact, thereby allowing the Company to ascertain whether sufficient distribution system capacity and Customer service facilities exist to serve the proposed increased requirement. Where the capacity or facilities do not exist, the Customer will not make the proposed increase until the Service Agreement shall be amended to provide for a suitable cash payment or a satisfactory revenue guarantee to the Company, or both.

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Rate R-OTOD

SERVICE AGREEMENT

The term of the Service Agreement shall be one year, and shall continue thereafter until canceled by one month's notice to the Company by the Customer. The Customer will not be permitted to change from this rate to any other rate until the Customer has taken service under this rate for at least twelve months. However, upon payment by the Customer of a suitable termination charge, the Company may, at its option, waive this provision where a substantial hardship to the Customer would otherwise result.

CHARACTER OF SERVICE

Service supplied under this rate will be single-phase, 60 hertz, alternating current, normally three-wire at a nominal voltage of 120/240 volts.

RATE PER MONTH

Customer Charge\$32.08 per month

Energy Charges:

Per Kilowatt-Hour

Distribution Charges:

On-Peak Hours (7:00 a.m. to 8:00 p.m.
weekdays excluding Holidays)14.710¢

Off-Peak Hours (all other hours)0.513¢

Regulatory Reconciliation Adjustment.....X.XX¢ per kilowatt-hour

Transmission Charges:

On-Peak Hours (7:00 a.m. to 8:00 p.m.
weekdays excluding Holidays) 3.011¢

Off-Peak Hours (all other hours)1.966¢

Stranded Cost Recovery.....0.844¢

The On-Peak Hours shall be the hours after 7:00 a.m. and before 8:00 p.m. weekdays excluding holidays as defined in this Tariff. The Off-Peak Hours shall be all hours not included in the On-Peak Hours.

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Rate R-OTOD

CAPACITY CHARGE

The Company's studies may show that, in order to more closely follow cost of service, it is necessary or desirable to utilize meters capable of measuring rate of taking of electric service in kilowatts. The Company may install such meters either for all Customers served under this rate or for only those Customers whose usage of electricity is uncharacteristic of this class. At any time, the Company may file a revision of the rate form and/or charges of this rate to provide for an appropriate capacity charge. After such revision of this rate, any Customer who is subject to higher billing under this rate will have the option of continuing to take service under this rate or to take service under any other rate of the Company's Tariff which may be available.

WATER HEATING - UNCONTROLLED

Uncontrolled water heating service is available at those locations which were receiving service hereunder on July 1, 2020 and which have continuously received such service since that date, and when such service is supplied to approved water heaters equipped with either (a) two thermostatically-operated heating elements, each with a rating of no more than 5,500 watts, so connected or interlocked that they cannot operate simultaneously, or (b) a single thermostatically-operated heating element with a rating of no more than 5,500 watts. The heating elements or element shall be connected by means of an approved circuit to a separate water heating meter.

Delivery Service measured by this meter will be billed monthly as follows:

Meter Charge\$4.87 per month

Energy Charges:

Distribution Charge..... 2.161¢ per kilowatt-hour
Distribution Adjustment Charge x.xxx¢ per kilowatt-hour
Transmission Charge 2.331¢ per kilowatt-hour
Stranded Cost Recovery..... 0.982¢ per kilowatt-hour

WATER HEATING - CONTROLLED

Controlled off-peak water heating is available under this rate for a limited period of time at those locations which were receiving controlled off-peak water heating service hereunder on Customer Choice Date and which have continuously received such service hereunder since that date. Service under this rate at such locations shall continue to be available only for the remaining life of the presently-installed water heating equipment. No replacement water heaters shall be permitted to be installed for service under this rate at locations which otherwise would qualify for this service.

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Rate R-OTOD

For those locations which qualify under the preceding paragraph, controlled off-peak water heating service is available under this rate when such service is supplied to approved storage type electric water heaters having an off-peak heating element with a rating of no more than 1,000 watts, or 20 watts per gallon of tank capacity, whichever is greater. The off-peak element shall be connected by means of an approved circuit to a separate water heating meter. Electricity used will be billed monthly as follows:

Meter Charge \$6.38 per month

Energy Charges:

Distribution Charge..... 1.141¢ per kilowatt-hour

Regulatory Reconciliation Adjustment X.XX¢ per kilowatt-hour

Transmission Charge 2.331¢ per kilowatt-hour

Stranded Cost Recovery.....0.568¢ per kilowatt-hour

SERVICE CHARGE

When the Company establishes or re-establishes a Delivery Service account for a Customer at a meter location, the Company will be entitled to assess a service charge in addition to all other charges under this rate. The service charge will be \$10.00 if the Company does not have to send an employee to the meter location to establish or re-establish Delivery Service. When it is necessary for the Company to send an employee to the meter location to establish or re-establish Delivery Service, the service charge will be \$35.00. When it is necessary for the Company to send an employee to the meter location outside of normal working hours to establish or re-establish Delivery Service, the service charge will be \$80.00. The Company will be entitled to assess an \$26.00 service charge when it is necessary to send an employee to the Customer location to collect a delinquent bill. This charge shall apply regardless of any action taken by the Company including accepting a payment, making a deferred payment arrangement or leaving a collection notice at the Customer's premises.

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Rate EAP

RESIDENTIAL ELECTRIC ASSISTANCE PROGRAM RATE EAP

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is available to the primary residence of residential Customers with a household income equal to or less than 200% of the federal poverty guidelines subject to the availability of funds for this program. Customers may apply for this rate with the Electric Assistance Program Administrator (Administrator) designated by the Public Utilities Commission. The Administrator will determine initial eligibility for Rate EAP and the appropriate Percent Discount level. The Administrator will also re-certify each Customer on or before the expiration date of the Customer's certification period. Billing for service under this rate shall commence on the date of the Customer's next meter read date (Effective Date) following the receipt by the Company of a certification notification transaction from the Administrator. Service under this rate shall continue until the Company receives a removal notification transaction from the Administrator, except that in the event the Customer terminates Delivery Service and does not request Delivery Service within 30 days, the Company may immediately remove the Customer from the Electric Assistance Program without notice to the Customer.

This rate is available in conjunction with the Company's Residential Delivery Service Rate R or Residential Time-of-Day Delivery Service Rate R-OTOD. Therefore, service shall be provided in accordance with the terms and conditions of Rate R or Rate R-OTOD as now or hereafter effective, except as specifically provided otherwise in this rate.

PERCENT DISCOUNT

For Customers receiving energy service under Default Energy Service, Customers will be billed for Delivery Service under Residential Delivery Service Rate R or Residential Time-of-Day Delivery Service Rate R-OTOD and for Default Energy Service, except that a Percent Discount will be applied to all applicable Delivery Service and Default Energy Service rate charges which includes the Customer Charge, any Meter Charge, the Distribution Charge, the Regulatory Reconciliation Adjustment, the Transmission Charge, the Stranded Cost Recovery Charge, the System Benefits Charge and the Default Energy Service Charge for the first 750 kWh of monthly usage per service account. The Percent Discount will not be applied to the Line Extension Surcharges, Returned Check Charges or Service Charges. The Percent Discount cannot be applied to or combined with the Elderly Customer Discount. The covered provisions of this rate shall also include service under Load Controlled Delivery Service Rate LCS.

For Customers receiving energy service from an Energy Service Provider that has elected to receive Billing and Payment Service from the Company (otherwise known as consolidated billing), the Percent Discount will be calculated in the same manner as Customers receiving energy service under Default Energy Service, i.e. the Company's Default Energy Service rate will be used in the calculation of the discount, rather than the Energy Service Provider's rate, regardless of the difference in rates. All other Percent Discount provisions remain the same as those applicable to Customers receiving energy service under Default Energy Service including the application of the Percent Discount to the first 750 kWh of monthly usage per service account.

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Rate EAP

The following percent discounts apply:

<u>Tier</u>	<u>Percentage of Federal Poverty Guidelines</u>	<u>Discount</u>
2	151% to 200%	8%
3	126% to 150%	22%
4	101% to 125%	36%
5	76% to 100%	52%
6	up to 75%	76%

DEPOSITS

Deposits obtained by the Company prior to the Effective Date of service under this rate plus interest accrued thereon due to four consecutive disconnect notices, disconnection of service, or failure to provide satisfactory evidence of intent to remain at the service location for a period of twelve consecutive months shall be reviewed to ensure that the deposit amount plus accrued interest does not exceed the Customer's total bill for two high use months. To the extent the deposit exceeds the total bill amount of two high use months discounted by the Percent Discount the customer will receive on future bills under this rate, the difference shall be first applied to any outstanding balance owed to the Company by the Customer after the crediting of qualifying pre-program past due balances. Any remaining difference shall be refunded to the Customer within two months following the Effective Date of service under this rate. All other deposits obtained by the Company prior to the Effective Date of service under this rate shall be first applied to any outstanding balance owed to the Company by the Customer after the crediting of qualifying pre-program past due balances. Any remaining deposit amount shall be refunded to the Customer within two months following the Effective Date of service under this rate.

When deposits are required from Customers receiving service under this rate, the deposit shall not be more than the estimated bill for Delivery Service and Energy Service, if applicable, for a period of two high use months reduced by the amount of the Percent Discount when those months were incurred prior to the Effective Date of service under this rate.

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Rate G

GENERAL DELIVERY SERVICE RATE G

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Delivery Service for any use. It is available to (1) those Customers at existing delivery points who were receiving service hereunder on General Service Rate G on January 1, 1983, and who have continuously received service under that rate and this successor since that date, and (2) all other Customers whose loads as defined for billing purposes do not exceed 100 kilowatts. Service rendered hereunder shall exclude all backup and standby service provided under Backup Delivery Service Rate B.

Customers taking service under this rate shall provide any necessary transforming and regulating devices on the Customer's side of the meter. Controlled electric service for thermal storage devices is available under Load Controlled Service Rate LCS and outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.

CHARACTER OF SERVICE

Delivery Service supplied under this rate will be 60 hertz, alternating current, either (a) single-phase, normally three-wire at a nominal voltage of 120/240 volts, or (b) three-phase, normally at a nominal voltage of 120/208 or 277/480 volts. Three-phase, three-wire service at a nominal voltage of 240, 480 or 600 volts is available only to those Customers at existing locations who were receiving such service on February 1, 1986, and who have continuously received such service since that date. In underground secondary network areas, Delivery Service will be supplied only at a nominal voltage of 120/208 volts.

RATE PER MONTH

	<u>Single-Phase Service</u>	<u>Three-Phase Service</u>
Customer Charge	\$16.21 per month	\$32.39 per month
Customer's Load Charges:	<u>Per Kilowatt of Customer Load in Excess of 5.0 Kilowatts</u>	
Distribution Charge.....	\$10.49	
Regulatory Reconciliation Adjustment.....	\$X.XX	
Transmission Charge	\$7.77	
Stranded Cost Recovery.....	\$0.69	

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Rate G

Energy Charges:

Per Kilowatt-Hour

Distribution Charges:

First 500 kilowatt-hours2.805¢
Next 1,000 kilowatt-hours2.268¢
All additional kilowatt-hours1.709¢

Transmission Charge

First 500 kilowatt-hours2.807¢
Next 1,000 kilowatt-hours1.056¢
All additional kilowatt-hours0.566¢

Stranded Cost Recovery0.732¢

WATER HEATING - UNCONTROLLED

Uncontrolled water heating service is available under this rate at those locations which were receiving service hereunder on July 1, 2020 and which have continuously received such service since that date, and when such service is supplied to approved water heaters equipped with either (a) two thermostatically-operated heating elements, each with a rating of no more than 5,500 watts, so connected or interlocked that they cannot operate simultaneously, or (b) a single thermostatically-operated heating element with a rating of no more than 5,500 watts. The heating elements or element shall be connected by means of an approved circuit to a separate water heating meter. Service measured by this meter will be billed monthly as follows:

Meter Charge \$4.87 per month

Energy Charges:

Distribution Charge..... 2.161¢ per kilowatt-hour
Regulatory Reconciliation Adj.X.XX¢ per kilowatt-hour
Transmission Charge 2.331¢ per kilowatt-hour
Stranded Cost Recovery..... 0.924¢ per kilowatt-hour

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Rate G

WATER HEATING - CONTROLLED

Controlled off-peak water heating is available under this rate for a limited period of time at those locations which were receiving controlled off-peak water heating service hereunder on Customer Choice Date and which have continuously received such service hereunder since that date. Service under this rate at such locations shall continue to be available only for the remaining life of the presently-installed water heating equipment. No replacement water heaters shall be permitted to be installed for service under this rate at locations which otherwise would qualify for this service.

For those locations which qualify under the preceding paragraph, controlled off-peak water heating service is available under this rate when such service is supplied to approved storage type electric water heaters having an off-peak heating element with a rating of no more than 1,000 watts, or 20 watts per gallon of tank capacity, whichever is greater. The off-peak element shall be connected by means of an approved circuit to a separate water heating meter. Electricity used will be billed monthly as follows:

Meter Charge\$6.38 per month

Energy Charges:

Distribution Charge..... 1.141¢ per kilowatt-hour

Regulatory Reconciliation Adj. X.XX¢ per kilowatt hour

Transmission Charge 2.331¢ per kilowatt-hour

Stranded Cost Recovery..... 0.532¢ per kilowatt-hour

SPACE HEATING SERVICE

Space heating service is available under this rate at those locations which were receiving space heating service under the Transitional Space Heating Service Rate TSH prior to Customer Choice Date and which have continuously received such service since that date. Customers at such locations who have elected this rate shall have the electricity for such service billed separately on a monthly basis as follows:

Meter Charge\$3.24 per month

Energy Charges:

Distribution Charge..... 3.908¢ per kilowatt-hour

Transmission Charge 2.807¢ per kilowatt-hour

Stranded Cost Recovery..... 1.159¢ per kilowatt-hour

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Rate G

Space heating equipment served under this rate, including heat pumps and associated air circulating equipment, shall be wired by means of approved circuits to permit measurement of such equipment's additional demand and energy use.

Customers taking space heating service under this rate at locations where the regular power and lighting service is delivered at primary voltage level or above shall be required to provide at the Customers' expense suitable transforming, controlling and regulating apparatus, acceptable to and approved by the Company, for the space heating service in the same manner as for the power and lighting service, so that deliveries of all electric service may be made by the Company at the same voltage level.

CUSTOMER'S LOAD

Customer's load is defined as the greatest rate of taking Delivery Service in kilowatts for any thirty (30) minute interval during the current monthly billing period.

Customer's load shall be measured whenever (a) such load is known or estimated to be 5.0 kilowatts or more, or (b) the Customer's use of service is 750 kilowatt-hours or more per month for three (3) consecutive months. However, any Customer's load may be measured at the Company's option. When measured, Customer's load shall be determined to the nearest one-tenth (0.1) kilowatt for billing purposes.

SERVICE CHARGE

When the Company establishes or re-establishes a Delivery Service account for a Customer at a meter location, the Company will be entitled to assess a service charge in addition to all other charges under this rate. The service charge will be \$10.00 if the Company does not have to send an employee to the meter location to establish or re-establish Delivery Service. When it is necessary for the Company to send an employee to the meter location to establish or re-establish Delivery Service, the service charge will be \$35.00. When it is necessary for the Company to send an employee to the meter location outside of normal working hours to establish or re-establish Delivery Service, the service charge will be \$80.00. The Company will be entitled to assess an \$26.00 service charge when it is necessary to send an employee to the Customer location to collect a delinquent bill. This charge shall apply regardless of any action taken by the Company including accepting a payment, making a deferred payment arrangement or leaving a collection notice at the Customer's premises.

Short-term, seasonal or transient Customers who take service at temporary locations shall pay for the cost of installing and removing the necessary poles, wires, transformers, cable and other equipment in addition to the foregoing service charge.

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Rate G-OTOD

GENERAL TIME-OF-DAY DELIVERY SERVICE RATE G-OTOD

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Delivery Service to Customers who utilize electric thermal storage devices and other applications approved by the Company. It is available to Customers whose loads as defined for billing purposes do not exceed 100 kilowatts. Service is available at the Customer's option to those Customers who have completed a written Application for Service and signed a Service Agreement, and who receive all of their Delivery Service requirements hereunder, except that outdoor area lighting is available under Outdoor Lighting Service Rate OL.

Customers taking service under this rate shall provide any necessary transforming and regulating devices on the Customer's side of the meter.

LIMITATIONS ON AVAILABILITY

The availability of this rate to particular Customers is contingent upon the availability of time-of-use meters and personnel to administer the rate, all as determined by the Company.

Because the Company's distribution system and Customer service facilities have a limited electrical capacity, large and/or intermittent and irregular electrical loads can result in the overloading and damaging of said facilities and can adversely affect the quality of service to other Customers of the Company. Therefore, service under this rate shall not be available where, in the Company's judgment, sufficient distribution system capacity and Customer service facilities do not exist in order to supply the electrical requirements of the applicant unless the Service Agreement provides for a suitable cash payment or a satisfactory revenue guarantee to the Company, or both. Further, in the event that a Customer receiving service under this rate shall propose to materially increase the amount of Delivery Service required, the Customer shall give the Company prior written notice of this fact, thereby allowing the Company to ascertain whether sufficient distribution system capacity and Customer service facilities exist to serve the proposed increased requirement. Where the capacity or facilities do not exist, the Customer will not make the proposed increase until the Service Agreement shall be amended to provide for a suitable cash payment or a satisfactory revenue guarantee to the Company, or both.

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Title: President and Chief Operating Officer

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Rate G - OTOD

SERVICE AGREEMENT

The term of the Service Agreement shall be one year, and shall continue thereafter until canceled by one month's notice to the Company by the Customer. The Customer will not be permitted to change from this rate to any other rate until the Customer has taken service under this rate for at least twelve months. However, upon payment by the Customer of a suitable termination charge, the Company may, at its option, waive this provision where a substantial hardship to the Customer would otherwise result.

CHARACTER OF SERVICE

Service supplied under this rate will be 60 hertz, alternating current, either (a) single-phase, normally three-wire at a nominal voltage of 120/240 volts or (b) three-phase, normally at a nominal voltage of 120/208 or 277/480 volts. Three-phase, three-wire service at a nominal voltage of 240, 480 or 600 volts is available only to those Customers at existing locations who were receiving such service on February 1, 1986, and who have continuously received such service since that date. In underground secondary network areas, service will be supplied only at a nominal voltage of 120/208 volts.

RATE PER MONTH

	<u>Single-Phase Service</u>	<u>Three-Phase Service</u>
Customer Charge	\$41.98 per month	\$60.00 per month

Customer's Load Charges:

Per Kilowatt of Customer Load

Distribution Charge.....	\$13.92
Regulatory Reconciliation Adjustment.....	\$X.XX
Transmission Charge	\$ 5.12
Stranded Cost Recovery.....	\$ 0.35

Energy Charges:

Per Kilowatt-Hour

Distribution Charges:

On-Peak Hours (7:00 a.m. to 8:00 p.m. weekdays excluding Holidays)	5.335¢
Off-Peak Hours (all other hours)	0.836¢

Stranded Cost Recovery.....	0.532¢
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Rate G-OTOD

CUSTOMER'S LOAD

Customer's load is defined as the greatest rate of taking service in kilowatts for any thirty (30) minute interval during on-peak hours of the current monthly billing period. On-peak hours shall be the hours of 7:00 a.m. through 8:00 p.m. weekdays excluding Holidays as defined in this Tariff.

SERVICE CHARGE

When the Company establishes or re-establishes a Delivery Service account for a Customer at a meter location, the Company will be entitled to assess a service charge in addition to all other charges under this rate. The service charge will be \$10.00 if the Company does not have to send an employee to the meter location to establish or re-establish Delivery Service. When it is necessary for the Company to send an employee to the meter location to establish or re-establish Delivery Service, the service charge will be \$35.00. When it is necessary for the Company to send an employee to the meter location outside of normal working hours to establish or re-establish Delivery Service, the service charge will be \$80.00. The Company will be entitled to assess an \$26.00 service charge when it is necessary to send an employee to the Customer location to collect a delinquent bill. This charge shall apply regardless of any action taken by the Company including accepting a payment, making a deferred payment arrangement or leaving a collection notice at the Customer's premises.

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Rate LCS

LOAD CONTROLLED DELIVERY SERVICE RATE LCS

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part and as provided hereinafter, the radio-controlled option of this rate is available at those locations which were receiving service hereunder on July 1, 2020 and which have continuously received such service since that date. Under the radio-controlled option it is applicable to separately metered and controlled Delivery Service to electric thermal storage devices and to conventional electric space heating when a dynamic electric thermal storage system or a wood stove or coal stove is available for use as a backup during times when service is interrupted by the Company and other applications approved by the Company. Service under the 8-hour, 10-hour and 11-hour options is available only at those locations which were receiving service under one of these options under Load Controlled Service Rate LCS or Controlled Off-Peak Electric Water Heating Service Rate COPE on October 1, 2004 and which have continuously received such service since that date.

The availability of the radio-controlled option in conjunction with a wood stove or coal stove shall be limited to those premises which have electric space heating equipment as the sole source of space heating, excluding the wood stove or coal stove. Such wood stove or coal stove must be permanently installed and sized to adequately heat the main living area of the premises.

Service under this rate is available at the Customer's option to those Customers whose electric thermal storage or other equipment has been approved by the Company for load control as provided hereinafter. Such equipment must be connected to a separate circuit to which no other electrical load shall be connected.

Radio-Controlled Option - Delivery service will be subject to interruptions of up to eight (8) hours during each twenty-four (24) hour day between 7:00 a.m. and 11:00 p.m. Each interruption will not exceed four (4) hours and the time between two consecutive interruptions will be no less than two (2) hours.

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This rate is intended as a rider applicable to Residential Delivery Service Rate R or General Delivery Service Rate G. Therefore, service under this rate must be taken in conjunction with service provided under either Rate R or Rate G in accordance with the terms and conditions therein as now or hereafter effective except as may be specifically provided otherwise in this rate.

LIMITATIONS ON AVAILABILITY

Service under this rate shall not be available where, in the Company's judgment, sufficient distribution system capacity does not exist in order to supply the electrical requirements of the applicant unless the Customer provides for a suitable cash payment or a satisfactory revenue guarantee to the Company, or both.

The availability of this rate is also contingent upon the availability to the Company of personnel and/or other resources necessary to provide service under this rate.

TERM

The term of service under this rate shall be one year, and shall continue thereafter until canceled by one month's notice to the Company by the Customer. The Customer will not be permitted to change from this rate to any other rate until the Customer has taken service under this rate for at least twelve months. However, upon payment by the Customer of a suitable termination charge, the Company may, at its option, waive this provision where a substantial hardship to the Customer would otherwise result.

RATE PER MONTH

Customer Charges:

Radio-Controlled Option\$6.99 per month

8-Hour, 10-Hour or 11-Hour Option\$6.38 per month

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Rate LCS

Energy Charges:

Per Kilowatt-Hour

Distribution Charges:

Radio-Controlled Option or 8-Hour Option 1.141¢

10-Hour or 11-Hour Option 2.161¢

Regulatory Recovery Adjustments:

Radio-Controlled Option..... X.XXX¢

8-Hour Option X.XXX¢

10-Hour or 11-Hour Option X.XXX¢

Transmission Charge 2.331¢

Stranded Cost Recovery (When service is taken
in conjunction with Rate R).....0.568¢

Stranded Cost Recovery (When service is taken
in conjunction with Rate G).....0.532¢

METERS

Under this rate, the Company will install one meter with appropriate load control devices.

ELECTRIC THERMAL STORAGE EQUIPMENT APPROVED FOR LOAD CONTROL

Load Controlled Service is available under this rate to electric thermal storage installations meeting the Company's specifications as to type, size and electrical characteristics in accordance with the following guidelines.

I. Electric Thermal Storage Space Heating Equipment

Adequate control and switching equipment must be installed to provide capability for staggering the commencement of the charging period with respect to other electric thermal storage devices and for permitting partial charging on warmer days, and for controlling service to the thermal storage devices.

The storage capability of the electric thermal storage device must be adequate to heat the Customer's whole premises under design conditions and must be properly sized to ensure

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A constant rate of charging during the period which service under this rate is available as determined by the Company in accordance with its customary procedures. A smaller sized electric thermal storage device may be approved by the Company for use in the Customer's premises under the Radio Controlled Option.

II. Electric Thermal Storage Water Heating

Load Controlled Service for electric thermal storage water heating is available under this rate when service is taken in conjunction with electric thermal storage space heating and at those locations which were receiving service under the Controlled Off-Peak Electric Water Heating Service Rate COPE on October 1, 2004 and which have continuously received such service since that date.

Service shall be supplied to electric thermal storage water heaters having either (i) two thermostatically-operated top and bottom heating elements, each with a rating of no more than 4,500 watts or forty (40) watts per gallon of storage capacity, whichever is greater, or (ii) a single thermostatically-operated heating element with a rating of 4,500 watts or forty (40) watts per gallon of storage capacity, whichever is greater. When there are two elements, both top and bottom elements must be connected and wired for Load Controlled Service, and must be connected or interlocked so that they cannot operate simultaneously.

The storage capacity of all electric thermal water heaters installed under the Radio-Controlled Option shall be forty (40) gallons or more. The storage capacity of all electric thermal water heaters installed under the 8-Hour, 10-Hour and 11-Hour Options shall be eighty (80) gallons or more. At the Company's option, smaller tanks may be installed for use in an individual apartment of a multi-family building under the 8-Hour, 10-Hour and 11-Hour Options.

INCREASED WATER HEATING CAPABILITY

Electric thermal storage water heating with switching capabilities for increasing the capability of the Customer's water heating equipment is available under this rate at those locations which had switching capability installed on or before January 1, 1994 and which have continuously received such service since that date. The element or elements must be connected and wired such that increased water heating capability is provided under Rate R or Rate G. Customers with installed switching capability will be billed an additional \$1.35 per month as a Customer charge. Switching capability is not available under the Radio-Controlled Option.

FEE FOR EMERGENCY CHARGING

If, due to an electrical outage or equipment malfunction, emergency charging of electric thermal storage devices is required at any time during which Delivery Service under this rate is not normally available, the Company will perform such charging upon sufficient notification. If charging is necessitated as a result of a malfunction of the Customer's equipment, the Company may assess the Customer a fee for such charging.

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Rate GV

PRIMARY GENERAL DELIVERY SERVICE RATE GV

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for high voltage Delivery Service. It is available upon the signing of a Service Agreement for such service at specified delivery points to Customers whose maximum demand shall not exceed 1,000 kilowatts. Service rendered hereunder shall exclude backup and standby service provided under Backup Delivery Service Rate B. Outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.

Suitable transforming, controlling and regulating apparatus, acceptable to and approved by the Company, shall be provided at the expense of the Customer. In locations in which space limitations or other factors make it impossible or inadvisable, in the opinion of the Company, for the Customer to have transforming apparatus devoted to its exclusive use, and in secondary network areas in which primary service is not made available by the Company at its option, Delivery Service shall be supplied from Company-owned transforming apparatus which also supplies other Customers. In such cases, this rate is available provided the Customer pays an annual rental charge equal to eighteen percent (18.0%) of the cost of the equivalent transformer capacity the Customer would furnish or rent to serve the load if exclusive use of a transformer bank by him were possible or if primary, three-phase service were available and provided the Customer pays in full the estimated cost of installing such equivalent transformer capacity at the time Delivery Service is initiated.

CHARACTER OF SERVICE

Delivery Service supplied under this rate will be three-phase, 60 hertz, alternating current, at a nominal voltage determined by the Company, generally 2,400/4,160, 4,800/8,320, 7,200/12,470, or 19,920/34,500 volts. A reasonably balanced load between phases shall be maintained by the Customer.

RATE PER MONTH

Customer Charge\$211.21 per month

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Demand Charges:

Per Kilowatt of Maximum Demand

Distribution Charges:

First 100 kilowatts.....	\$6.48
Excess Over 100 kilowatts.....	\$6.22
Regulatory Reconciliation Adjustment.....	\$X.XX
Transmission Charge	\$10.40
Stranded Cost Recovery.....	\$0.65

Energy Charges:

Per Kilowatt-Hour

Distribution Charges:

First 200,000 kilowatt-hours.....	0.657¢
All additional kilowatt-hours	0.583¢
Stranded Cost Recovery.....	0.643¢

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PRIMARY METERING LOSS ADJUSTMENT

When at the Company's option Delivery Service is metered at delivery voltage (2,400 volts nominal and above), all demand and energy meter readings shall be reduced by one and three-quarters percent (1.75%). Where feasible and at the Company's option, a value other than one and three-quarters percent (1.75%) may be used when specific data is available and this value is a more accurate representation of electrical losses.

MAXIMUM DEMAND

The kilowatt (KW) demand and, at the Company's option, the kilovolt-ampere (KVA) demand during each thirty-minute interval of the current monthly billing period shall be determined by measurement. Maximum demand shall be determined to the nearest whole (1.0) kilowatt (KW) or kilovolt-ampere (KVA) for billing purposes and shall be defined as the greater of:

- (1) the highest kilowatt (KW) demand registered during the on-peak hours of said period or if kilovolt-ampere (KVA) demand is measured, the greater of (a) the highest kilowatt (KW) demand during said period or, (b) 80 percent of the highest kilovolt-ampere (KVA) demand measured of said period or,
- (2) fifty percent (50%) of the maximum demand, as defined above, occurring during off-peak hours.

OFF-PEAK PERIODS

The off-peak period shall be the period including the hours after 8:00 p.m. and before 7:00 a.m. Monday through Friday, and the entire day on Saturdays, Sundays, and Holidays as defined in this Tariff. The on-peak period shall be all hours not included in the off-peak period.

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CONTRACT TERM

The contract term shall be for not less than one year and for such longer periods as maybe determined by the operation of the sections in this rate entitled "Guarantees" and "Apparatus".

GUARANTEES

- (a) When the estimated expenditure necessary to deliver electrical energy properly to a Customer's premises shall be of such an amount that the income to be derived from the delivery of such energy at the rate herein established, including the monthly minimum charge, will be insufficient to warrant such expenditure, the Company may require the Customer to guarantee a minimum annual payment for a term of years and/or to pay the whole or a part of the cost of extending, enlarging, or rebuilding its facilities to supply the Customer's premises or other reasonable payments in addition to the payments otherwise provided herein.
- (b) Except as provided by the Terms and Conditions and as modified by the provisions of Paragraph (a) of this section, and exclusive of any charges made under the provisions of the section in this rate entitled "Apparatus" and if applicable, for Default Energy Service, the minimum charge shall be \$1,015 per month.

APPARATUS

Substation foundations, structures, and all necessary controlling, regulating, transforming, and protective apparatus shall be furnished, owned, and maintained by the Customer at the Customer's expense. However, controlling, regulating, and transforming apparatus may be rented from the Company at a charge of eighteen percent (18.0%) per year of the equipment cost. The cost of installing such equipment shall be paid in full at the time service is initiated. In no event shall the Company be required to rent apparatus to the Customer the total cost of which shall exceed \$10,000. The Company may refuse to rent pole-mounted apparatus based on environmental and other immediate hazards that are present. In the event the Company refuses to rent a pole-mounted apparatus, the Company shall inform the Customer of the environmental and other immediate hazards that are present and shall provide the Customer with the opportunity to remove the hazards. In the event the environmental and the other immediate hazards are removed by the Customer, the Company shall agree to rent pole-mounted apparatus to the Customer. If a Customer-owned structure supporting a Company owned pole-mounted transformer is deemed insufficient or threatened by trees or other hazards, the Company shall inform the Customer of the hazards and shall provide the Customer with the opportunity to repair or remove the hazard. In the event the Customer refuses to repair or remove the hazard or does not repair or remove the hazard in a timely manner, the Company is authorized to terminate the existing rental agreement and to remove the transformer upon 90 days written notice to the Customer. In cases where the Customer elects to rent apparatus from the Company, the Customer shall guarantee, in addition to any other guarantees, to continue to pay rental therefor for a period of not less than four (4) years. Should the Customer discontinue service before four (4) years shall have elapsed, the guaranteed rental then unpaid shall immediately become due and payable.

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METERING

The Company may install one or more meters at its option. Metering shall be located on the low voltage side of the Customer's transforming apparatus provided, however, that metering may be at delivery voltage at the option of the Company.

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LARGE GENERAL DELIVERY SERVICE RATE LG

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for high voltage Delivery Service. It is available upon the signing of a Service Agreement for such service at specified delivery points to Customers whose loads are larger than those that would be permitted under Rate GV of this Tariff. Service rendered hereunder shall exclude all backup and standby service provided under Backup Delivery Service Rate B. Outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL. Substation foundations and structures, and suitable controlling, regulating, and transforming apparatus, all of which shall be acceptable to and approved by the Company, together with such protective equipment as the Company shall deem necessary for the protection and safe operation of its system, shall be provided at the expense of the Customer.

CHARACTER OF SERVICE

Delivery Service supplied under this rate will be three-phase, 60 hertz, alternating current, at a nominal delivery voltage determined by the Company, generally 34,500 volts or higher. A reasonably balanced load between phases shall be maintained by the Customer.

RATE PER MONTH

Customer Charge \$660.15 per month

Demand Charges:

Per Kilovolt-Ampere of Maximum Demand

Distribution Charge..... \$5.51

Regulatory Reconciliation Adjustment..... \$X.XX

Transmission Charge \$10.24

Stranded Cost Recovery..... \$0.49

Energy Charges:

Per Kilowatt-Hour

Distribution Charges:

On-Peak Hours.....0.554¢

Off-Peak Hours0.468¢

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Energy Charges (Continued...)

Per Kilowatt-Hour

Stranded Cost Recovery:

On-Peak Hours..... 0.519¢

Off-Peak Hours 0.378¢

MAXIMUM DEMAND

The kilovolt-ampere (KVA) demand during each thirty-minute interval of the current monthly billing period shall be determined by measurement. Maximum demand shall be determined for billing purposes to the nearest whole (1.0) kilovolt-ampere and shall be defined as the greater of:

- (1) the highest kilovolt-ampere demand registered during the on-peak hours of said period, or
- (2) fifty percent (50%) of the highest kilovolt-ampere demand registered during the off-peak hours of said period, except that for any portion of the Customer's highest off-peak kilovolt-ampere demand in excess of 30,000 kilovolt-amperes the multiplier applicable to the amount of such demand within each successive 10,000 kilovolt-ampere block of such excess portion shall be increased from fifty percent (50%) by successive ten percent (10%) increments, up to a maximum multiplier of one hundred percent (100%) for that portion of demand in excess of 70,000 kilovolt amperes, or
- (3) eighty percent (80%) of the amount by which the greatest amount defined in (1) and (2) above during the eleven (11) preceding months exceeds 1,000 kilovolt-amperes.

OFF-PEAK PERIOD

The off-peak period shall be the period including the hours after 8:00 p.m. and before 7:00 a.m., Monday through Friday, and the entire day on Saturdays, Sundays, and Holidays. The on-peak period shall be all hours not included in the off-peak period.

CONTRACT TERM

The contract term shall be for not less than one year and for such longer periods as maybe determined by the operation of the sections in this rate entitled "Guarantees" and "Apparatus".

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DISCOUNT FOR SERVICE AT 115,000 VOLTS

A monthly discount of forty-nine cents (\$0.49) per kilovolt-ampere (KVA) of maximum demand shall be given to Customers who contract to take service under this rate at a delivery voltage of 115,000 volts and to pay charges based on a monthly maximum demand of at least 10,000 kilovolt-amperes. Except as provided in the last sentence of this paragraph, this discount is available only at specified delivery points on the 115,000 volt transmission system of the Company as it exists from time to time where, in the opinion of the Company, there is sufficient capacity in facilities to supply the Customer's requirement and where system integrity and operating flexibility will not be impaired by the addition of the Customer's load. The discount is available also at other delivery points, provided the Customer satisfies the Company's requirements determined under Paragraph (a) of the section of this rate entitled "Guarantees".

In the event that any Customer qualifying for and receiving the discount provided in this section shall require a substantially larger or substantially smaller amount of capacity, the Customer shall so notify the Company in writing at least two (2) years prior to the date when such larger or smaller amount shall be required.

GUARANTEES

- (a) When the estimated expenditure necessary to deliver electrical energy properly to a Customer's premises shall be of such an amount that the income to be derived from the delivery of such energy at the rate herein established, including the monthly minimum charge, will be insufficient to warrant such expenditure, the Company may require the Customer to guarantee a minimum annual payment for a term of years and/or to pay the whole or a part of the cost of extending, enlarging, or rebuilding its facilities to deliver electrical energy properly to the Customer's point of delivery or other reasonable payments in addition to the payments otherwise provided herein.
- (b) Except as provided by the Terms and Conditions and as modified by the provisions of Paragraph (a) of this section, and exclusive of any charges made under the provisions of the section in this rate entitled "Apparatus" and if applicable, for Default Energy Service, the minimum monthly charge shall be \$1,076 per month.

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APPARATUS

Substation foundations, structures, and all necessary controlling, regulating, transforming, and protective apparatus shall be furnished, owned, and maintained by the Customer at the Customer's expense. However, controlling, regulating, and transforming apparatus may be rented from the Company at a charge of eighteen percent (18.0%) per year of the equipment cost. The cost of installing such equipment shall be paid in full at the time service is initiated. In no event shall the Company be required to rent apparatus to the Customer the total cost of which shall exceed \$10,000. The Company may refuse to rent pole-mounted apparatus based on environmental and other immediate hazards that are present. In the event the Company refuses to rent a pole-mounted apparatus, the Company shall inform the Customer of the environmental and other immediate hazards that are present and shall provide the Customer with the opportunity to remove the hazards. In the event the environmental and the other immediate hazards are removed by the Customer, the Company shall agree to rent pole-mounted apparatus to the Customer. If a Customer-owned structure supporting a Company owned pole-mounted transformer is deemed insufficient or threatened by trees or other hazards, the Company shall inform the Customer of the hazards and shall provide the Customer with the opportunity to repair or remove the hazard. In the event the Customer refuses to repair or remove the hazard or does not repair or remove the hazard in a timely manner, the Company is authorized to terminate the existing rental agreement and to remove the transformer upon 90 days written notice to the Customer. In cases where the Customer elects to rent apparatus from the Company, the Customer shall guarantee, in addition to any other guarantees, to continue to pay rental therefor for a period of not less than four (4) years. Should the Customer discontinue service before four (4) years shall have elapsed, the guaranteed rental then unpaid shall immediately become due and payable.

METERING

The Company may install one or more meters at its option. Metering shall be at delivery voltage, provided, however, that metering may be at a lower voltage at the option of the Company, in which case the maximum demand and kilowatt-hour energy use shall include the losses imposed by transformers between the delivery and metering points. In the latter case, the Company may at its option correct for the transformer losses by compensated metering or estimate such losses by another suitable method.

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Issued by: Joseph A. Purington

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BACKUP DELIVERY SERVICE RATE B

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for backup and maintenance Delivery Service provided by the Company in conjunction with electricity produced by generation facilities located on the Customer's side of the meter which supplies all or a portion of the Customer's electric load requirements on a regular basis. Service under this rate is mandatory for Customers who take Conjunctional Service as specified in the Terms and Conditions for Delivery Service, and who, except for their own generation, would otherwise qualify for service under either Rate GV or Rate LG. This rate is not mandatory for service to Customers whose generating equipment is installed for the purpose of providing a backup or emergency supply during service outages on the Company's system, nor is it mandatory for Customers whose generation was installed prior to and has not been rebuilt since January 1, 1985. Customers taking service under this rate shall be required to execute a Service Agreement for such service which shall be available only at the delivery point specified therein.

Any Customer taking service under this rate shall be subject to the provisions of:
a) Conjunctional Delivery Service under the Terms and Conditions for Delivery Service, and b) the applicable Delivery Service rate under which the Customer would otherwise take service from the Company if the Company delivered all the Customer's electricity requirements, except as such provisions may be modified by, or conflict with, the terms of this Rate Schedule.

The delivery of any electricity generated by the Customer in excess of the Customer's total electric load requirements and made available for sale to the Company or other entity shall be governed by the terms of a separate agreement.

DEFINITIONS

Standard Rate: The standard Delivery Service rate, either Primary General Delivery Service Rate GV or Large General Delivery Service Rate LG, under which the Customer would otherwise take service if the Company delivered all the Customer's electricity requirements.

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Backup Contract Demand: An amount of demand which the Customer may impose on the Company's distribution system under this Rate Schedule to back up the Customer's generating facilities. Backup Contract Demand shall be the normal output rating in kilowatts of the Customer's generating facilities as determined by the Company from time to time by test operation for those Customers who have a non-zero Supplemental Demand (i.e., whose maximum demand exceeds their generating capacity). For Customers whose generating capacity is larger than their total internal load, Backup Contract Demand shall be based on thirty minute meter readings for on-peak periods during the current month and previous eleven months. For Customers who would otherwise be served under Rate GV, Backup Contract Demand shall be the greater of: a) the highest kilowatt demand during those periods, or b) 80% of the highest kilovolt-ampere demand during those periods. For Customers who would otherwise be served under Rate LG, Backup Contract Demand shall be the highest kilovolt-ampere demand during those periods.

Backup Demand: The amount of demand in kilowatts delivered to the Customer under this Rate Schedule during a particular thirty minute interval. Backup Demand shall be the lesser of: a) Backup Contract Demand minus the amount of generation registered by the generation meter, or b) the total amount of demand registered. If such amount is less than zero, it shall be deemed to be equal to zero.

Backup Energy: The amount of kilowatt-hours delivered to the Customer under this Rate Schedule during a particular thirty minute interval. Backup Energy shall be equal to Backup Demand for that thirty minute interval divided by two.

On-Peak Hours: The period from 7:00 a.m. to 8:00 p.m. weekdays excluding holidays.

Supplemental Demand: The amount of demand in kilowatts delivered to the Customer by the Company in excess of its Backup Demand during a particular thirty minute interval. Supplemental Demand shall be equal to the total amount of demand registered less the amount of Backup Demand taken. If such amount is less than zero, it shall be deemed to be equal to zero. The delivery of Supplemental Demand and related energy shall be billed under the Company's standard rate (Rate G, Rate GV, or Rate LG) available to the Customer for the amount of Supplemental Demand taken.

RATE PER MONTH

Administrative Charge	\$372.10 per month
Translation Charge	\$62.42 per recorder per month

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Demand Charges:

For Customers who take service at 115,000 volts or higher, the following charges apply:

Transmission Charge.....	\$1.59 per KW or KVA, whichever is whichever is applicable, of Backup Contract Demand
Stranded Cost Recovery (For Customers whose Standard Rate is Rate GV)...	\$0.32 per KW or KVA, whichever is applicable, of Backup Contract Demand
Stranded Cost Recovery (For Customers whose Standard Rate is Rate LG)....	\$0.24 per KW or KVA, whichever is applicable, of Backup Contract Demand

For all other Customers, in addition to the charges applicable to the Customers who take service at 115,000 volts or higher, the following additional charge applies:

Distribution Charge.....	\$5.12 per KW or KVA, whichever is applicable, of Backup Contract Demand
Regulatory Reconciliation Adj.	\$X.XX per KW or KVA, whichever is applicable, of Backup Contract Demand

Energy Charges:

The energy charges contained in the Standard Rate for Delivery Service, except that the distribution charge is not applicable to Customers who take service at 115,000 volts or higher.

METERING

Metering shall be provided by the Company in accordance with the provisions of the Customer's Standard Rate, except as modifications to such metering may be required by the provisions of this rate. The Company may install any metering equipment necessary to accomplish the purposes of this rate, including the measurement of output from the Customer's generating facilities. Customer shall provide suitable meter locations for the Company's metering facilities. All costs of metering equipment in excess of costs normally incurred by the Company to provide service under Customer's Standard Rate shall be borne by the Customer.

REFUSAL TO PROVIDE ACCESS

In the event that the Customer refuses access to its premises to allow the Company to install metering equipment to measure the output of the Customer's generating facilities, the Company may estimate the amount of demand and energy delivered under this rate. The Customer shall be responsible for payment of all bill amounts calculated hereunder based on such estimates of demand and energy delivered.

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CONTRACT TERM

The contract term shall be for not less than one year and for such longer periods as may be determined by the operation of the sections of Customer's Standard Rate entitled "Guarantees" and "Apparatus".

SPECIAL PROVISIONS

1. Notwithstanding the general provisions of this rate schedule, the Company may include such other provisions in Customer's Service Agreement, executed pursuant to this Rate B, as may be necessary to reflect the specific circumstances of such Customer, the operating characteristics of Customer's generating equipment or any other particular facts, without limitation, which are necessary, in the Company's sole judgment and subject to Commission approval, to give effect to the purpose and intent of this rate.
2. The Customer's failure to execute a Service Agreement pursuant to the terms of this Rate B shall not preclude the application of this rate to any partial requirements service provided by the Company to the Customer.

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OUTDOOR LIGHTING DELIVERY SERVICE RATE OL AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for the following applications:

- (a) unmetered street and highway lighting provided to municipalities, state highway departments, and other governmental bodies;
- (b) unmetered outdoor area lighting for private yards, parking lots, private roads, and other off-street applications.

All-night outdoor lighting service on an annual basis totaling approximately 3,937 hours of operation per year and midnight outdoor lighting service on an annual basis totaling approximately 1,815 hours of operation per year shall be provided for under this rate.

RATE PER MONTH

Energy Charge:

Per Kilowatt-Hour

Transmission Charge 2.058¢
Stranded Cost Recovery..... 0.954¢
Regulatory Reconciliation Adjustment.....X.XX¢

In addition to the energy charges above, Customers shall be assessed a monthly Distribution Rate per luminaire. The Distribution Rate includes, among other costs, the cost of the fixture and bracket. The energy charge shall be applied to the monthly kilowatt-hours specified below for the applicable fixture and service option. For outdoor lighting charges which are billed in conjunction with service rendered under a metered Rate Schedule, the kilowatt-hours used for billing purposes shall be the amount specified for the calendar month in which the meter read date occurred for service rendered under the metered Rate Schedule.

All-Night Service Option:

The monthly kilowatt-hours and distribution rates for each luminaire served under the all-night service option are shown below.

For New and Existing Installations:

Lamp Nominal

Light Output Lumens	Power Rating Watts	Monthly KWH per Luminaire												Monthly Distribution Rate
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
High Pressure Sodium:														
4,000	50	27	23	22	19	16	16	16	18	21	23	24	27	\$14.77
5,800	70	40	34	32	29	24	23	24	27	31	35	37	40	14.77
9,500	100	59	50	47	42	35	34	35	39	46	51	53	59	19.64
16,000	150	88	74	70	62	53	51	53	59	68	76	79	88	27.78
30,000	250	142	120	113	101	85	82	85	95	110	123	128	142	28.47
50,000	400	217	183	173	154	130	126	130	144	168	188	196	217	28.79
130,000	1,000	510	430	408	362	306	296	306	340	395	442	460	510	46.20

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Metal Halide:

5,000	70	41	35	33	29	25	24	25	28	32	36	37	41	\$15.41
8,000	100	56	47	45	40	34	33	34	38	44	49	51	56	21.09
13,000	150	88	74	71	63	53	51	53	59	68	77	80	88	28.94
13,500	175	96	81	77	68	57	56	57	64	74	83	87	96	29.55
20,000	250	134	113	107	95	80	78	80	89	104	116	121	134	29.55
36,000	400	209	176	167	149	126	122	126	140	162	181	189	209	29.82
100,000	1,000	502	423	402	356	301	292	301	335	389	435	454	502	44.71

Light Emitting Diode (LED):

2,500	28	13	11	10	9	8	8	8	9	10	11	12	13	\$10.00
4,100	36	17	14	13	12	10	10	10	11	13	15	15	17	9.97
4,800	51	24	20	19	17	14	14	14	16	18	21	21	24	10.13
8,500	92	43	36	34	30	26	25	26	29	33	37	39	43	11.17
13,300	142	66	56	53	47	40	38	40	44	51	57	60	66	12.35
24,500	220	102	86	82	73	61	59	61	68	79	89	92	102	15.54

For Existing Installations Only:

Lamp Nominal

Light Output Lumens	Power Rating Watts	Monthly KWH per Luminaire												Monthly Distribution Rate
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Incandescent:														
600	105	49	41	39	35	29	28	29	33	38	42	44	49	\$8.51
1,000	105	49	41	39	35	29	28	29	33	38	42	44	49	9.50
2,500	205	95	80	76	68	57	55	57	64	74	83	86	95	12.19
6,000	448	208	176	167	148	125	121	125	139	161	181	188	208	20.94

Mercury:

3,500	100	54	46	44	39	33	32	33	36	42	47	49	54	\$13.03
7,000	175	95	80	76	68	57	55	57	64	74	83	86	95	15.68
11,000	250	136	114	109	96	81	79	81	91	105	118	123	136	19.38
15,000	400	211	178	169	149	126	122	126	140	163	183	190	211	22.17
20,000	400	211	178	169	149	126	122	126	140	163	183	190	211	23.94
56,000	1,000	503	424	403	357	302	292	302	335	390	436	454	503	38.05

Fluorescent:

20,000	330	153	129	123	109	92	89	92	102	119	133	139	153	\$32.47
High Pressure Sodium in Existing Mercury Luminaires:														
12,000	150	84	71	67	59	50	49	50	56	65	73	76	84	20.32
34,200	360	192	162	154	136	115	112	115	128	149	166	173	192	26.01

The 15,000 Lumen Mercury fixture is fitted with a 20,000 lumen lamp. The 600 Lumen Incandescent fixture is fitted with a 1,000 lumen lamp.

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Midnight Service Option:

The monthly kilowatt-hours and distribution rates for each luminaire served under the midnight service option are shown below.

Lamp Nominal

Light Output Lumens	Power Rating Watts	Monthly KWH per Luminaire												Monthly Distribution Rate
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<u>High Pressure Sodium:</u>														
4,000	50	14	11	9	10	7	6	6	7	9	11	13	14	\$14.77
5,800	70	20	16	13	15	11	9	9	11	13	16	20	21	14.77
9,500	100	30	23	20	21	16	13	14	16	19	24	28	31	19.64
16,000	150	44	34	29	31	24	20	21	24	28	35	42	47	27.78
30,000	250	71	56	47	51	38	32	33	38	46	57	69	76	28.47
50,000	400	109	85	72	77	58	49	51	58	70	87	105	116	28.79
130,000	1,000	255	200	170	181	136	115	119	136	165	204	246	272	46.20
<u>Metal Halide:</u>														
5,000	70	20	16	14	15	11	9	10	11	13	17	20	22	\$15.41
8,000	100	28	22	19	20	15	13	13	15	18	23	27	30	21.09
13,000	150	44	34	30	31	24	20	21	24	28	36	43	47	28.94
13,500	175	48	38	32	34	25	22	22	26	31	38	47	51	29.55
20,000	250	67	52	45	48	36	30	31	36	43	54	65	71	29.55
36,000	400	104	82	70	74	56	47	49	56	68	84	101	111	29.82
100,000	1,000	251	196	167	178	134	114	117	134	162	201	243	268	44.71
<u>Light Emitting Diode (LED):</u>														
2,500	28	13	11	10	9	8	8	8	9	10	11	12	13	\$10.00
4,100	36	17	14	13	12	10	10	10	11	13	15	15	17	9.97
4,800	51	24	20	19	17	14	14	14	16	18	21	21	24	10.13
8,500	92	43	36	34	30	26	25	26	29	33	37	39	43	11.17
13,300	142	66	56	53	47	40	38	40	44	51	57	60	66	12.35
24,500	220	102	86	82	73	61	59	61	68	79	89	92	102	15.54

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MODIFICATION OF SERVICE OPTION

Municipal and state roadway lighting Customers may request a modification of service from the all-night service option to the midnight service option during the calendar months of January and February of each year, otherwise known as the open enrollment period. Requests received from municipal and state roadway lighting Customers after the open enrollment period shall be implemented during the subsequent open enrollment period, unless the Company determines that it is feasible and practicable to implement the request prior to the subsequent enrollment period. All other Customers may request a modification of service from the all-night service option to the midnight service option at any time. Customers requesting a modification of service from the all-night service option to the midnight service option are responsible to pay to the Company the installed cost of any additional equipment required to provide service under the midnight service option. The installed cost includes the cost of the additional equipment, labor, vehicles and overheads. The Customer is responsible to pay such costs prior to the installation of the equipment. If such a request is made concurrent with the Company's existing schedule for lamp replacement and maintenance, the Customer is responsible to pay to the Company the cost of any additional equipment required, including overheads. The Customer is responsible to pay such costs prior to the installation of the equipment.

Customers requesting a modification of service from the midnight service option to the all-night service option are responsible to pay to the Company the installation cost of the equipment required to provide service under the all-night service option. The installation cost includes the cost of labor, vehicles and overheads. The Customer is responsible to pay such costs prior to the installation of the equipment. If such a request is made concurrent with the Company's existing schedule for lamp replacement and maintenance, no additional costs are required to modify service from the midnight service option to the all-night service option.

The Company will utilize fixed price estimates per luminaire for the installed cost, the additional equipment cost and the equipment installation cost and will update the fixed price estimates per luminaire each year based upon current costs. In the event traffic control is required during a modification of service option or for equipment repair, the Customer is responsible to coordinate and to provide traffic control and to pay all costs associated with traffic control. In the event the Customer is a residential or General Delivery Service Rate G Customer, the Company may coordinate and provide traffic control on the Customer's behalf and the Customer shall reimburse the Company for all costs associated with the traffic control provided by the Company. The scheduling of work associated with the modification of a service option will be made at the Company's discretion with consideration given to minimizing travel and set-up time.

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LEAP YEAR ADJUSTMENT TO ENERGY

During any leap year, the energy (kilowatt-hour) usage during the month of February for all fixtures shall be increased by 3.4 percent for the purpose of determining total energy charges under this rate.

CONTRACT TERM

The contract term for outdoor area lighting shall be for not less than one year.

MAINTENANCE

The Company shall exercise reasonable diligence to ensure all street and highway lamps are burning and shall make replacements promptly when notified of outages. Lamp replacement, maintenance and cleaning of street and highway lighting fixtures will normally be performed on a periodic basis in accordance with generally accepted utility practices and consistent with any manufacturer's recommendations. Lamp replacement and maintenance of outdoor area lighting will be performed as soon as possible following notification by the Customer of the need for such service, but the Company shall not be required to perform any such replacement or maintenance except during regular working hours.

NEW INSTALLATIONS, EXTENSIONS AND REPLACEMENTS

New installations, extensions and replacements using overhead wiring, a standard fixture, an all-night service option photocell and located upon existing poles of the Company, shall be made at the expense of the Company.

Except for the excess costs of underground facilities to be apportioned as set forth in the provisions for underground electric distribution facilities specified in the Company's "Information and Requirements for Electric Supply", any costs incurred in connection with new installations, extensions and replacements which exceed the costs of a standard outdoor lighting fixture equipped with an all-night service option photocell located on existing poles with overhead wiring shall be borne by the Customer. Such excess costs shall be paid as a lump sum prior to the installation of the equipment.

In the case of new installations, extensions and replacements which make use of underground conductors for supply and distribution and/or of standards or poles employed exclusively for lighting purposes, the Company reserves the right to require the Customer to furnish, own, and maintain such underground supply and distribution facilities and/or the standards or poles.

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If the Company's right under the preceding paragraph is exercised and the Company thereby is relieved of the cost of installing the customary overhead wires and appurtenances and the customary dual purpose poles, the Company shall:

1. pay to the Customer the sum of the following:
 - a. the estimated saving in investment to the Company represented by the estimated cost of the customary overhead wires and appurtenances;
 - b. such portion, if any, of the estimated cost to the Company of the customary dual purpose poles as would normally be allocated to lighting purposes;
2. have the right, without payment of any charge, to attach its wires, fixtures, brackets, luminaires, transformers, and other equipment to the standards or poles owned by the Customer.

Should the standards or poles furnished, owned, and maintained by the Customer be located in a public highway, the Customer shall procure and furnish to the Company a license under the Public Laws of New Hampshire (R.S.A. Chapter 231) covering such interest as the Company may have in the standards or poles, including their wires, fixtures, brackets, luminaires, transformers, and other equipment.

For outdoor area lighting installations, the Customer shall provide without expense or cost to the Company, all permits, consents, or easements necessary for the erection, maintenance, and operation of the Company's facilities, including the right to cut and trim trees and bushes wherever necessary; and the Company shall not be required to move its facilities to another location on the Customer's premises unless the Customer shall bear the cost thereof. The Company reserves the right to restrict such installations under this rate to those which will yield a reasonable return to the Company and to areas which are easily accessible by service truck. Installations of 4,000 lumen (50 watt) high pressure sodium luminaires will not be allowed as replacements of existing 3,500 lumen (100 watt) mercury luminaires unless the Customer agrees to pay for the remaining unexpired life of the retired equipment, including the unexpired portion of the cost of installation and the cost of removal less any salvage value of the equipment removed.

The total number of new installations, extensions, and replacements for outdoor lighting equipment may be limited by the Company in any calendar year to three (3) percent of the total number of units billed to the particular Customers at the beginning of such calendar year.

In cases where the Customer requests a change in or removal of existing outdoor lighting equipment which has not reached the end of its normal useful life, the Company may require the Customer to pay for the remaining unexpired life of the retired equipment, including the unexpired portion of the cost of installation and the cost of removal less any salvage value of the equipment removed.

All poles, wires, fixtures, brackets, luminaires, transformers, and other equipment furnished by the Company shall be maintained by it and title to such shall in all cases remain vested in the Company.

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ENERGY EFFICIENT OUTDOOR LIGHTING
DELIVERY SERVICE RATE EOL

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this unmetered rate is available to any federal, state, county, municipal or other governmental unit, or department or agency of the government. Service under this rate is for delivery and maintenance of street and area lighting service to fixtures utilizing high pressure sodium, metal halide, light emitting diode ("LED") or other energy efficient technology accepted by the Company, for which the Customer has paid the installed cost of fixtures and brackets. It is available at the Customer's option to those Customers who sign a Service Agreement to receive all of their street and area lighting service requirements under Rate EOL where feasible.

Customers choosing to convert from service under Outdoor Lighting Delivery Service Rate OL to service under Rate EOL must:

- (a) contribute to the Company the remaining unexpired life of currently installed high pressure sodium and metal halide fixtures and brackets which the Customer wishes to remain in service on the date that service under this rate is initiated;
- (b) contribute to the Company the cost of removal and remaining unexpired life of any street and area lighting fixtures and brackets as of the date that such fixtures are removed and replaced with energy efficient lighting technology in accordance with this Rate Schedule;
- (c) pay the Company the installed cost for all new high pressure sodium and metal halide fixtures and brackets placed into service under this rate, and;
- (d) furnish any fixtures utilizing other lighting technologies accepted by the Company, and pay either the Company or a private line contractor, as described under the "Additional Requirements" section below, for the installation of these fixtures.

The Company will perform all maintenance of lighting fixtures under this rate. The Company will hold title to all fixtures during the time they are installed.

All-night outdoor lighting service on an annual basis totaling approximately 4,345 hours of operation per year and midnight outdoor lighting service on an annual basis totaling approximately 2,005 hours of operation per year shall be provided for under this rate.

LIMITATIONS ON AVAILABILITY

The availability of this rate to any Customer is contingent upon the availability to the Company of personnel and/or other resources necessary to perform the conversion of existing fixtures in accordance with the time schedule specified in the Service Agreement.

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Title: President and Chief Operating Officer

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ADDITIONAL REQUIREMENTS FOR TECHNOLOGIES OTHER THAN HIGH PRESSURE SODIUM OR METAL HALIDE

Fixtures utilizing technologies other than High Pressure Sodium or Metal Halide must be provided by the Customer for installation on the Company's facilities. Fixtures shall be accepted by the Company in advance of installation and must be compatible with existing line voltage, brackets and photoelectric controls, and must require no special tools or training to install and maintain.

Customers who are replacing existing fixtures with these technologies are responsible for the cost of removal and installation. Customers may choose to have this work completed by the Company or may opt to hire and pay a private line contractor to perform the work. Any private contractor shall have all the requisite training, certifications and insurance to safely perform the required installations, and shall be licensed by the State and accepted by the Company. Prior to commencement of work, the municipality must provide written certification of the qualifications to the Company. Contractors shall coordinate the installation work with the Company and submit a work plan subject to approval by the Company. The Customer shall bear all expenses related to the use of such labor, including any expenses arising from damage to the Company's electrical system caused by the contractor's actions.

SERVICE AGREEMENT

The Customer shall sign a Service Agreement governing the contribution for the remaining unexpired life of the existing street lighting fixtures and brackets, the contribution for the installed cost of the new fixtures and brackets, and the conversion of existing fixtures.

SERVICE DURING THE CONVERSION PERIOD FROM RATE OL TO RATE EOL

Service under this rate shall be implemented on a prorated basis, according to the number of fixtures which have been converted. Therefore, during the conversion period a portion of the Customer's street and area lighting requirements may be served under Outdoor Lighting Delivery Service Rate OL for those fixtures which have not yet been converted under this Rate.

MONTHLY RATES

Energy Charge:

Per Kilowatt-Hour

Transmission Charge 2.058¢

Stranded Cost Recovery..... 0.954¢

Regulatory Reconciliation Adjustment.....X.XX¢

In addition to the energy charges above, Customers shall be assessed the monthly Distribution Rates shown below. The energy charge shall be applied to the monthly kilowatt-hours specified below for the applicable fixture and service option. For outdoor lighting charges

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which are billed in conjunction with service rendered under a metered Rate Schedule, the kilowatt-hours used for billing purposes shall be the amount specified for the calendar month in which the later meter read date occurred for service rendered under the metered Rate Schedule.

All-Night Service Option:

The monthly kilowatt-hours and distribution rates for each fixture served under the all-night service option are shown below.

<u>Lamp Nominal</u>		<u>Monthly KWH per Fixture</u>												<u>Monthly</u>
<u>Light</u>	<u>Power</u>													<u>Distribution</u>
<u>Output</u>	<u>Rating</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Rate</u>
<u>Lumens</u>	<u>Watts</u>													
High Pressure Sodium:														
4,000	50	27	23	22	19	16	16	16	18	21	23	24	27	\$6.12
5,800	70	40	34	32	29	24	23	24	27	31	35	37	40	6.43
9,500	100	59	50	47	42	35	34	35	39	46	51	53	59	6.85
16,000	150	88	74	70	62	53	51	53	59	68	76	79	88	7.51
30,000	250	142	120	113	101	85	82	85	95	110	123	128	142	8.73
50,000	400	217	183	173	154	130	126	130	144	168	188	196	217	10.44
130,000	1,000	510	430	408	362	306	296	306	340	395	442	460	510	17.11
Metal Halide:														
5,000	70	41	35	33	29	25	24	25	28	32	36	37	41	\$6.45
8,000	100	56	47	45	40	34	33	34	38	44	49	51	56	6.79
13,000	150	88	74	71	63	53	51	53	59	68	77	80	88	7.52
13,500	175	96	81	77	68	57	56	57	64	74	83	87	96	7.69
20,000	250	134	113	107	95	80	78	80	89	104	116	121	134	8.55
36,000	400	209	176	167	149	126	122	126	140	162	181	189	209	10.27
100,000	1,000	502	423	402	356	301	292	301	335	389	435	454	502	16.93

LED's and other technologies accepted by the Company:

	<u>Per</u>	<u>Per</u>
	<u>Fixture</u>	<u>Watt</u>
Monthly Distribution Rates	\$3.01	\$0.01058

Monthly KWH per Fixture will be calculated to the nearest whole (1.0) KWH as follows:

Total Fixture Wattage divided by 1,000 times the monthly hours of operation below

<u>Monthly Hours of Operation</u>											
<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
421	350	342	342	257	230	248	283	316	372	399	433

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Midnight Service Option:

The monthly kilowatt-hours and distribution rates for each fixture served under the midnight service option are shown below.

<u>Lamp Nominal</u>		<u>Monthly KWH per Fixture</u>												<u>Monthly</u>
<u>Light</u>	<u>Power</u>													<u>Distribution</u>
<u>Output</u>	<u>Rating</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Rate</u>
<u>Lumens</u>	<u>Watts</u>													
High Pressure Sodium:														
4,000	50	14	11	9	10	7	6	6	7	9	11	13	14	\$6.12
5,800	70	20	16	13	15	11	9	9	11	13	16	20	21	6.43
9,500	100	30	23	20	21	16	13	14	16	19	24	28	31	6.85
16,000	150	44	34	29	31	24	20	21	24	28	35	42	47	7.51
30,000	250	71	56	47	51	38	32	33	38	46	57	69	76	8.73
50,000	400	109	85	72	77	58	49	51	58	70	87	105	116	10.44
130,000	1,000	255	200	170	181	136	115	119	136	165	204	246	272	17.11
Metal Halide:														
5,000	70	20	16	14	15	11	9	10	11	13	17	20	22	\$6.45
8,000	100	28	22	19	20	15	13	13	15	18	23	27	30	6.79
13,000	150	44	34	30	31	24	20	21	24	28	36	43	47	7.52
13,500	175	48	38	32	34	25	22	22	26	31	38	47	51	7.69
20,000	250	67	52	45	48	36	30	31	36	43	54	65	71	8.55
36,000	400	104	82	70	74	56	47	49	56	68	84	101	111	10.27
100,000	1,000	251	196	167	178	134	114	117	134	162	201	243	268	16.93

LED's and other technologies accepted by the Company:

	<u>Per Fixture</u>	<u>Per Watt</u>
Monthly Distribution Rates	\$3.01	\$0.01058

Monthly KWH per Fixture will be calculated to the nearest whole (1.0) KWH as follows:

Total Fixture Wattage divided by 1,000 times the monthly hours of operation below

<u>Monthly Hours of Operation</u>											
<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
213	175	150	120	106	91	97	116	138	170	214	226

LEAP YEAR ADJUSTMENT TO ENERGY

During any leap year, the energy (Kilowatt-hour) usage during the month of February for all fixtures shall be increased by 3.4 percent for the purpose of determining total energy charges under this rate.

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MAINTENANCE

The Company shall exercise reasonable diligence to ensure that all lamps are burning and shall make replacements promptly when notified of outages. However, the Company shall not be required to perform any replacements or maintenance except during regular working hours.

For high pressure sodium and metal halide fixtures, lamp replacement, maintenance and cleaning of lighting fixtures will normally be performed on a periodic basis in accordance with generally accepted utility practices and consistent with any manufacturer's recommendations.

For fixtures utilizing technologies other than high pressure sodium or metal halide, the Company will be responsible for correcting Company system voltage problems at no charge to the Customer. When the Company responds to a report of a non-working fixture not related to voltage, the Customer will be assessed a per-fixture per-visit charge to replace photoelectric controls or to remove an otherwise non-working fixture and return it to the Customer.

	<u>Per-Fixture Per-Visit</u>
Maintenance Charge.....	\$189.00 plus cost of materials

USE OF ADVANCED CONTROLS

Where lighting controls that meet the current ANSI C12.20 standard have been installed that allow for variation from the Company's outdoor lighting hours schedule under All-Night Schedule or Midnight Schedule, the Customer must provide verification of such installation to the Company and a schedule indicating the expected average operating wattage of lights subject to the Customer's control and operation. Upon installation and at any time thereafter, the Customer must also provide the Company access, either directly or indirectly, to the data from the Customer's control system in order for the Company to verify the measured energy use of the lighting systems and modify the billed usage as appropriate on a prospective basis. The Customer shall provide a report annually which provides actual monthly operating usage of such lighting systems.

The schedule of average operating wattage ratings may be revised once per year at the request of the Customer. However, it is the Customer's responsibility to immediately notify the Company of any planned or unplanned changes to its scheduled usage to allow for billing adjustments as may be needed.

The charge for the monthly kilowatt-hours shall be determined on the basis of the average operating wattage of the light sources resulting from installed control adjustments established at the beginning of the billing period multiplied by the average monthly hours of the outdoor lighting hours schedule. The wattage ratings shall allow for the billing of kilowatt-hours according to the schedule submitted by the Customer to the Company and reflect any adjustments from the lighting control system including, but not limited to, fixture trimming, dimming, brightening, variable dimming, and multiple hourly schedules.

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MODIFICATION OF SERVICE OPTION

Municipal and state roadway lighting Customers may request a modification of service from the all-night service option to the midnight service option during the calendar months of January and February of each year, otherwise known as the open enrollment period. Requests received from municipal and state roadway lighting Customers after the open enrollment period shall be implemented during the subsequent open enrollment period, unless the Company determines that it is feasible and practicable to implement the request prior to the subsequent enrollment period. All other Customers may request a modification of service from the all-night service option to the midnight service option at any time. Customers requesting a modification of service from the all-night service option to the midnight service option are responsible to pay to the Company the installed cost of any additional equipment required to provide service under the midnight service option. The installed cost includes the cost of the additional equipment, labor, vehicles and overheads. The Customer is responsible to pay such costs prior to the installation of the equipment. If such a request is made concurrent with the Company's existing schedule for lamp replacement and maintenance, the Customer is responsible to pay to the Company the cost of any additional equipment required, including overheads. The Customer is responsible to pay such costs prior to the installation of the equipment.

Customers requesting a modification of service from the midnight service option to the all-night service option are responsible to pay to the Company the installation cost of the equipment required to provide service under the all-night service option. The installation cost includes the cost of labor, vehicles and overheads. The Customer is responsible to pay such costs prior to the installation of the equipment. If such a request is made concurrent with the Company's existing schedule for lamp replacement and maintenance, no additional costs are required to modify service from the midnight service option to the all-night service option.

The Company will utilize fixed price estimates per fixture for the installed cost, the additional equipment cost and the equipment installation cost and will update the fixed price estimates per fixture each year based upon current costs. In the event traffic control is required during a modification of service option or for equipment repair, the Customer is responsible to coordinate and to provide traffic control and to pay all costs associated with traffic control. The scheduling of work associated with the modification of a service option will be made at the Company's discretion with consideration given to minimizing travel and set-up time.

NEW INSTALLATIONS, EXTENSIONS AND REPLACEMENTS

No additional cost, other than a contribution for the installed cost of new fixtures and brackets as provided for herein, shall be assessed for fixtures and brackets which are attached to existing poles utilizing overhead secondary wiring. Any cost incurred in connection with the installation of lighting facilities which exceeds the cost of using existing poles with overhead secondary wiring shall be borne by the Customer.

Except for the excess costs of underground facilities to be apportioned as set forth in the provisions for underground electric distribution facilities specified in the Company's "Information and Requirements for Electric Service", any cost incurred in connection with the installation of poles, transformers, wiring, or any other facilities or equipment used exclusively for lighting purposes shall be borne by the Customer.

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In such cases, the Company shall credit the Customer with the portion, if any, of the estimated cost of such facilities which would normally be allocated to lighting purposes.

Any cost incurred in connection with new installations, or with the replacement or removal of existing fixtures and/or brackets shall be borne by the Customer. Such costs shall include the installed cost of the new fixtures and/or brackets in the case of new installations and replacements, and the cost of removal of the existing fixtures and/or brackets, less any salvage value of such fixtures and/or brackets which are removed from service.

In the case of new installations, extensions and replacements which make use of underground conductors for supply and distribution and/or of standards or poles employed exclusively for lighting purposes, the Company reserves the right to require the Customer to furnish, own, and maintain such underground supply and distribution facilities and/or the standards or poles.

If the Company's right under the preceding paragraph is exercised and the Company thereby is relieved of the cost of installing the customary overhead wires and appurtenances and the customary dual purpose poles, the Company shall:

1. pay to the Customer the sum of the following:
 - a. the estimated saving in investment to the Company represented by the estimated cost of the customary overhead wires and appurtenances;
 - b. such portion, if any, of the estimated cost to the Company of the customary dual purpose poles as would normally be allocated to lighting purposes;
2. have the right, without payment of any charge, to attach its wires, brackets, fixtures, transformers, and other equipment to the standards or poles owned by the Customer.

Should the standards or poles furnished, owned, and maintained by the Customer be located in a public highway, the Customer shall procure and furnish to the Company a license under the Public Laws of New Hampshire (R.S.A. Chapter 231) covering such interest as the Company may have in the standards or poles, including their wires, brackets, fixtures, transformers, and other equipment.

For outdoor area lighting installations, the Customer shall provide without expense or cost to the Company, all permits, consents, or easements necessary for the erection, maintenance, and operation of the Company's facilities, including the right to cut and trim trees and bushes wherever necessary; and the Company shall not be required to move its facilities to another location on the Customer's premises unless the Customer shall bear the cost thereof. The Company reserves the right to restrict such installations under this Rate to areas which are easily accessible by service truck.

All poles, wires, brackets, fixtures, transformers, and other equipment furnished by the Company shall be maintained by it and title to such shall in all cases remain vested in the Company.

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Rate DE

DEFAULT ENERGY SERVICE RATE DE

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Default Energy Service in conjunction with the applicable Delivery Service Rate Schedule. It is available to Customers who are not receiving Supplier Service or Self-Supply Service.

Notwithstanding any other Tariff provision or Special Contract terms, no discount shall be applied to this rate.

RATE PER MONTH

Applicable to customers receiving Delivery Service under Primary General Delivery Service Rate GV, Large General Delivery Service Rate LG and Backup Delivery Service Rate B, including any outdoor area lighting taken in conjunction with these accounts under Outdoor Lighting Delivery Service Rate OL:

Per Kilowatt-Hour

	February <u>2020</u>	March <u>2020</u>	April <u>2020</u>	May <u>2020</u>	June <u>2020</u>	July <u>2020</u>
Base Rate	10.228¢	7.674¢	7.127¢	6.143¢	5.384¢	5.830¢
Reconciliation Adjustment	0.195¢	0.195¢	0.195¢	0.195¢	0.195¢	0.195¢
Renewable Portfolio Standard	0.779¢	0.779¢	0.779¢	0.779¢	0.779¢	0.779¢
Administrative & General	<u>0.095¢</u>	<u>0.095¢</u>	<u>0.095¢</u>	<u>0.095¢</u>	<u>0.095¢</u>	<u>0.095¢</u>
Total Rate Per Month	11.297¢	8.743¢	8.196¢	7.212¢	6.453¢	6.899¢

Applicable to all other customers:

February 2020 – July 2020 Per Kilowatt-Hour

Base Rate	7.404¢
Reconciliation Adjustment	0.028¢
Renewable Portfolio Standard	0.779¢
<u>Administrative & General</u>	<u>0.095¢</u>
Total Rate Per Month	8.306¢

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Rate SSP

SMART START ENERGY EFFICIENCY PROGRAM

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for the installation of energy efficiency and load management measures for municipalities in offices, schools, and other municipal buildings. The energy efficiency and load management measures will be installed at the Company's expense and the Customer shall reimburse the Company through charges added to the Customer's regular monthly bill. Upon the Customer's request, the Company may utilize a fixed price estimate for the installed cost of energy efficiency and load management measures installed by the Company to determine eligibility and the monthly charges under this rate. If the Customer enters into an agreement based upon the fixed price estimate, both the Customer and the Company will be bound by that fixed price estimate. This rate is for a basic utility service and the Customer is liable for payment of the charges under this rate under the same conditions as any other charges for basic utility service including, but not limited to, the Customer's service being subject to disconnection for nonpayment in accordance with the rules of the Commission.

At its sole discretion, the Company shall determine eligibility for service under this rate subject to (1) the availability of funds budgeted for this program, (2) the suitability of approved energy efficiency and load management measures for the Customer's location and the likelihood that the measures will be used and useful throughout their estimated life, (3) a minimum project cost requirement of \$1,000 which may be met by aggregating project costs from multiple delivery service accounts, and (4) the Company's determination that the measures chosen are estimated to produce sufficient energy or demand savings to offset the total costs of the measures. Although the Company expects that all Customers participating in the Smart Start Energy Efficiency Program will receive lower monthly electric bills, there is no guarantee of savings.

Any Customer taking service under this rate must be and remain a full requirements delivery service Customer. In the event the Customer does not remain a full requirements delivery service Customer, any remaining charges under this rate shall immediately become due and payable.

COMPANY RESPONSIBILITIES

The Company will act as the Customer's agent in selecting energy efficiency and or load management measures which are suitable for the Customer's end uses of electricity and which are estimated to produce sufficient savings in energy usage or demand. The Company may arrange for a supplier or contractor (1) to install the measures (2) to instruct the Customer on the proper use, operation and maintenance of the measures and (3) to certify that the measures are properly installed and operating as designed. Upon notification by the Customer that work is complete, the Company will verify that the measure(s) have been installed and arrange for payment to the contractor.

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After receiving notice from the Customer, the Company will evaluate any report of a failed measure(s), and at its option, the Company will cause the measure(s) to be repaired or replaced when necessary or will terminate charges under this rate.

The Company will inform all new Customers at a location where energy efficiency or load management measures have been installed as to the existence of any unbilled charges remaining under this rate for that location. If the former Customer received service under an accelerated payment period term, the Company will inform the new Customer that they may revert at any time to the minimum monthly charge that was available to the former Customer. The Company will also inform these Customers of the benefits associated with the measure(s) and their responsibility for the payment of the remaining charges under this rate and other obligations.

CUSTOMER RESPONSIBILITIES

Prior to the installation of any energy efficiency or load management measures, the Customer will sign a Smart Start Agreement which will provide that the Customer is responsible for:

- (1) payment of the monthly charges under this rate in addition to all other charges on the monthly bill;
- (2) informing the Company if the measures fail completely or malfunction so that the estimated reductions in demand and energy use cannot be realized;
- (3) maintaining the energy efficiency or load management measures at the service location and taking reasonable steps to prevent damage to such measures;
- (4) becoming fully informed concerning the routine operation and maintenance of the energy efficiency or load management measures installed at the service location;
- (5) allowing access by the Company, at reasonable times, for any inspection or repair of the energy efficiency or load management measures to the extent the Company is responsible for such repairs as described above; and
- (6) accepting responsibility for the cost of out of warranty repairs. Customers may accept such responsibility through any of the following:
 - (a) the customer may repair the measure(s) themselves,
 - (b) the customer and/or customer's casualty insurance may pay for repairs,
 - (c) the customer may agree to an extension of the number of monthly payments to cover the Company's cost of repair.

A Customer's obligation to pay for the measure(s) ends when the Customer closes their account. If the Customer is the owner or lessor of the premises, the Customer must inform all prospective purchasers or renters of the location that there is an unexpired obligation under this rate. Whenever a Customer applies for service at a location which was the subject of a previous Smart Start Agreement, payment for which has not been completed, such Customer shall become responsible for the remaining balance. If the location was the subject of an accelerated payment term, the new Customer has the option to revert at any time to the minimum monthly charge that was available to the former Customer. Acceptance of electric service constitutes acceptance of the obligations under this rate by the new Customer.

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LANDLORD'S AND LESSOR'S RESPONSIBILITIES

In order to be eligible to accept the installation of the energy efficiency or load management measures in a location which is rented or leased to tenants who currently are Customers of the Company or future tenants of such locations who will apply for service from the Company at such locations, the owner and the landlord or lessor (in case the landlord or lessor is not the owner) must enter into a Smart Start Agreement under which they agree:

- (1) to cooperate in obtaining the consent of any existing tenants to enter into a Smart Start Agreement with the Company,
- (2) to inform all prospective new tenants of the obligation to enter into a Smart Start Agreement for the remaining balance of any previous Smart Start Agreement attributable to the rented or leased location; and
- (3) to inform all subsequent owners or lessors of these obligations with respect to informing tenants of their obligation to enter into a Smart Start Agreement.

Landlords and lessors of service locations must also agree to allow the Company access to any measures in order to inspect or repair the measures.

PRICING AND CONTRACT TERM

The Smart Start Agreement will specify the monthly charge and the term of the payment period. A Customer can choose to accelerate the payment period term by paying a higher monthly charge or a Customer can choose to pay the remaining balance owed to the Company at any time. Customers selecting an accelerated payment period term can revert at any time to the minimum monthly charge available to the Customer. The term of the Smart Start Agreement may be extended by the Company to recover its costs for out of warrantee repairs or missed payments.

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ENERGY EFFICIENCY LOAN PROGRAM

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this program shall allow Customers installing energy-efficiency measures under an energy efficiency program offered by the Company and approved by the Commission ("Participating Customers") to borrow all or a portion of the Customer's share of the installed cost of the energy-efficiency measures ("Customer Loan Amount") through an additional charge on their monthly electric service bill issued by the Company.

It is available to Residential Participating Customers with existing agreements as well as Residential Participating Customers who meet the following qualifications:

1. The Customer must own the residential property where the energy-efficiency measures are installed; and
2. The Customer must have an active Delivery Service account with the Company for the property where the energy-efficiency measures are installed and receive Delivery Service under Residential Delivery Service Rate R or Residential Time-of-Day Delivery Service Rate R-OTOD; and
3. The Customer must have a Fair Isaac and Company ("FICO") credit score of 680 or higher; and
4. The Customer must have good credit with the Company, which is defined as a Customer that has not received a disconnect notice from the Company during the twelve months preceding the Customer's request for service under this program; and
5. The Customer Loan Amount must be greater than or equal to \$500 and less than or equal to \$2,000 and must not exceed the Customer's share of the installed cost of the energy-efficiency measures installed under the Company's approved energy-efficiency program.

It is available to Non-Residential Participating Customers with existing agreements as well as Non-Residential Participating Customers who are not eligible under the Smart Start Energy Efficiency Program Rate SSP and who meet the following qualifications:

1. The Customer must own or lease the property where the energy-efficiency measures are installed; and
2. The Customer must have an active Delivery Service account with the Company for twelve consecutive months at the property where the energy efficiency measures are installed and receive Delivery Service under General Delivery Service Rate G, General Time-of-Day Delivery Service Rate G-OTOD, or Primary General Delivery Service Rate GV; and
3. The Customer must have good credit with the Company, which is defined as a Customer that has not received a disconnect notice from the Company during the twelve months preceding the Customer's request for service under this program and has no outstanding bill amounts owed to the Company; and

Issued: October 9, 2020

Issued by: /s/ Joseph A. Purington
Joseph A. Purington

Effective: January 1, 2021

Title: President and Chief Operating Officer

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
DBA EVERSOURCE ENERGY

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4. The Customer Loan Amount must be greater than or equal to \$1,500 and less than or equal to \$20,000 and must not exceed the Customer's share of the installed cost of the energy-efficiency measures installed under the Company's approved energy-efficiency programs.

At its sole discretion, the Company shall determine eligibility for service under this program subject to the availability of program funds.

Any Customer taking service under this program must remain a Delivery Service Customer of the Company at the property where the energy-efficiency measures are installed. In the event the Customer does not remain a Delivery Service Customer of the Company at the property where the energy-efficiency measures are installed, any remaining charges under this program shall immediately become due and payable.

CUSTOMER LOAN AGREEMENT

Participating Customers shall be required to execute a separate Customer Loan Agreement which will specify the fixed monthly charge and the terms of the payment period. A Customer can choose to pay the remaining balance owed to the Company at any time. A late payment charge as described in the Terms and Conditions for Delivery Service section of the Company's Tariff is applicable to the monthly charges rendered under this program. Participating Customers are not subject to disconnection of electric service for nonpayment of the charges under this program.

The Customer Loan Amount shall be paid to the Company by the Participating Customer through a fixed monthly charge applied over a term of months as established in the Customer Loan Agreement. Residential Participating Customers may specify the repayment term of the Customer Loan Amount subject to a maximum repayment term limit of 24 months. When requested by the customer, the term of a Residential Customer Loan Agreement may be extended or payments temporarily deferred for financial reasons to a maximum term length of 36 months. Non-Residential Participating Customers can choose to accelerate the payment period term specified in the Customer Loan Agreement by paying a higher monthly charge and can revert at any time to the minimum monthly charge available to the Customer as specified in the Customer Loan Agreement. When requested by the customer, the term of a Non-Residential Customer Loan Agreement may be extended by the Company to recover its costs for missed payments or payments temporarily deferred for financial reasons at the discretion of the Company.

Issued: October 9, 2020

Issued by: /s/ Joseph A. Purington
Joseph A. Purington

Effective: January 1, 2021

Title: President, NH Electric Operations

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STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

Report of Proposed Rate Changes - Settlement Rates

Tariff NHPUC No. 9

Date Filed: October 9, 2020

Date Effective: January 1, 2021

(A)	(B)	(C)	(D)	(E)	(F) = (E) - (D)	(G) = (F) / (D)
Class of Service	Effect of Proposed Change	Average Number of Customers	Estimated Annual Revenue (a) Current Rates (b)	Proposed Rates (c)	Proposed Annual Change Revenue	Percent
Residential Service Rate R and R-OTOD	Increase	439,078	\$ 587,513,346	\$ 615,117,807	\$ 27,604,461	4.7%
General Service Rate G and Rate G-OTOD	Increase	75,983	\$ 284,151,913	\$ 295,712,356	\$ 11,560,443	4.1%
Primary General Service Rate GV	Increase	1,393	\$ 206,952,027	\$ 211,938,457	\$ 4,986,430	2.4%
Large General Service Rate LG	Increase	121	\$ 141,139,745	\$ 143,902,776	\$ 2,763,031	2.0%
Outdoor Lighting Service Rate OL and Rate EOL	Decrease	773	\$ 10,675,492	\$ 9,328,554	\$ (1,346,938)	-12.6%
Total (a)	Increase	517,349	\$ 1,230,432,523	\$ 1,275,999,950	\$ 45,567,427	3.7%

Notes:

(a) Based on actual sales to customers for the twelve-month period ending December 31, 2018, normalized for lighting inventory as of December 2018.

(b) Current rate revenue is based on distribution rates effective January 1, 2018, and transmission, stranded cost recovery, system benefits, and energy service rates in effect as of the filing date. Support for amounts are shown in Appendix 10, pages 11 through 21

(c) Proposed rate revenue is based on proposed distribution rates and includes base increase, recoupment and surcredit.

No changes in other rate components have been reflected. Support for amounts are shown in Appendix 10, pages 11 through 21.

Signed By: /s/ Edward A. Davis
Edward A. Davis

Title: Director, Rates

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STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Report of Proposed Rate Changes Current Rates

Tariff NHPUC No. 9

Date Filed: October 9, 2020
Date Effective: January 1, 2021

(A)	(B)	(C)	(D)	(E)	(F)	(G) = Sum of (B) to (F)
Class	Current Distribution	Current Transmission	Current SCRC	Current System Benefits	Current Energy Service (b)	Total Revenue
Residential Service Rate R (a)	\$ 202,012,310	\$ 97,714,996	\$ 32,002,049	\$ 24,330,751	\$ 231,453,240	\$ 587,513,346
General Service Rate G	84,312,407	49,219,118	15,488,590	12,854,042	122,277,756	284,151,913
Primary General Service Rate GV	36,426,129	44,111,953	13,492,968	12,396,614	100,524,363	206,952,027
Large General Service Rate LG	20,150,790	29,120,817	7,079,752	9,308,181	75,480,205	141,139,745
Outdoor Lighting Rates OL, EOL	<u>7,590,790</u>	<u>586,558</u>	<u>271,903</u>	<u>211,765</u>	<u>2,014,476</u>	<u>10,675,492</u>
Total Retail	<u>\$ 350,492,426</u>	<u>\$ 220,753,442</u>	<u>\$ 68,335,262</u>	<u>\$ 59,101,353</u>	<u>\$ 531,750,040</u>	<u>\$ 1,230,432,523</u>

Notes:

- (a) Revenues for Residential Rate R do not include credits issued to qualifying customers under the Residential Electric Assistance Program.
(b) For purposes of this calculation, all customers are assumed to receive service under the Energy Service rate.
(c) Support for amounts shown above is contained in Appendix 10, pages 11 through 21.

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STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION Report of Proposed Rate Changes Permanent Rates

Date Filed: October 9, 2020
Date Effective: January 1, 2021

Tariff NHPUC No. 9

(A)	(B)	(C)	(D)	(E)	(F)	(G) = Sum of (B) to (F)
	Proposed	Current	Current	Current	Current	Total
	Permanent	Transmission	SCRC	System	Energy	Revenue
Class	Distribution			Benefits	Service (b)	
Residential Service Rate R (a)	\$229,616,771	\$ 97,714,996	\$32,002,049	\$24,330,751	\$231,453,240	\$ 615,117,807
General Service Rate G	95,872,850	49,219,118	15,488,590	12,854,042	122,277,756	295,712,356
Primary General Service Rate GV	41,412,559	44,111,953	13,492,968	12,396,614	100,524,363	211,938,457
Large General Service Rate LG	22,913,821	29,120,817	7,079,752	9,308,181	75,480,205	143,902,776
Outdoor Lighting Rates OL, EOL	6,243,852	586,558	271,903	211,765	2,014,476	9,328,554
Total Retail	<u>\$396,059,853</u>	<u>\$220,753,442</u>	<u>\$68,335,262</u>	<u>\$59,101,353</u>	<u>\$531,750,040</u>	<u>\$ 1,275,999,950</u>

Notes:

- (a) Revenues for Residential Rate R do not include credits issued to qualifying customers under the Residential Electric Assistance Program.
(b) For purposes of this calculation, all customers are assumed to receive service under the Energy Service rate.
(c) Support for amounts shown above is contained in Appendix 10, pages 11 through 21.

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STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

Report of Proposed Rate Changes
Incremental Increase/(Decrease)

Tariff NHPUC No. 9

Date Filed: October 9, 2020
Date Effective: January 1, 2021

(A)	(B)	(C)	(D)	(E)	(F)	(G) = Sum of (B) to (F)
Class	Proposed Permanent Distribution (b)	Current Transmission	Current SCRC	Current System Benefits	Current Energy Service (c)	Total Revenue
Residential Service Rate R (a)	\$ 27,604,461	\$ -	\$ -	\$ -	\$ -	\$ 27,604,461
General Service Rate G	11,560,443	-	-	-	-	11,560,443
Primary General Service Rate GV	4,986,430	-	-	-	-	4,986,430
Large General Service Rate LG	2,763,031	-	-	-	-	2,763,031
Outdoor Lighting Rates OL, EOL	(1,346,938)	-	-	-	-	(1,346,938)
Total Retail	<u>\$ 45,567,427</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 45,567,427</u>

Notes:

- (a) Revenues for Residential Rate R do not include credits issued to qualifying customers under the Residential Electric Assistance Program.
(b) Appendix 10, page 3 - Appendix 10, page 2
(c) For purposes of this calculation, all customers are assumed to receive service under the Energy Service rate.

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STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Report of Proposed Rate Changes Percent Increase/(Decrease)

Tariff NHPUC No. 9

Date Filed: October 9, 2020
Date Effective: January 1, 2021

(A)	(B)	(C)	(D)	(E)	(F)	(G)
	Proposed	Current	Current	Current	Current	
	Permanent	Transmission	SCRC	System	Energy	Total
Class	Distribution (b)			Benefits	Service (c)	Revenue
Residential Service Rate R (a)	13.7%	0.0%	0.0%	0.0%	0.0%	4.7%
General Service Rate G	13.7%	0.0%	0.0%	0.0%	0.0%	4.1%
Primary General Service Rate GV	13.7%	0.0%	0.0%	0.0%	0.0%	2.4%
Large General Service Rate LG	13.7%	0.0%	0.0%	0.0%	0.0%	2.0%
Outdoor Lighting Rates OL, EOL	-17.7%	0.0%	0.0%	0.0%	0.0%	-12.6%
Total Retail	13.0%	0.0%	0.0%	0.0%	0.0%	3.7%

Notes:

- (a) Revenues for Residential Rate R do not include credits issued to qualifying customers under the Residential Electric Assistance Program.
(b) Percent change is Appendix 10, page 4, Column (B) / Appendix 10, page 2, Column (B)
(c) For purposes of this calculation, all customers are assumed to receive service under the Energy Service rate.

**Distribution Revenue Allocation
Settlement Rate Year 1**

	Source
Current Rate Distribution Revenue	Col B Line 67
Current Streetlighting Revenue	Col B Line 65
Current Distribution minus Streetlighting	Line 11 - Line 12
Permanent Rate Revenue Adjustment	See Settlement
Streetlighting Adjustment	Appendix 10, pages 25 & 26
Permanent Distribution Increase	Line 15 - Line 16
Permanent Distribution Revenue	Line 11 + Line 15
Adjusted Street Lighting Revenue	Line 12 + Line 16
Permanent Distribution minus Streetlighting	Line 19 - Line 20
Permanent Average Rate Change %	(Line 21 / Line 13)
Temporary Rate Recoupment	See Settlement
Customer Surcredit	See Settlement
Total Recoupment	Line 25 + Line 26
Proposed Distribution Revenue	Line 19 + Line 27
Recoupment Average D Rate Change %	(Line 29 / Line 19)

	A	B	C = B * Line 23	D = (B+C) * Line 31	E = B + C + D	F	G = F - B	H = G / A	I = F / B
	Test Year 2018 Billed Sales (MWh)	Current Rate Distribution Revenue (Rev \$/000)	Permanent D.Changes (Rev \$/000)	Recoup D.Changes (Rev \$/000)	Distribution Target (Rev \$/000)	Proposed Rate Distribution (Rev \$/000)	Proposed vs Current (Rev \$/000)	g/kWh	% Chg.
R	3,144,509	\$ 197,334.9	\$ 26,669.548	\$ 326.0	\$ 224,330.4	\$ 224,327.1			
R-TOD	462	34.6	4.7	0.1	39.4	39.1			
	3,144,971	197,369.5	26,674.2	326.1	224,369.8	224,366.2	\$ 26,996.7	0.858	13.68%
R-WH	92,916	4,195.3	567.0	6.9	4,769.2	4,522.9			
G-WH	3,379	136.8	18.5	0.2	155.5	147.3			
LCS-R	36,777	447.5	60.5	0.7	508.7	727.7			
LCS-G	4,510	28.9	3.9	0.0	32.8	68.9			
	137,582	4,908.4	649.8	7.9	5,466.2	5,466.8	658.4	0.479	13.69%
G	1,715,822	83,771.9	11,321.7	138.4	95,231.9	95,231.3			
G-TOD	856	173.2	23.4	0.3	196.9	196.0			
	1,716,678	83,945.1	11,345.1	138.7	95,428.8	95,427.4	11,482.3	0.669	13.68%
G-SH	5,452	201.7	27.3	0.3	229.3	229.3	27.6	0.506	13.67%
GV	1,665,676	36,211.5	4,893.9	59.8	41,165.3	41,170.4	4,958.9	0.298	13.69%
LG	1,172,439	18,846.4	2,547.1	31.1	21,424.6	21,430.4	2,584.0	0.220	13.71%
B-GV	2,778	214.6	29.0	0.4	243.9	242.1			
B-LG	80,345	1,304.4	176.3	2.2	1,482.8	1,483.4			
	83,123	1,519.0	205.3	2.5	1,726.7	1,725.5	206.6	0.249	13.60%
EOL	11,371	3,081.8	(1,048.6)	3.0	2,036.2	2,036.2			
OL	17,130	4,509.0	(307.4)	6.1	4,207.7	4,207.7			
	28,501	7,590.8	(1,356.0)	9.1	6,243.9	6,243.9	(1,346.9)	(4.726)	-17.74%
Total Retail	7,954,422	\$ 350,492.4	\$ 44,986.7	\$ 575.6	\$ 396,054.7	\$ 396,059.9	\$ 45,567.4	0.573	13.00%
					Distribution Target Difference	\$ 396,054.7			
						\$ 5.2			

Attachment A

SUMMARY OF CURRENT AND PROPOSED DISTRIBUTION RATES

Rate	Blocks	Current Rates (01/01/18)	Current Rates (08/01/20)	Proposed Rates (01/01/21) (a)	Percent Change
R	Customer charge	\$ 12.69	\$ 13.81	\$ 13.81	0.00%
	All KWH	0.04141	0.04508	0.04811	6.72%
Uncontrolled					
Water	Meter charge	\$ 4.47	\$ 4.87	\$ 4.87	0.00%
Heating	All KWH	0.02030	0.02210	0.02161	-2.22%
Controlled					
Water	Meter charge	\$ 7.88	\$ 8.58	\$ 6.38	-25.64%
Heating	All KWH	0.00120	0.00131	0.01141	770.99%
R-OTOD	Customer charge	\$ 29.47	\$ 32.08	\$ 32.08	0.00%
	On-peak KWH	\$ 0.13235	\$ 0.14407	\$ 0.14710	2.10%
	Off-peak KWH	0.00193	0.00210	0.00513	144.29%
G	Single phase customer charge	\$ 14.89	\$ 16.21	\$ 16.21	0.00%
	Three phase customer charge	29.76	32.39	32.39	0.00%
	Load charge (over 5 KW)	\$ 8.72	\$ 9.49	\$ 10.49	10.54%
	First 500 KWH	\$ 0.06986	\$ 0.07604	\$ 0.02805	-63.11%
	Next 1,000 KWH	0.01731	0.01884	0.02268	20.38%
	All additional KWH	0.00612	0.00666	0.01709	156.61%
Space	Meter charge	\$ 2.98	\$ 3.24	\$ 3.24	0.00%
Heating	All KWH	0.03426	0.03729	0.03908	4.80%
G-OTOD	Single phase customer charge	\$ 38.57	\$ 41.98	\$ 41.98	0.00%
	Three phase customer charge	55.12	60.00	60.00	0.00%
	Load charge	\$ 12.15	\$ 13.23	\$ 13.92	5.22%
	On-peak KWH	0.04901	0.05335	0.05335	0.00%
	Off-peak KWH	0.00768	0.00836	0.00836	0.00%
LCS	Radio-controlled option	\$ 9.11	\$ 9.92	\$ 6.99	-29.54%
	8, 10 or 11-hour option	7.88	8.58	6.38	-25.64%
	Switch option	9.11	9.92	6.99	-29.54%
	Radio-controlled option	\$ 0.00120	\$ 0.00131	\$ 0.01141	770.99%
	8-hour option	0.00120	0.00131	0.01141	770.99%
	10 or 11-hour option	0.02448	0.02665	0.02161	-18.91%

(a) Proposed rates include base change, recoupment and surcredit adjustment.

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SUMMARY OF CURRENT AND PROPOSED DISTRIBUTION RATES

Rate	Blocks	Current Rates (01/01/18)	Current Rates (08/01/20)	Proposed Rates (01/01/21) (a)	Percent Change
GV	Customer charge	\$ 194.03	\$ 211.21	\$ 211.21	0.00%
	First 100 KW	\$ 5.58	\$ 6.07	\$ 6.48	6.75%
	All additional KW	5.34	5.81	6.22	7.06%
	First 200,000 KWH	\$ 0.00606	\$ 0.00660	\$ 0.00657	-0.45%
	All additional KWH	0.00509	0.00554	0.00583	5.23%
	Minimum Charge	\$ 893.00	\$ 972.00	\$ 1,015.00	4.42%
LG	Customer charge	\$ 606.47	\$ 660.15	\$ 660.15	0.00%
	Demand charge	\$ 4.75	\$ 5.17	\$ 5.51	6.58%
	On-peak KWH	\$ 0.00508	\$ 0.00553	\$ 0.00554	0.18%
	Off-peak KWH	0.00429	0.00467	0.00468	0.21%
	Minimum Charge	\$ 947.00	\$ 1,031.00	\$ 1,076.00	4.36%
	Discount for Service at 115kV	\$ (0.43)	\$ (0.47)	\$ (0.49)	4.26%
B	Administrative charge	\$ 341.84	\$ 372.10	\$ 372.10	0.00%
Service at less than 115 KV	Translation charge	57.34	62.42	62.42	0.00%
	Demand charge	\$ 4.48	\$ 4.88	\$ 5.12	4.92%
	All KWH	Energy charges in the standard rate			
B	Administrative charge	\$ 341.84	\$ 372.10	\$ 372.10	0.00%
Service at 115 KV or higher	Translation charge	57.34	62.42	62.42	0.00%
	Demand charge		Not applicable		
	All KWH		Not applicable		

(a) Proposed rates include base change, recoupment and surcredit adjustment.

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SUMMARY OF CURRENT AND PROPOSED DISTRIBUTION RATES

Outdoor Lighting Service Rate OL

	Lumens	Watts	Current Rates (01/01/18)	Current Rates (08/01/20)	Proposed Rates (01/01/21) (a)	Percent Change
For new and existing installations						
High Pressure Sodium	4,000	50	\$ 15.83	\$ 17.23	\$ 14.77	-14.26%
	5,800	70	15.83	17.23	14.77	-14.26%
	9,500	100	21.05	22.91	19.64	-14.26%
	16,000	150	29.77	32.41	27.78	-14.28%
	30,000	250	30.51	33.21	28.47	-14.27%
	50,000	400	30.85	33.58	28.79	-14.27%
	130,000	1,000	49.51	53.89	46.20	-14.27%
Metal Halide	5,000	70	16.51	17.97	15.41	-14.26%
	8,000	100	22.60	24.60	21.09	-14.27%
	13,000	150	31.01	33.76	28.94	-14.28%
	13,500	175	31.67	34.37	29.55	-14.01%
	20,000	250	31.67	34.47	29.55	-14.26%
	36,000	400	31.96	34.79	29.82	-14.27%
	100,000	1,000	47.91	52.15	44.71	-14.27%
Light Emitting Diode (LED)	2,500	28			10.00	
	4,100	36			9.97	
	4,800	51			10.13	
	8,500	92			11.17	
	13,300	142			12.35	
	24,500	220			15.54	
For existing installations only						
Incandescent	600	105	9.12	9.93	8.51	-14.29%
	1,000	105	10.18	11.08	9.50	-14.26%
	2,500	205	13.06	14.22	12.19	-14.29%
	6,000	448	22.44	24.43	20.94	-14.28%
Mercury	3,500	100	13.96	15.20	13.03	-14.29%
	7,000	175	16.80	18.29	15.68	-14.28%
	11,000	250	20.77	22.61	19.38	-14.28%
	15,000	400	23.76	25.86	22.17	-14.26%
	20,000	400	25.65	27.92	23.94	-14.27%
	56,000	1,000	40.77	44.38	38.05	-14.27%
Fluorescent	20,000	330	34.79	37.87	32.47	-14.27%
High Pressure Sodium in existing mercury luminaires						
	12,000	150	21.77	23.70	20.32	-14.28%
	34,200	360	27.87	30.34	26.01	-14.28%

(a) Proposed rates include base change, recoupment and surcredit adjustment.

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SUMMARY OF CURRENT AND PROPOSED DISTRIBUTION RATES

Energy Efficient Outdoor Lighting Service Rate EOL

	<u>Lumens</u>	<u>Watts</u>	<u>Current Rates (01/01/18)</u>	<u>Current Rates (08/01/20)</u>	<u>Proposed Rates (01/01/21) (a)</u>	<u>Percent Change</u>
High Pressure Sodium	4,000	50	\$ 8.42	\$ 9.17	\$ 6.12	-33.25%
	5,800	70	8.42	9.17	6.43	-29.90%
	9,500	100	10.36	11.28	6.85	-39.26%
	16,000	150	11.39	12.40	7.51	-39.46%
	30,000	250	11.39	12.40	8.73	-29.57%
	50,000	400	11.76	12.80	10.44	-18.46%
	130,000	1,000	22.32	24.30	17.11	-29.59%
Metal Halide	5,000	70	8.75	9.52	6.45	-32.26%
	8,000	100	11.57	12.59	6.79	-46.09%
	13,000	150	12.35	13.44	7.52	-44.07%
	13,500	175	13.00	14.15	7.69	-45.68%
	20,000	250	13.22	14.39	8.55	-40.56%
	36,000	400	13.59	14.79	10.27	-30.58%
	100,000	1,000	24.21	26.35	16.93	-35.75%
LED's and other technologies accepted by the Company						
Per fixture charge			3.37	3.67	3.01	-17.90%
Per watt charge			\$ 0.05130	\$ 0.05580	\$ 0.01058	-81.04%

(a) Proposed rates include base change, recoupment and surcredit adjustment.

Attachment A

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Summary of Revenues by Type and Class

Current Revenues						
	Distribution	Transmission	SCRC	SBC	Energy	Total
Rate R	197,334,891	94,681,175	30,879,081	23,363,704	222,253,918	568,512,769
Rate R CWH	24,218	12,698	3,094	4,047	38,501	82,558
Rate R UWH	4,171,103	2,153,177	907,087	686,319	6,528,810	14,446,496
Rate R LCS	447,452	857,268	208,892	273,252	2,599,391	4,386,255
Rate R OTOD	34,646	10,678	3,895	3,429	32,620	85,268
Rate R	202,012,310	97,714,996	32,002,049	24,330,751	231,453,240	587,513,346
Rate G	83,771,868	48,826,887	15,361,851	12,748,559	121,274,312	281,983,477
Rate G CWH	-	-	-	-	-	-
Rate G UWH	136,750	78,771	31,225	25,108	238,849	510,703
Rate G LCS	28,868	105,125	23,993	33,508	318,758	510,252
Rate G Space	201,725	153,034	63,187	40,507	385,338	843,791
Rate G OTOD	173,196	55,301	8,334	6,360	60,499	303,690
Rate G	84,312,407	49,219,118	15,488,590	12,854,042	122,277,756	284,151,913
Rate GV	36,426,129	44,111,953	13,492,968	12,396,614	100,524,363	206,952,027
Rate LG	20,150,790	29,120,817	7,079,752	9,308,181	75,480,205	141,139,745
Rate OL/EOL	7,590,790	586,558	271,903	211,765	2,014,476	10,675,492
TOTAL	350,492,426	220,753,442	68,335,262	59,101,353	531,750,040	1,230,432,523

Proposed Revenues						
	Distribution	Transmission	SCRC	SBC	Energy	Total
Rate R	224,327,079	94,681,175	30,879,081	23,363,704	222,253,918	595,504,957
Rate R CWH	25,294	12,698	3,094	4,047	38,501	83,634
Rate R UWH	4,497,565	2,153,177	907,087	686,319	6,528,810	14,772,958
Rate R LCS	727,721	857,268	208,892	273,252	2,599,391	4,666,524
Rate R OTOD	39,112	10,678	3,895	3,429	32,620	89,734
Rate R	229,616,771	97,714,996	32,002,049	24,330,751	231,453,240	615,117,807
Rate G	95,231,333	48,826,887	15,361,851	12,748,559	121,274,312	293,442,942
Rate G CWH	-	-	-	-	-	-
Rate G UWH	147,275	78,771	31,225	25,108	238,849	521,228
Rate G LCS	68,906	105,125	23,993	33,508	318,758	550,290
Rate G Space	229,307	153,034	63,187	40,507	385,338	871,373
Rate G OTOD	196,029	55,301	8,334	6,360	60,499	326,523
Rate G	95,872,850	49,219,118	15,488,590	12,854,042	122,277,756	295,712,356
Rate GV	41,412,559	44,111,953	13,492,968	12,396,614	100,524,363	211,938,457
Rate LG	22,913,821	29,120,817	7,079,752	9,308,181	75,480,205	143,902,776
Rate OL/EOL	6,243,852	586,558	271,903	211,765	2,014,476	9,328,554
TOTAL	396,059,853	220,753,442	68,335,262	59,101,353	531,750,040	1,275,999,950

Source of data is Appendix 10, pages 12 through 21

Attachment A

Comparison of Current vs Proposed
Permanent Rates

Rate R - Residential Electric Service							
	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Current Revenues	(D) Proposed Rate	(E) = (A) x (D) Proposed Revenues	(F) = (E) - (C) Proposed vs. Current Difference	(G) = (F) / (C) % Chg
Customer Charge							
Customer Charge	5,289,264	\$ 12.69	\$ 67,120,760	\$ 13.81	\$ 73,044,736	\$ 5,923,976	8.83%
Energy Charge All kWh	3,144,509,315						
Distribution		\$ 0.04141	\$ 130,214,131	\$ 0.04811	\$ 151,282,343	\$ 21,068,212	16.18%
Transmission		0.03011	94,681,175	0.03011	94,681,175	-	0.00%
Stranded Cost Recovery Charge		0.00982	30,879,081	0.00982	30,879,081	-	0.00%
System Benefits Charge		0.00743	23,363,704	0.00743	23,363,704	-	0.00%
Energy Service Charge		0.07068	222,253,918	0.07068	222,253,918	-	0.00%
Distribution Impact Only		\$ 0.06276	\$ 197,334,891	\$ 0.07134	\$ 224,327,079	\$ 26,992,188	13.68%
Total Change		\$ 0.18080	\$ 568,512,769	\$ 0.18938	\$ 595,504,957	\$ 26,992,188	4.75%
Rate R - Residential Uncontrolled Water Heating							
Customer Charge							
Customer Charge	513,638	\$ 4.47	\$ 2,295,964	\$ 4.87	\$ 2,501,419	\$ 205,455	8.95%
Energy Charge All kWh	92,371,389						
Distribution		\$ 0.02030	\$ 1,875,139	\$ 0.02161	\$ 1,996,146	\$ 121,007	6.45%
Transmission		0.02331	2,153,177	0.02331	2,153,177	-	0.00%
Stranded Cost Recovery Charge		0.00982	907,087	0.00982	907,087	-	0.00%
System Benefits Charge		0.00743	686,319	0.00743	686,319	-	0.00%
Energy Service Charge		0.07068	6,528,810	0.07068	6,528,810	-	0.00%
Distribution Impact Only		\$ 0.04516	\$ 4,171,103	\$ 0.04869	\$ 4,497,565	\$ 326,462	7.83%
Total Change		\$ 0.15640	\$ 14,446,496	\$ 0.15993	\$ 14,772,958	\$ 326,462	2.26%
Rate R - Residential Controlled Water Heating							
Customer Charge							
Customer Charge	2,990	\$ 7.88	\$ 23,564	\$ 6.38	\$ 19,079	\$ (4,485)	-19.04%
Energy Charge All kWh	544,730						
Distribution		\$ 0.00120	\$ 654	\$ 0.01141	\$ 6,215	\$ 5,561	850.83%
Transmission		0.02331	12,698	0.02331	12,698	-	0.00%
Stranded Cost Recovery Charge		0.00568	3,094	0.00568	3,094	-	0.00%
System Benefits Charge		0.00743	4,047	0.00743	4,047	-	0.00%
Energy Service Charge		0.07068	38,501	0.07068	38,501	-	0.00%
Distribution Impact Only		\$ 0.04446	\$ 24,218	\$ 0.04643	\$ 25,294	\$ 1,076	4.44%
Total Change		\$ 0.15156	\$ 82,558	\$ 0.15353	\$ 83,634	\$ 1,076	1.30%

Attachment A

Public Service Company of New Hampshire d/b/a Eversource Energy Docket No. DE 19-057 Appendix 10 (Settlement) October 9, 2020 Page 13 of 50							
Comparison of Current vs Proposed Permanent Rates							
Rate R - Load Control Service, Radio Controlled							
	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Current Revenues	(D) Proposed Rate	(E) = (A) x (D) Proposed Revenues	(F) = (E) - (C) Proposed vs. Current Difference	(G) = (F) / (C) % Chg
Customer Charge							
Customer Charge	41,348	\$ 9.11	\$ 376,678	\$ 6.99	\$ 289,020	\$ (87,658)	-23.27%
Energy Charge All kWh	36,095,933						
Distribution		\$ 0.00120	\$ 43,315	\$ 0.01141	\$ 411,855	\$ 368,540	850.83%
Transmission		0.02331	841,396	0.02331	841,396	-	0.00%
Stranded Cost Recovery Charge		0.00568	205,025	0.00568	205,025	-	0.00%
System Benefits Charge		0.00743	268,193	0.00743	268,193	-	0.00%
Energy Service Charge		0.07068	2,551,261	0.07068	2,551,261	-	0.00%
Distribution Impact Only		\$ 0.01164	\$ 419,993	\$ 0.01942	\$ 700,875	\$ 280,882	66.88%
Total Change		\$ 0.11874	\$ 4,285,868	\$ 0.12652	\$ 4,566,750	\$ 280,882	6.55%
Rate R - Load Control Service, 8 Hour Switch							
Customer Charge							
Customer Charge	145	\$ 9.11	\$ 1,316	\$ 6.99	\$ 1,010	\$ (306)	-23.27%
Energy Charge All kWh	44,152						
Distribution		\$ 0.00120	\$ 53	\$ 0.01141	\$ 504	\$ 451	850.83%
Transmission		0.02331	1,029	0.02331	1,029	-	0.00%
Stranded Cost Recovery Charge		0.00568	251	0.00568	251	-	0.00%
System Benefits Charge		0.00743	328	0.00743	328	-	0.00%
Energy Service Charge		0.07068	3,121	0.07068	3,121	-	0.00%
Distribution Impact Only		\$ 0.03101	\$ 1,369	\$ 0.03429	\$ 1,514	\$ 145	10.59%
Total Change		\$ 0.13811	\$ 6,098	\$ 0.14140	\$ 6,243	\$ 145	2.38%
Rate R - Load Control Service, 8 Hour No Switch							
Customer Charge							
Customer Charge	1,249	\$ 7.88	\$ 9,844	\$ 6.38	\$ 7,970	\$ (1,874)	-19.04%
Energy Charge All kWh	357,451						
Distribution		\$ 0.00120	\$ 429	\$ 0.01141	\$ 4,079	\$ 3,650	850.83%
Transmission		0.02331	8,332	0.02331	8,332	-	0.00%
Stranded Cost Recovery Charge		0.00568	2,030	0.00568	2,030	-	0.00%
System Benefits Charge		0.00743	2,656	0.00743	2,656	-	0.00%
Energy Service Charge		0.07068	25,265	0.07068	25,265	-	0.00%
Distribution Impact Only		\$ 0.02874	\$ 10,273	\$ 0.03371	\$ 12,049	\$ 1,776	17.29%
Total Change		\$ 0.13584	\$ 48,556	\$ 0.14081	\$ 50,332	\$ 1,776	3.66%
Rate R - Load Control Service, 10/11 Hour Switch							
Customer Charge							
Customer Charge	60	\$ 9.11	\$ 547	\$ 6.99	\$ 419	\$ (128)	-23.27%
Energy Charge All kWh	13,784						
Distribution		\$ 0.02448	\$ 337	\$ 0.02161	\$ 298	\$ (39)	-11.72%
Transmission		0.02331	321	0.02331	321	-	0.00%
Stranded Cost Recovery Charge		0.00568	78	0.00568	78	-	0.00%
System Benefits Charge		0.00743	102	0.00743	102	-	0.00%
Energy Service Charge		0.07068	974	0.07068	974	-	0.00%
Distribution Impact Only		\$ 0.06413	\$ 884	\$ 0.05202	\$ 717	\$ (167)	-18.89%
Total Change		\$ 0.17114	\$ 2,359	\$ 0.15902	\$ 2,192	\$ (167)	-7.08%
Rate R - Load Control Service, 10/11 Hour No Switch							
Customer Charge							
Customer Charge	1,070	\$ 7.88	\$ 8,432	\$ 6.38	\$ 6,827	\$ (1,605)	-19.04%
Energy Charge All kWh	265,564						
Distribution		\$ 0.02448	\$ 6,501	\$ 0.02161	\$ 5,739	\$ (762)	-11.72%
Transmission		0.02331	6,190	0.02331	6,190	-	0.00%
Stranded Cost Recovery Charge		0.00568	1,508	0.00568	1,508	-	0.00%
System Benefits Charge		0.00743	1,973	0.00743	1,973	-	0.00%
Energy Service Charge		0.07068	18,770	0.07068	18,770	-	0.00%
Distribution Impact Only		\$ 0.05623	\$ 14,933	\$ 0.04732	\$ 12,566	\$ (2,367)	-15.85%
Total Change		\$ 0.16333	\$ 43,374	\$ 0.15441	\$ 41,007	\$ (2,367)	-5.46%

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7								
8	Comparison of Current vs Proposed							
9	Permanent Rates							
10								
11	Rate R - Optional Time of Day							
12		(A)	(B)	(C) = (A) x (B)	(D)	(E) = (A) x (D)	(F) = (E) - (C)	(G) = (F) / (C)
13		Billing	Current	Current	Proposed	Proposed	Proposed vs. Current	
14		Determinants	Rate	Revenues	Rate	Revenues	Difference	% Chg
15								
16	Customer Charge							
17	Customer Charge	466	\$ 29.47	\$ 13,721	\$ 32.08	\$ 14,936	\$ 1,215	8.86%
18								
19	Energy Charge On Peak kWh							
20	Distribution	153,613	\$ 0.13235	\$ 20,331	\$ 0.14710	\$ 22,596	\$ 2,265	11.14%
21	Transmission		0.03011	4,625	0.03011	4,625	-	0.00%
22	Stranded Cost Recovery Charge		0.00844	1,296	0.00844	1,296	-	0.00%
23	System Benefits Charge		0.00743	1,141	0.00743	1,141	-	0.00%
24	Energy Service Charge		0.07068	10,857	0.07068	10,857	-	0.00%
25								
26	Energy Charge Off Peak kWh							
27	Distribution	307,907	\$ 0.00193	\$ 594	\$ 0.00513	\$ 1,580	\$ 986	165.99%
28	Transmission		0.01966	6,053	0.01966	6,053	-	0.00%
29	Stranded Cost Recovery Charge		0.00844	2,599	0.00844	2,599	-	0.00%
30	System Benefits Charge		0.00743	2,288	0.00743	2,288	-	0.00%
31	Energy Service Charge		0.07068	21,763	0.07068	21,763	-	0.00%
32								
33	Distribution Impact Only		\$ 0.07507	\$ 34,646	\$ 0.08475	\$ 39,112	\$ 4,466	12.89%
34	Total Change		\$ 0.18475	\$ 85,268	\$ 0.19443	\$ 89,734	\$ 4,466	5.24%

Attachment A

Comparison of Current vs Proposed
Permanent Rates

Rate G - General Service							
	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Current Revenues	(D) Proposed Rate	(E) = (A) x (D) Proposed Revenues	(F) = (E) - (C) Proposed vs. Current Difference	(G) = (F) / (C) % Chg
Customer Charge							
Customer Charge 1 Phase	682,271	\$ 14.89	\$ 10,159,015	\$ 16.21	\$ 11,059,613	900,598	8.87%
Customer Charge 3 Phase	235,118	29.76	6,997,118	32.39	7,615,478	618,360	8.84%
Demand Charge >5 kW	4,060,918						
Distribution		\$ 8.72	\$ 35,411,205	\$ 10.49	\$ 42,599,030	7,187,825	20.30%
Transmission		7.77	31,553,333	7.77	31,553,333	-	0.00%
Stranded Cost Recovery Charge		0.69	2,802,033	0.69	2,802,033	-	0.00%
Energy Charge < 500 kWh	273,389,497						
Distribution		\$ 0.06986	\$ 19,098,990	\$ 0.02805	\$ 7,668,575	(11,430,415)	-59.85%
Transmission		0.02807	7,674,043	0.02807	7,674,043	-	0.00%
Stranded Cost Recovery Charge		0.00732	2,001,211	0.00732	2,001,211	-	0.00%
System Benefits Charge		0.00743	2,031,284	0.00743	2,031,284	-	0.00%
Energy Service Charge		0.07068	19,323,170	0.07068	19,323,170	-	0.00%
Energy Charge 501 - 1500 kWh	292,926,918						
Distribution		\$ 0.01731	\$ 5,070,565	\$ 0.02268	\$ 6,643,583	1,573,018	31.02%
Transmission		0.01056	3,093,308	0.01056	3,093,308	-	0.00%
Stranded Cost Recovery Charge		0.00732	2,144,225	0.00732	2,144,225	-	0.00%
System Benefits Charge		0.00743	2,176,447	0.00743	2,176,447	-	0.00%
Energy Service Charge		0.07068	20,704,075	0.07068	20,704,075	-	0.00%
Energy Charge >1500 kWh	1,149,505,765						
Distribution		\$ 0.00612	7,034,975	\$ 0.01709	19,645,054	12,610,079	179.25%
Transmission		0.00566	6,506,203	0.00566	6,506,203	-	0.00%
Stranded Cost Recovery Charge		0.00732	8,414,382	0.00732	8,414,382	-	0.00%
System Benefits Charge		0.00743	8,540,828	0.00743	8,540,828	-	0.00%
Energy Service Charge		0.07068	81,247,067	0.07068	81,247,067	-	0.00%
Distribution Impact Only		\$ 0.04882	83,771,868	\$ 0.05550	\$ 95,231,333	\$ 11,459,465	13.68%
Total Change		\$ 0.16434	281,983,477	\$ 0.17102	\$293,442,942	\$ 11,459,465	4.06%

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8	Comparison of Current vs Proposed						
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10							
11	Rate G - General Service Uncontrolled Water Heating						
12	(A)	(B)	(C) = (A) x (B)	(D)	(E) = (A) x (D)	(F) = (E) - (C)	(G) = (F) / (C)
13	Billing	Current	Current	Proposed	Proposed	Proposed vs. Current	
14	Determinants	Rate	Revenues	Rate	Revenues	Difference	% Chg
15							
16	Customer Charge						
17	Customer Charge	15,246	\$ 4.47	\$ 68,150	\$ 4.87	\$ 74,248	\$ 6,098 8.95%
18							
19	Energy Charge All kWh						
20	Distribution	3,379,300	\$ 0.02030	\$ 68,600	\$ 0.02161	\$ 73,027	\$ 4,427 6.45%
21	Transmission		0.02331	78,771	0.02331	78,771	- 0.00%
22	Stranded Cost Recovery Charge		0.00924	31,225	0.00924	31,225	- 0.00%
23	System Benefits Charge		0.00743	25,108	0.00743	25,108	- 0.00%
24	Energy Service Charge		0.07068	238,849	0.07068	238,849	- 0
25							
26	Distribution Impact Only		\$ 0.04047	\$ 136,750	\$ 0.04358	\$ 147,275	\$ 10,525 7.70%
27	Total Change		\$ 0.15113	\$ 510,703	\$ 0.15424	\$ 521,228	\$ 10,525 2.06%
28							
29	Rate G - General Service Controlled Water Heating						
30							
31	Customer Charge						
32	Customer Charge	-	\$ 7.88	\$ -	\$ 6.38	\$ -	\$ - -19.04%
33							
34	Energy Charge All kWh						
35	Distribution	-	\$ 0.00120	\$ -	\$ 0.01141	\$ -	\$ - 850.83%
36	Transmission		0.02331	-	0.02331	-	- 0.00%
37	Stranded Cost Recovery Charge		0.00532	-	0.00532	-	- 0.00%
38	System Benefits Charge		0.00743	-	0.00743	-	- 0.00%
39	Energy Service Charge		0.07068	-	0.07068	-	- 0.00%
40							
41	Distribution Impact Only		\$ -	\$ -	\$ -	\$ -	
42	Total Change		\$ -	\$ -	\$ -	\$ -	
43							

Attachment A

Comparison of Current vs Proposed
Permanent Rates

Rate G - Space Heating								
	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Current Revenues	(D) Proposed Rate	(E) = (A) x (D) Proposed Revenues	(F) = (E) - (C) Proposed vs. Current Difference	(G) = (F) / (C) % Chg	
Customer Charge								
Customer Charge	5,015	\$ 2.98	\$ 14,944	\$ 3.24	\$ 16,248	\$ 1,304	8.72%	
Energy Charge All kWh	5,451,861							
Distribution		\$ 0.03426	\$ 186,781	\$ 0.03908	\$ 213,059	\$ 26,278	14.07%	
Transmission		0.02807	153,034	0.02807	153,034	-	0.00%	
Stranded Cost Recovery Charge		0.01159	63,187	0.01159	63,187	-	0.00%	
System Benefits Charge		0.00743	40,507	0.00743	40,507	-	0.00%	
Energy Service Charge		0.07068	385,338	0.07068	385,338	-	0.00%	
Distribution Impact Only		\$ 0.03700	\$ 201,725	\$ 0.04206	\$ 229,307	\$ 27,582	13.67%	
Total		\$ 0.15477	\$ 843,791	\$ 0.15983	\$ 871,373	\$ 27,582	3.27%	
Rate G - Optional Time of Day								
Customer Charge								
Customer Charge 1 Phase	199	\$ 38.57	\$ 7,675	\$ 41.98	\$ 8,354	\$ 679	8.84%	
Customer Charge 3 Phase	261	55.12	14,364	60.00	15,636	1,272	8.85%	
Demand Charge	10,801							
Distribution		\$ 12.15	\$ 131,232	\$ 13.92	\$ 150,350	\$ 19,118	14.57%	
Transmission		5.12	55,301	5.12	55,301	-	0.00%	
Stranded Cost Recovery Charge		0.35	3,780	0.35	3,780	-	0.00%	
Energy Charge On Peak kWh	323,044							
Distribution		\$ 0.04901	\$ 15,832	\$ 0.05335	\$ 17,234	\$ 1,402	8.86%	
Transmission		-	-	-	-	-	-	
Stranded Cost Recovery Charge		0.00532	1,719	0.00532	1,719	-	0.00%	
System Benefits Charge		0.00743	2,400	0.00743	2,400	-	0.00%	
Energy Service Charge		0.07068	22,833	0.07068	22,833	-	0.00%	
Energy Charge Off Peak kWh	532,915							
Distribution		\$ 0.00768	\$ 4,093	\$ 0.00836	\$ 4,455	\$ 362	8.85%	
Transmission		-	-	-	-	-	-	
Stranded Cost Recovery Charge		0.00532	2,835	0.00532	2,835	-	0.00%	
System Benefits Charge		0.00743	3,960	0.00743	3,960	-	0.00%	
Energy Service Charge		0.07068	37,666	0.07068	37,666	-	0.00%	
Distribution Impact Only		\$ 0.20234	\$ 173,196	\$ 0.22902	\$ 196,029	\$ 22,833	13.18%	
Total Change		\$ 0.35480	\$ 303,690	\$ 0.38147	\$ 326,523	\$ 22,833	7.52%	

Attachment A

Comparison of Current vs Proposed Permanent Rates							
	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Current Revenues	(D) Proposed Rate	(E) = (A) x (D) Proposed Revenues	(F) = (E) - (C) Proposed vs. Current Difference	(G) = (F) / (C) % Chg
Rate G - Load Control Service, Radio Controlled							
Customer Charge							
Customer Charge	2,298	\$ 9.11	\$ 20,935	\$ 6.99	\$ 16,063	\$ (4,872)	-23.27%
Energy Charge All kWh	4,365,538						
Distribution		\$ 0.00120	\$ 5,239	\$ 0.01141	\$ 49,811	\$ 44,572	850.83%
Transmission		0.02331	101,761	0.02331	101,761	-	0.00%
Stranded Cost Recovery Charge		0.00532	23,225	0.00532	23,225	-	0.00%
System Benefits Charge		0.00743	32,436	0.00743	32,436	-	0.00%
Energy Service Charge		0.07068	308,556	0.07068	308,556	-	0.00%
Distribution Impact Only		\$ 0.00600	\$ 26,174	\$ 0.01509	\$ 65,874	\$ 39,700	151.68%
Total Change		\$ 0.11274	\$ 492,152	\$ 0.12183	\$ 531,852	\$ 39,700	8.07%
Rate G - Load Control Service, 8 Hour No Switch							
Customer Charge							
Customer Charge	72	\$ 7.88	\$ 567	\$ 6.38	\$ 459	\$ (108)	-19.04%
Energy Charge All kWh	68,521						
Distribution		\$ 0.00120	\$ 82	\$ 0.01141	\$ 782	\$ 700	850.83%
Transmission		0.02331	1,597	0.02331	1,597	-	0.00%
Stranded Cost Recovery Charge		0.00532	365	0.00532	365	-	0.00%
System Benefits Charge		0.00743	509	0.00743	509	-	0.00%
Energy Service Charge		0.07068	4,843	0.07068	4,843	-	0.00%
Distribution Impact Only		\$ 0.00947	\$ 649	\$ 0.01811	\$ 1,241	\$ 592	91.22%
Total Change		\$ 0.11621	\$ 7,963	\$ 0.12485	\$ 8,555	\$ 592	7.43%
Rate G - Load Control Service, 8 Hour Switch							
Customer Charge							
Customer Charge	0	\$ 9.11	\$ -	\$ 6.99	\$ -	\$ -	-23.27%
Energy Charge All kWh	0						
Distribution		\$ 0.00120	\$ -	\$ 0.01141	\$ -	\$ -	850.83%
Transmission		0.02331	-	0.02331	-	-	0.00%
Stranded Cost Recovery Charge		0.00532	-	0.00532	-	-	0.00%
System Benefits Charge		0.00743	-	0.00743	-	-	0.00%
Energy Service Charge		0.07068	-	0.07068	-	-	0.00%
Distribution Impact Only			\$ -		\$ -	\$ -	
Total Change			\$ -		\$ -	\$ -	
Rate G - Load Control Service, 10/11 Hour Switch							
Customer Charge							
Customer Charge	0	\$ 9.11	\$ -	\$ 6.99	\$ -	\$ -	-23.27%
Energy Charge All kWh	0						
Distribution		\$ 0.02448	\$ -	\$ 0.02161	\$ -	\$ -	-11.72%
Transmission		0.02331	-	0.02331	-	-	0.00%
Stranded Cost Recovery Charge		0.00532	-	0.00532	-	-	0.00%
System Benefits Charge		0.00743	-	0.00743	-	-	0.00%
Energy Service Charge		0.07068	-	0.07068	-	-	0.00%
Distribution Impact Only			\$ -		\$ -	\$ -	
Total Change			\$ -		\$ -	\$ -	
Rate G - Load Control Service, 10/11 Hour No Switch							
Customer Charge							
Customer Charge	24	\$ 7.88	\$ 189	\$ 6.38	\$ 153	\$ (36)	-19.04%
Energy Charge All kWh	75,820						
Distribution		\$ 0.02448	\$ 1,856	\$ 0.02161	\$ 1,638	\$ (218)	-11.72%
Transmission		0.02331	1,767	0.02331	1,767	-	0.00%
Stranded Cost Recovery Charge		0.00532	403	0.00532	403	-	0.00%
System Benefits Charge		0.00743	563	0.00743	563	-	0.00%
Energy Service Charge		0.07068	5,359	0.07068	5,359	-	0.00%
Distribution Impact Only		\$ 0.02697	\$ 2,045	\$ 0.02362	\$ 1,791	\$ (254)	-12.42%
Total Change		\$ 0.13370	\$ 10,137	\$ 0.13035	\$ 9,883	\$ (254)	-2.51%

Public Service Company of New Hampshire
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Permanent Rates

Rate GV	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Current Revenues	(D) Proposed Rate	(E) = (A) x (D) Proposed Revenues	(F) = (E) - (C) Proposed vs. Current Difference	(G) = (F) / (C) % Chg
Customer Charge	16,601	\$ 194.03	\$ 3,221,053	\$ 211.21	\$ 3,506,255	\$ 285,202	8.85%
Demand 1-100 kW	1,568,428	\$ 5.58	\$ 8,751,828	\$ 6.48	\$ 10,163,413	\$ 1,411,585	16.13%
Distribution		10.40	16,311,651	\$ 10.40	16,311,651	-	0.00%
Transmission		0.65	1,019,478	\$ 0.65	1,019,478	-	0.00%
Stranded Cost Recovery Charge						-	0.00%
Demand > 100 kW	2,667,694	\$ 5.34	\$ 14,245,486	\$ 6.22	\$ 16,593,057	\$ 2,347,571	16.48%
Distribution		10.40	27,744,018	\$ 10.40	27,744,018	-	0.00%
Transmission		0.65	1,734,001	\$ 0.65	1,734,001	-	0.00%
Stranded Cost Recovery Charge						-	0.00%
Minimum Charge	123	\$ 893.00	\$ 110,064	\$ 1,015.00	\$ 125,101	\$ 15,037	13.66%
Energy Charge 1 - 200,000 kWh	1,448,276,753	\$ 0.00606	\$ 8,776,557	\$ 0.00657	\$ 9,515,178	\$ 738,621	8.42%
Distribution		0.00643	9,312,420	0.00643	9,312,420	-	0.00%
Transmission		0.00743	10,760,696	0.00743	10,760,696	-	0.00%
Stranded Cost Recovery Charge		0.06025	87,258,674	0.06025	87,258,674	-	0.00%
System Benefits Charge						-	0.00%
Energy Service Charge						-	0.00%
Energy Charge >200,000 kWh	217,399,074	\$ 0.00509	\$ 1,106,561	\$ 0.00583	\$ 1,267,437	\$ 160,876	14.54%
Distribution		0.00643	1,397,876	0.00643	1,397,876	-	0.00%
Transmission		0.00743	1,615,275	0.00743	1,615,275	-	0.00%
Stranded Cost Recovery Charge		0.06025	13,098,294	0.06025	13,098,294	-	0.00%
System Benefits Charge						-	0.00%
Energy Service Charge						-	0.00%
Distribution Impact Only		\$ 0.02174	\$ 36,211,549	\$ 0.02472	\$ 41,170,441	\$ 4,958,892	13.69%
Total Change		\$ 0.12395	\$ 206,463,932	\$ 0.12693	\$ 211,422,824	\$ 4,958,892	2.40%
Rate GV - Backup Service < 115 KV							
Administrative Charge	108	\$ 341.84	\$ 36,919	\$ 372.10	\$ 40,187	\$ 3,268	8.85%
Translation Charge	39	\$ 57.34	\$ 2,236	62.42	\$ 2,434	\$ 198	8.86%
Demand Charge	35,399	\$ 4.48	\$ 158,588	\$ 5.12	\$ 181,243	\$ 22,655	14.29%
Distribution		1.59	56,284	1.59	56,284	-	0.00%
Transmission		0.32	11,328	0.32	11,328	-	0.00%
Stranded Cost Recovery Charge						-	0.00%
Energy Charge 1 - 200,000 kWh	2,778,333	\$ 0.00606	\$ 16,837	\$ 0.00657	\$ 18,254	\$ 1,417	8.42%
Distribution		0.00643	17,865	0.00643	17,865	-	0.00%
Transmission		0.00743	20,643	0.00743	20,643	-	0.00%
Stranded Cost Recovery Charge		0.06025	167,395	0.06025	167,395	-	0.00%
System Benefits Charge						-	0.00%
Energy Service Charge						-	0.00%
Energy Charge >200,000 kWh	0	\$ 0.00509	\$ -	\$ 0.00583	\$ -	\$ -	14.54%
Distribution		0.00643	-	0.00643	-	-	0.00%
Transmission		0.00743	-	0.00743	-	-	0.00%
Stranded Cost Recovery Charge		0.06025	-	0.06025	-	-	0.00%
System Benefits Charge						-	0.00%
Energy Service Charge						-	0.00%
Distribution Impact Only		\$ 0.07723	\$ 214,580	\$ 0.08715	\$ 242,118	\$ 27,538	12.83%
Total Change		\$ 0.17568	\$ 488,095	\$ 0.18559	\$ 515,633	\$ 27,538	5.64%
Rate GV - Backup Service > 115 KV							
Administrative Charge	-	\$ 341.84	\$ -	\$ 372.10	\$ -	\$ -	8.85%
Translation Charge	-	\$ 57.34	\$ -	62.42	\$ -	\$ -	8.86%
Demand Charge	-	1.59	-	1.59	-	-	0.00%
Transmission		0.32	-	0.32	-	-	0.00%
Stranded Cost Recovery Charge						-	0.00%
Energy Charge On Peak	-	0.00256	-	0.00256	-	-	0.00%
Transmission		0.00586	-	0.00586	-	-	0.00%
Stranded Cost Recovery Charge		0.12222	-	0.12222	-	-	0.00%
System Benefits Charge						-	0.00%
Energy Service Charge						-	0.00%
Energy Charge Off Peak	-	0.00171	-	0.00171	-	-	0.00%
Transmission		0.00586	-	0.00586	-	-	0.00%
Stranded Cost Recovery Charge		0.12222	-	0.12222	-	-	0.00%
System Benefits Charge						-	0.00%
Energy Service Charge						-	0.00%
Distribution Impact Only		\$ -	\$ -	\$ -	\$ -	\$ -	
Total Change		\$ -	\$ -	\$ -	\$ -	\$ -	

Comparison of Current vs Proposed
Permanent Rates

Rate LG	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Current Revenues	(D) Proposed Rate	(E) = (A) x (D) Proposed Revenues	(F) = (E) - (C) Proposed vs. Current Difference	(G) = (F) / (C) % Chg
Customer Charge	1,272	\$ 606.47	\$ 771,430	\$ 660.15	\$ 839,711	\$ 68,281	8.85%
Demand	2,661,538						
Distribution		\$ 4.75	\$ 12,642,306	\$ 5.51	\$ 14,665,074	\$ 2,022,768	16.00%
Transmission		10.24	27,254,149	10.24	27,254,149	-	0.00%
Stranded Cost Recovery Charge		0.49	1,304,154	0.49	1,304,154	-	0.00%
Minimum Charge	0	\$ 947.00	\$ -	\$ 1,076.00	\$ -	\$ -	13.62%
Discount for above 115kV	0	\$ (0.43)	\$ -	\$ (0.49)	\$ -	\$ -	13.95%
Energy Charge On Peak	510,025,661						
Distribution		\$ 0.00508	\$ 2,590,930	\$ 0.00554	\$ 2,825,542	\$ 234,612	9.06%
Transmission		-	-	-	-	-	0.00%
Stranded Cost Recovery Charge		0.00519	2,647,033	0.00519	2,647,033	-	0.00%
System Benefits Charge		0.00743	3,789,491	0.00743	3,789,491	-	0.00%
Energy Service Charge		0.06025	30,729,046	0.06025	30,729,046	-	0.00%
Energy Charge Off Peak	662,413,106						
Distribution		\$ 0.00429	\$ 2,841,752	\$ 0.00468	\$ 3,100,093	\$ 258,341	9.09%
Transmission		-	-	-	-	-	0.00%
Stranded Cost Recovery Charge		0.00378	2,503,922	0.00378	2,503,922	-	0.00%
System Benefits Charge		0.00743	4,921,729	0.00743	4,921,729	-	0.00%
Energy Service Charge		0.06025	39,910,390	0.06025	39,910,390	-	0.00%
Distribution Impact Only		\$ 0.01607	\$ 18,846,418	\$ 0.01828	\$ 21,430,420	\$ 2,584,002	13.71%
Total Charge		\$ 0.11251	\$131,906,332	\$ 0.11471	\$134,490,334	\$ 2,584,002	1.96%
Rate LG - Backup Service < 115 KV							
Administrative Charge	109	\$ 341.84	\$ 37,329	\$ 372.10	\$ 40,633	\$ 3,304	8.85%
Translation Charge	26	\$ 57.34	\$ 1,491	62.42	\$ 1,623	\$ 132	8.86%
Demand Charge	260,477						
Distribution		\$ 4.48	\$ 1,166,937	\$ 5.12	\$ 1,333,642	\$ 166,705	14.29%
Transmission		1.59	414,158	1.59	414,158	-	0.00%
Stranded Cost Recovery Charge		0.24	62,514	0.24	62,514	-	0.00%
Energy Charge On Peak	6,651,595						
Distribution		\$ 0.00508	\$ 33,790	\$ 0.00554	\$ 36,850	\$ 3,060	9.06%
Transmission		-	-	-	-	-	0.00%
Stranded Cost Recovery Charge		0.00519	34,522	0.00519	34,522	-	0.00%
System Benefits Charge		0.00743	49,421	0.00743	49,421	-	0.00%
Energy Service Charge		0.06025	400,759	0.06025	400,759	-	0.00%
Energy Charge Off Peak	8,704,697						
Distribution		\$ 0.00429	\$ 37,343	\$ 0.00468	\$ 40,738	\$ 3,395	9.09%
Transmission		-	-	-	-	-	0.00%
Stranded Cost Recovery Charge		0.00378	32,904	0.00378	32,904	-	0.00%
System Benefits Charge		0.00743	64,676	0.00743	64,676	-	0.00%
Energy Service Charge		0.06025	524,458	0.06025	524,458	-	0.00%
Distribution Impact Only		\$ 0.08315	\$ 1,276,890	\$ 0.09465	\$ 1,453,486	\$ 176,596	13.83%
Total Charge		\$ 0.18626	\$ 2,860,302	\$ 0.19776	\$ 3,036,898	\$ 176,596	6.17%
Rate LG - Backup Service > 115 KV							
Administrative Charge	80	\$ 341.84	\$ 27,482	\$ 372.10	\$ 29,915	\$ 2,433	8.85%
Translation Charge	-	\$ 57.34	\$ -	62.42	\$ -	\$ -	8.86%
Demand Charge	913,528						
Transmission		1.59	\$ 1,452,510	1.59	\$ 1,452,510	-	0.00%
Stranded Cost Recovery Charge		0.24	219,247	0.24	219,247	-	0.00%
Energy Charge On Peak	21,134,611						
Transmission		-	\$ -	-	\$ -	-	0.00%
Stranded Cost Recovery Charge		0.00519	109,689	0.00519	109,689	-	0.00%
System Benefits Charge		0.00743	157,030	0.00743	157,030	-	0.00%
Energy Service Charge		0.06025	1,273,360	0.06025	1,273,360	-	0.00%
Energy Charge Off Peak	43,853,801						
Transmission		-	\$ -	-	\$ -	-	0.00%
Stranded Cost Recovery Charge		0.00378	165,767	0.00378	165,767	-	0.00%
System Benefits Charge		0.00743	325,834	0.00743	325,834	-	0.00%
Energy Service Charge		0.06025	2,642,192	0.06025	2,642,192	-	0.00%
Distribution Impact Only		\$ 0.00042	\$ 27,482	\$ 0.00046	\$ 29,915	\$ 2,433	8.85%
Total Charge		\$ 0.09807	\$ 6,373,111	\$ 0.09810	\$ 6,375,544	\$ 2,433	0.04%

Attachment A

1								Public Service Company of New Hampshire
2								d/b/a Eversource Energy
3								Docket No. DE 19-057
4								Appendix 10 (Settlement)
5								October 9, 2020
6								Page 21 of 50
7								
8								
9								
10								
11	Rate OL - Outdoor Lighting							
12		(A)	(B)	(C) = (A) x (B)	(D)	(E) = (A) x (D)	(F) = (E) - (C)	(G) = (F) / (C)
13		Billing	Current	Current	Proposed	Proposed	Proposed vs. Current	
14		Determinants	Rate	Revenues	Rate	Revenues	Difference	% Chg
15								
16	Energy Charge All kWh	17,130,466						
17	Transmission		\$ 0.02058	\$ 352,545	\$ 0.02058	\$ 352,545	\$ -	0.00%
18	Stranded Cost Recovery Charge		0.00954	163,425	0.00954	163,425	-	0.00%
19	System Benefits Charge		0.00743	127,279	0.00743	127,279	-	0.00%
20	Energy Service Charge		0.07068	1,210,781	0.07068	1,210,781	-	0.00%
21	Total		\$ 0.10823	\$ 1,854,030	\$ 0.10823	\$ 1,854,030	\$ -	0.00%
22								
23	Distribution Charge (per fixture)							
24	4000 LUMEN HP SODIUM	42,792	\$ 15.83	\$ 677,397	\$ 14.77	\$ 632,137	\$ (45,260)	-6.68%
25	5800 LUMEN HP SODIUM	7,260	15.83	114,926	14.77	107,247	(7,679)	-6.68%
26	9500 LUMEN HP SODIUM	10,692	21.05	225,067	19.64	210,029	(15,038)	-6.68%
27	16000 LUMEN HP SODIUM	9,936	29.77	295,795	27.78	276,031	(19,764)	-6.68%
28	30000 LUMEN HP SODIUM	15,480	30.51	472,295	28.47	440,738	(31,557)	-6.68%
29	50000 LUMEN HP SODIUM	22,860	30.85	705,231	28.79	658,111	(47,120)	-6.68%
30	130000 LUMEN HP SODIUM	3,684	49.51	182,385	46.20	170,208	(12,187)	-6.68%
31	5000 LUMEN METAL HALIDE	2,700	16.51	44,577	15.41	41,599	(2,978)	-6.68%
32	8000 LUMEN METAL HALIDE	1,608	22.60	36,341	21.09	33,913	(2,428)	-6.68%
33	13000 LUMEN METAL HALIDE	-	31.01	-	28.94	-	-	-6.68%
34	13500 LUMEN METAL HALIDE	1,464	31.67	46,365	29.55	43,267	(3,098)	-6.68%
35	20000 LUMEN METAL HALIDE	3,696	31.67	117,052	29.55	109,231	(7,821)	-6.68%
36	36000 LUMEN METAL HALIDE	5,136	31.96	164,147	29.82	153,179	(10,968)	-6.68%
37	100000 LUMEN METAL HALIDE	3,216	47.91	154,079	44.71	143,784	(10,295)	-6.68%
38	600 LUMEN INCANDESCENT	1,068	9.12	9,740	8.51	9,089	(651)	-6.68%
39	1000 LUMEN INCANDESCENT	2,844	10.18	28,952	9.50	27,017	(1,935)	-6.68%
40	2500 LUMEN INCANDESCENT	48	13.06	627	12.19	585	(42)	-6.70%
41	6000 LUMEN INCANDESCENT	-	22.44	-	20.94	-	-	-6.68%
42	3500 LUMEN MERCURY	59,064	13.96	824,533	13.03	769,442	(55,091)	-6.68%
43	7000 LUMEN MERCURY	11,472	16.80	192,730	15.68	179,852	(12,878)	-6.68%
44	11000 LUMEN MERCURY	684	20.77	14,207	19.38	13,257	(950)	-6.69%
45	15000 LUMEN MERCURY	36	23.76	855	22.17	798	(57)	-6.67%
46	20000 LUMEN MERCURY	5,088	25.65	130,507	23.94	121,787	(8,720)	-6.68%
47	56000 LUMEN MERCURY	1,632	40.77	66,537	38.05	62,091	(4,446)	-6.68%
48	20000 LUMEN FLUORESCENT	24	34.79	835	32.47	779	(56)	-6.71%
49	12000 LUMEN HP SODIUM	96	21.77	2,090	20.32	1,950	(140)	-6.70%
50	34200 LUMEN HP SODIUM	60	27.87	1,672	26.01	1,560	(112)	-6.70%
51	Average Number of Fixtures/Month	17,720						
52								
53	Distribution Impact Only		\$ 0.26321	\$ 4,508,952	\$ 0.24563	\$ 4,207,681	\$ (301,271)	-6.68%
54	Total Charge		\$ 0.37144	\$ 6,362,982	\$ 0.35386	\$ 6,061,711	\$ (301,271)	-4.73%
55								
56								
57	Rate EOL - Efficient Outdoor Lighting							
58								
59	Energy Charge All kWh	11,370,898						
60	Transmission		\$ 0.02058	\$ 234,013	\$ 0.02058	\$ 234,013	\$ -	0.00%
61	Stranded Cost Recovery Charge		0.00954	108,478	0.00954	108,478	-	0.00%
62	System Benefits Charge		0.00743	84,486	0.00743	84,486	-	0.00%
63	Energy Service Charge		0.07068	803,695	0.07068	803,695	-	0.00%
64	Total			\$ 1,230,672		\$ 1,230,672	\$ -	0.00%
65								
66	Distribution Charge (per fixture)							
67	4000 LUMEN HP SODIUM	45,216	\$ 8.42	\$ 380,719	\$ 6.12	\$ 276,779	\$ (103,940)	-27.30%
68	5800 LUMEN HP SODIUM	2,616	8.42	22,027	6.43	16,816	(5,211)	-23.66%
69	9500 LUMEN HP SODIUM	4,272	10.36	44,258	6.85	29,268	(14,990)	-33.87%
70	16000 LUMEN HP SODIUM	6,648	11.39	75,721	7.51	49,905	(25,816)	-34.09%
71	30000 LUMEN HP SODIUM	20,784	11.39	236,730	8.73	181,523	(55,207)	-23.32%
72	50000 LUMEN HP SODIUM	1,584	11.76	18,628	10.44	16,532	(2,096)	-11.25%
73	130000 LUMEN HP SODIUM	684	22.32	15,267	17.11	11,704	(3,563)	-23.34%
74	5000 LUMEN METAL HALIDE	9,984	8.75	87,360	6.45	64,388	(22,972)	-26.30%
75	8000 LUMEN METAL HALIDE	1,152	11.57	13,329	6.79	7,819	(5,510)	-41.34%
76	13000 LUMEN METAL HALIDE	-	12.35	-	7.52	-	-	-39.13%
77	13500 LUMEN METAL HALIDE	1,056	13.00	13,728	7.69	8,117	(5,611)	-40.87%
78	20000 LUMEN METAL HALIDE	840	13.22	11,105	8.55	7,185	(3,920)	-35.30%
79	36000 LUMEN METAL HALIDE	528	13.59	7,176	10.27	5,421	(1,755)	-24.46%
80	100000 LUMEN METAL HALIDE	1,236	24.21	29,924	16.93	20,927	(8,997)	-30.07%
81	LEDs	388,872	3.37	1,310,499	3.01	1,171,676	(138,823)	-10.59%
82	Average Number of Fixtures/Month	40,456						
83								
84	Distribution Charge (per Watt)							
85	LEDs	15,894,084	\$ 0.05130	\$ 815,367	\$ 0.01058	\$ 168,111	\$ (647,256)	-79.38%
86								
87	Distribution Impact Only		\$ 0.27103	\$ 3,081,838	\$ 0.17907	\$ 2,036,171	\$ (1,045,667)	-33.93%
88	Total Charge		\$ 0.37926	\$ 4,312,510	\$ 0.28730	\$ 3,266,843	\$ (1,045,667)	-24.25%

Attachment A

STREET LIGHTING DISTRIBUTION RATE DESIGN

Distribution Breakout by Component

	Rate EOL		Rate OL	
Total Fixtures	A	40,456	E	17,720
	Aa - Non-LED	8,050	Ea - Non-LED	17,720
	Ab - LED	32,406	Eb - LED	-
Connected Demand KW	B	2,619	F	3,947
Annual kWh	C	11,370,898	G	17,130,466
Proposed Distribution Revenue	D	\$ 2,036,170	H	\$ 4,207,682
Distribution by Category				
1) D - System Demand				
Revenue \$	I	\$ 332,442	K = J* F* 12* 1000	\$501,029
Charge Per Watt	J = I / B / 1000 / 12	0.01058	L = K / F	0.01058
2) D - System Customer				
Revenue \$	M = D - Q - I	\$1,328,161	O = N* E* 12* 1000	\$581,743
Charge Per Fixture	N = M / A	\$2.74	P = O / E	\$2.74
3) D - Operations & Maintenance				
Revenue \$	Q = R*Aa*12 + S*Ab*12	\$375,567	T = U*Ea*12 + V*Eb*12	\$589,433
Charge Per Fixture Non-LED	R	\$2.77	U = R	\$2.77
LED = 10% of Non-LED	S	\$0.28	V = S	\$0.28
4) D - Equipment				
Revenue \$			W = H- K- O- T	\$ 2,535,477
Total D		\$2,036,170		\$4,207,682

Note: A, B, C, D - See Appendix 10, page 25.
E, F, G, H - See Appendix 10, page 26.
I - See Application Attachment AN-1, page 3, lines 41 and 42.
R - See Appendix 10, page 23, line 28.
S - See Appendix 10, page 23, line 30.

Attachment A

Public Service Company of New Hampshire
d/b/a Eversource Energy
Docket No. DE 19-057
Exhibit 58
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Public Service Company of New Hampshire
d/b/a Eversource Energy
Docket No. DE 19-057
Appendix 10 (Settlement)
October 9, 2020
Page 23 of 50

Street Lighting Operations & Maintenance

Charge Per Fixture

Source

Test Year Street Lighting O & M	\$965,000	A = Appendix 10, page 24, line 26
<u>Non-LED Fixtures</u>		
Rate EOL	8,050	B = Appendix 10, page 25, lines 38 & 41
Rate OL	<u>17,720</u>	C = Appendix 10, page 26, line 66
Total Non-LED	25,770	D = B + C
<u>LED Fixtures</u>		
Rate EOL	32,406	E = Appendix 10, page 25, line 38
Rate OL	<u>-</u>	F = Appendix 10, page 26, lines 36-41
Total LED	32,406	G = E + F
Average Cost Per Fixture	\$2.77	H = A / (D+G*10%) / 12
Non-LED Monthly Charge Per Fixture	\$2.77	I = H
LED Monthly Charge Per Fixture	\$0.28	J = H * 10%

Street Lighting Operations & Maintenance Expense

Distribution Expense *			
	<u>Operation</u>	<u>Maintenance</u>	<u>Total</u>
Supervision and Engineering	444	2	446
Street Lighting	519	52	571
Other	<u>67</u>	<u>277</u>	<u>345</u>
Total Distribution Expense	1,031	331	1,362

Street Lighting Expense			
	<u>Operation</u>	<u>Maintenance</u>	<u>Total</u>
Derived Supervision and Engineering	393	0	393
Street Lighting	<u>519</u>	<u>52</u>	<u>571</u>
Total Distribution Expense	912	53	965

Note * See Application Attachment AN-1, page 10

Street Lighting EOL-Efficient Outdoor Lighting

Unbundled Rate Calculation

High Pressure Sodium

Light Emissive Diodes (LED)	TV Fixtures			Connected Demand			kWh per Fixture			Annual kWh			Current Distribution			Distribution Increase			Distribution Bundled			Proposed Distribution Unbundled (A)			% Chg
	All		Mid-Night	kW		Mid-Night	All		Mid-Night	Total		Rate	Revenue	Per M	Step+Recoup	Rate	Revenue	% Chg	Customer	0.01058	\$2.77	Monthly	Annual		
	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night	Night	Mid-Night			
16	58	4,000	3,753	15	3,768	219	252	117	945,756	1,755	947,511	\$8.42	\$ 380,719	-\$2.86	\$0.01	\$5.56	\$ 251,541	-33.9%	27.4	\$ 0.61	\$2.77	\$6.12	\$ 276,779	-27%	
17	87	5,800	218	19	376	81,968	376	81,968	195,800	1,755	947,511	8.42	22,027	-\$2.86	\$0.01	5.56	14,553	-33.9%	27.4	0.92	2.77	\$6.43	\$ 16,816	-24%	
18	127	9,500	356	45	550	195,800	550	195,800	195,800	1,755	947,511	10.36	44,258	-\$3.53	\$0.01	6.84	29,241	-33.9%	27.4	1.34	2.77	\$6.85	\$ 29,288	-34%	
19	189	16,000	554	105	821	454,834	821	454,834	454,834	614	2,295,920	11.39	75,721	-\$3.88	\$0.01	7.53	50,029	-33.9%	27.4	2.00	2.77	\$7.51	\$ 49,905	-34%	
20	305	30,000	1,731	1	1,732	528	1,326	614	2,295,306	614	2,295,920	11.39	75,721	-\$3.88	\$0.01	7.53	50,029	-33.9%	27.4	3.23	2.77	\$8.73	\$ 181,523	-23%	
21	466	50,000	132	62	2026	132	2026	4765	267,432	4765	483,276	11.76	18,628	-\$4.00	\$0.01	7.77	12,307	-33.9%	27.4	4.93	2.77	\$10.44	\$ 16,532	-11%	
22	1097	130,000	57	63	4765	57	4765	4765	271,605	4765	483,276	22.32	15,267	-\$7.59	\$0.02	14.75	10,087	-33.9%	27.4	11.60	2.77	\$17.11	\$ 11,704	-23%	
Metal Halide	89	5,000	832	39	832	74	386	321,152	321,152	386	832	\$8.75	\$ 87,360	-\$2.98	\$0.01	5.78	\$ 57,719	-33.9%	27.4	0.94	2.77	\$6.45	\$ 64,388	-26%	
	121	8,000	96	12	96	12	527	50,592	50,592	527	96	11.57	13,329	-\$3.94	\$0.01	7.64	8,806	-33.9%	27.4	1.28	2.77	\$6.79	\$ 7,819	-41%	
	190	13,000	88	-	88	-	825	78,848	78,848	825	88	12.35	13,329	-\$4.20	\$0.01	8.16	9,070	-33.9%	27.4	2.01	2.77	\$7.52	\$ 8,117	-39%	
	206	13,500	88	18	88	18	896	78,848	78,848	896	88	13.00	13,728	-\$4.42	\$0.01	8.59	9,070	-33.9%	27.4	2.18	2.77	\$7.69	\$ 8,117	-41%	
	288	20,000	70	20	70	20	1251	87,570	87,570	1251	70	13.22	11,105	-\$4.50	\$0.01	8.73	7,337	-33.9%	27.4	3.05	2.77	\$9.55	\$ 7,185	-35%	
	450	36,000	44	20	44	20	1956	86,064	86,064	1956	44	13.59	7,176	-\$4.62	\$0.01	8.98	4,741	-33.9%	27.4	4.76	2.77	\$10.27	\$ 5,421	-24%	
	1080	100,000	103	111	103	111	4892	483,276	483,276	4892	103	24.21	29,924	-\$8.24	\$0.02	16.00	19,771	-33.9%	27.4	11.42	2.77	\$16.93	\$ 20,927	-30%	
	Light Emitting Diodes (LED)	Various		32,367	39	32,406							\$3.37	\$ 1,310,499	-\$1.15	\$0.00	2.23	\$ 865,847	-33.9%	27.4	0.28		\$3.01	\$ 1,171,676	-11%
		Demand	1,321,662	2,845	4345	2005	1,325			5,742,621	5,704	5,748,326	\$0.0513	\$1,367	-\$0.01746	\$0.00005								\$ 168,111	-79%
		Total EOL	40,401	55	40,456	2,619	40,461	55	40,466	11,362,824	8,073	11,370,898		\$1,367				\$58,747	-33.9%				\$2,036,170	-34%	

Light Emitting Diodes (LED)

37																												
38																												
39																												
40																												
41																												
42																												
43																												
44																												
45																												
46																												

Note: A - Distribution Component Source:
Customer - See Appendix 10, page 22, line 39
Demand - See Appendix 10, page 22, line 34
O&M - See Appendix 10, page 22, line 44 & 45

Street Lighting Rate OL - Outdoor Lighting
Unbundled Rate Calculation

	TV Average Fixtures				Annual kWh per Fixture				Connected Demand	Current Dist Only				Distribution Increase		Distribution Bundled				Proposed Distribution Unbundled (A)															
	All		Mid		All		Mid			Monthly		Annual		Firm		Rate		Revenue		Cust		Demand		Equip		Monthly		Annual							
	Night	Day	Night	Day	Night	Day	Night	Day		Rate	Revenue	Revenue	Revenue	Step	Recovery	Rate	Revenue	% Chg	% Chg	Rate	Revenue	% Chg	% Chg	Rate	Revenue	% Chg	% Chg	Rate	Revenue	% Chg	% Chg				
13	High Pressure Sodium																																		
14	Connected																																		
15	58	4,000	3,566	-	3,566	-	3,566	-	207	\$15.83	\$ 677,397	\$ 677,397	\$ 677,397	\$1.08	0.1%	\$14.77	\$ 632,137	-6.7%	-6.7%	\$2.74	\$0.01058	\$2.77	\$6.65	\$14.77	\$ 632,137	-6.7%	-6.7%	\$2.74	\$0.01058	\$2.77	\$6.65	\$14.77	\$ 632,137	-6.7%	-6.7%
16	17	5,800	605	-	605	-	605	-	53	15.83	114,928	114,928	114,928	-1.08	0.02	14.77	107,247	-6.7%	-6.7%	274	0.92	2.77	8.34	14.77	107,247	-6.7%	-6.7%	274	0.92	2.77	8.34	14.77	107,247	-6.7%	-6.7%
17	18	9,500	889	2	889	2	889	2	113	21.05	225,067	225,067	225,067	-1.44	0.03	19.64	210,029	-6.7%	-6.7%	274	1.34	2.77	12.79	19.64	210,029	-6.7%	-6.7%	274	1.34	2.77	12.79	19.64	210,029	-6.7%	-6.7%
18	19	16,000	825	3	825	3	825	3	156	29.77	295,795	295,795	295,795	-2.03	0.04	27.78	276,031	-6.7%	-6.7%	274	2.00	2.77	20.27	27.78	276,031	-6.7%	-6.7%	274	2.00	2.77	20.27	27.78	276,031	-6.7%	-6.7%
19	20	305	30,000	1,289	1	1,289	1	1,289	393	30.51	472,295	472,295	472,295	-2.08	0.04	28.47	440,738	-6.7%	-6.7%	274	3.23	2.77	19.74	28.47	440,738	-6.7%	-6.7%	274	3.23	2.77	19.74	28.47	440,738	-6.7%	-6.7%
20	305	30,000	1,289	1	1,289	1	1,289	1	393	30.51	472,295	472,295	472,295	-2.08	0.04	28.47	440,738	-6.7%	-6.7%	274	3.23	2.77	19.74	28.47	440,738	-6.7%	-6.7%	274	3.23	2.77	19.74	28.47	440,738	-6.7%	-6.7%
21	466	50,000	1,902	3	1,902	3	1,902	3	888	30.85	705,231	705,231	705,231	-2.10	0.04	28.79	658,111	-6.7%	-6.7%	274	4.93	2.77	18.35	28.79	658,111	-6.7%	-6.7%	274	4.93	2.77	18.35	28.79	658,111	-6.7%	-6.7%
22	1,087	130,000	306	1	306	1	306	1	337	49.51	182,395	182,395	182,395	-3.38	0.07	46.20	170,208	-6.7%	-6.7%	274	11.60	2.77	29.09	46.20	170,208	-6.7%	-6.7%	274	11.60	2.77	29.09	46.20	170,208	-6.7%	-6.7%
23																																			
24	Metal Halide																																		
25	69	5,000	225	-	225	-	225	-	20	\$16.51	44,577	44,577	44,577	\$1.13	0.02	\$15.41	41,589	-6.7%	-6.7%	274	\$0.04	\$2.77	\$8.96	\$15.41	41,589	-6.7%	-6.7%	274	\$0.04	\$2.77	\$8.96	\$15.41	41,589	-6.7%	-6.7%
26	121	10,000	133	1	133	1	133	1	16	22.60	36,341	36,341	36,341	-1.54	0.03	21.09	33,913	-6.7%	-6.7%	274	1.28	2.77	14.30	21.09	33,913	-6.7%	-6.7%	274	1.28	2.77	14.30	21.09	33,913	-6.7%	-6.7%
27	121	13,000	119	3	119	3	119	3	25	31.07	46,365	46,365	46,365	-2.11	0.04	28.94	43,267	-6.7%	-6.7%	274	2.01	2.77	21.42	28.94	43,267	-6.7%	-6.7%	274	2.01	2.77	21.42	28.94	43,267	-6.7%	-6.7%
28	209	13,000	119	3	119	3	119	3	25	31.07	46,365	46,365	46,365	-2.16	0.04	28.94	43,267	-6.7%	-6.7%	274	2.01	2.77	21.42	28.94	43,267	-6.7%	-6.7%	274	2.01	2.77	21.42	28.94	43,267	-6.7%	-6.7%
29	209	20,000	305	3	305	3	305	3	89	31.67	117,052	117,052	117,052	-2.16	0.04	29.55	109,231	-6.7%	-6.7%	274	3.05	2.77	21.00	29.55	109,231	-6.7%	-6.7%	274	3.05	2.77	21.00	29.55	109,231	-6.7%	-6.7%
30	288	20,000	305	3	305	3	305	3	89	31.67	117,052	117,052	117,052	-2.16	0.04	29.55	109,231	-6.7%	-6.7%	274	3.05	2.77	21.00	29.55	109,231	-6.7%	-6.7%	274	3.05	2.77	21.00	29.55	109,231	-6.7%	-6.7%
31	450	36,000	422	6	422	6	422	6	183	31.96	164,147	164,147	164,147	-2.18	0.04	29.82	153,179	-6.7%	-6.7%	274	4.76	2.77	19.56	29.82	153,179	-6.7%	-6.7%	274	4.76	2.77	19.56	29.82	153,179	-6.7%	-6.7%
32	1,080	100,000	266	2	266	2	266	2	289	47.91	154,079	154,079	154,079	-3.27	0.06	44.71	143,784	-6.7%	-6.7%	274	11.42	2.77	27.78	44.71	143,784	-6.7%	-6.7%	274	11.42	2.77	27.78	44.71	143,784	-6.7%	-6.7%
33																																			
34																																			
35	Light-Emitting Diode (LED)																																		
36	28	2,500																																	
37	36	4,100																																	
38	36	4,100																																	
39	51	4,800																																	
40	92	8,500																																	
41	142	13,300																																	
42	220	24,500																																	
43																																			
44																																			
45	105	600	89	89	89	89	89	89	9	\$9.12	9,740	9,740	9,740	\$0.62	0.01	\$8.51	9,089	-6.7%	-6.7%	274	\$1.11	\$2.77	\$1.89	\$8.51	9,089	-6.7%	-6.7%	274	\$1.11	\$2.77	\$1.89	\$8.51	9,089	-6.7%	-6.7%
46	105	1,000	237	237	237	237	237	237	25	10.18	28,952	28,952	28,952	-0.69	0.01	9.50	27,017	-6.7%	-6.7%	274	1.11	2.77	2.88	9.50	27,017	-6.7%	-6.7%	274	1.11	2.77	2.88	9.50	27,017	-6.7%	-6.7%
47	205	2,500	4	4	4	4	4	4	1	13.06	627	627	627	-0.89	0.02	12.19	585	-6.7%	-6.7%	274	2.17	2.77	4.51	12.19	585	-6.7%	-6.7%	274	2.17	2.77	4.51	12.19	585	-6.7%	-6.7%
48	448	6,000								22.44				-1.53	0.03	20.94				274	4.74	2.77	10.69	20.94											
49																																			
50																																			
51	Mercury																																		
52	117	3,500	4,922	4,922	4,922	4,922	4,922	4,922	576	\$13.96	\$ 824,533	\$ 824,533	\$ 824,533	\$0.95	0.02	\$13.03	\$ 769,442	-6.7%	-6.7%	274	\$1.24	\$2.77	\$6.28	\$13.03	\$ 769,442	-6.7%	-6.7%	274	\$1.24	\$2.77	\$6.28	\$13.03	\$ 769,442	-6.7%	-6.7%
53	205	7,000	956	956	956	956	956	956	196	16.80	192,730	192,730	192,730	-1.15	0.02	15.68	179,852	-6.7%	-6.7%	274	2.17	2.77	8.00	15.68	179,852	-6.7%	-6.7%	274	2.17	2.77	8.00	15.68	179,852	-6.7%	-6.7%
54	292	11,000	57	57	57	57	57	57	17	20.77	14,207	14,207	14,207	-1.42	0.03	19.38	13,257	-6.7%	-6.7%	274	3.09	2.77	10.79	19.38	13,257	-6.7%	-6.7%	274	3.09	2.77	10.79	19.38	13,257	-6.7%	-6.7%
55	453	15,000	3	3	3	3	3	3	1	23.76	855	855	855	-1.62	0.03	22.17	798	-6.7%	-6.7%	274	4.79	2.77	11.87	22.17	798	-6.7%	-6.7%	274	4.79	2.77	11.87	22.17	798	-6.7%	-6.7%
56	453	20,000	424	424	424	424	424	424	192	25.65	130,507	130,507	130,507	-1.75	0.03	23.94	121,787	-6.7%	-6.7%	274	4.79	2.77	13.64	23.94	121,787	-6.7%	-6.7%	274	4.79	2.77	13.64	23.94	121,787	-6.7%	-6.7%
57	1,082	56,000	136	136	136	136	136	136	147	40.77	66,537	66,537	66,537	-2.78	0.06	38.05	62,091	-6.7%	-6.7%	274	11.44	2.77	21.09	38.05	62,091	-6.7%	-6.7%	274	11.44	2.77	21.09	38.05	62,091	-6.7%	-6.7%
58																																			
59	330	20,000	2	2	2	2	2	2	1	\$34.79	\$ 835	\$ 835	\$ 835	-2.37	0.05	\$32.47	\$ 779	-6.7%	-6.7%	274	\$3.49	\$2.77	\$23.47	\$32.47	\$ 779	-6.7%	-6.7%	274	\$3.49	\$2.77	\$23.47	\$32.47	\$ 779	-6.7%	-6.7%
60																																			
61	HPS in Mercury Luminaire																																		
62	180	12,000	8	8	8	8	8	8	1	\$21.77	\$ 2,090	\$ 2,090	\$ 2,090	-1.48	0.03	\$20.32	\$ 1,950	-6.7%	-6.7%	274	\$1.90	\$2.77	\$12.90	\$20.32	\$ 1,950	-6.7%	-6.7%	274	\$1.90	\$2.77	\$12.90	\$20.32	\$ 1,950	-6.7%	-6.7%
63	413	34,200	5	5	5	5	5	5	2	27.87	1,672	1,672	1,672	-1.90	0.04	26.01	1,560	-6.7%	-6.7%	274	4.37	2.77	16.13	26.01	1,560	-6.7%	-6.7%	274	4.37	2.77	16.13	26.01	1,560	-6.7%	-6.7%
64																																			
65																																			
66	Total OL																																		
67	17,695	25	17,720						3,947	\$ 17,110,234	20,232	\$ 17,130,466				\$ 4,207,682	-6.7%	-6.7%						\$ 4,207,682	-6.7%	-6.7%						\$ 4,207,682	-6.7%	-6.7%	

Attachment A

Calculation of Current Installed Cost of LED Street Lighting Equipment

LED Equipment Calculation						
	28 Watts	36 Watts	51 Watts	92 Watts	142 Watts	220 Watts
LABOR COST						
Hours						
Work Tasks	1.41	1.41	1.41	1.41	1.41	1.41
Setup/Span	0.53	0.53	0.53	0.53	0.53	0.53
Travel	0.36	0.36	0.36	0.36	0.36	0.36
Total	2.30	2.30	2.30	2.30	2.30	2.30
Labor Cost (Unloaded)	\$ 105.30	\$ 105.30	\$ 105.30	\$ 105.30	\$ 105.30	\$ 105.30
Labor Loaders						
Non-Productive	\$ 16.03	\$ 16.03	\$ 16.03	\$ 16.03	\$ 16.03	\$ 16.03
Labor	\$ 46.14	\$ 46.14	\$ 46.14	\$ 46.14	\$ 46.14	\$ 46.14
Direct Engineering	\$ 13.44	\$ 13.44	\$ 13.44	\$ 13.44	\$ 13.44	\$ 13.44
Total	\$ 75.61	\$ 75.61	\$ 75.61	\$ 75.61	\$ 75.61	\$ 75.61
Total Labor Cost	\$ 180.91	\$ 180.91	\$ 180.91	\$ 180.91	\$ 180.91	\$ 180.91
EQUIPMENT COST						
Hours	1.15	1.15	1.15	1.15	1.15	1.15
Rate	\$ 32.40	\$ 32.40	\$ 32.40	\$ 32.40	\$ 32.40	\$ 32.40
Total Equipment Cost	\$ 37.31	\$ 37.31	\$ 37.31	\$ 37.31	\$ 37.31	\$ 37.31
MATERIAL COST						
(From Materials Tab)	\$ 288.86	\$ 279.65	\$ 279.65	\$ 328.99	\$ 383.69	\$ 579.55
Material Loader	13.25%	13.25%	13.25%	13.25%	13.25%	13.25%
Total Material Cost	\$ 327.13	\$ 316.70	\$ 316.70	\$ 372.58	\$ 434.53	\$ 656.33
OTHER LOADERS						
Eng. & Sup.	\$ 77.19	\$ 77.19	\$ 77.19	\$ 77.19	\$ 77.19	\$ 77.19
Small Tool	\$ 5.43	\$ 5.43	\$ 5.43	\$ 5.43	\$ 5.43	\$ 5.43
AS&E	\$ 2.73	\$ 2.67	\$ 2.67	\$ 2.95	\$ 3.26	\$ 4.37
Total Other Cost	\$ 85.34	\$ 85.29	\$ 85.29	\$ 85.57	\$ 85.88	\$ 86.99
Total Installed Cost	\$ 630.70	\$ 620.22	\$ 620.22	\$ 676.38	\$ 738.64	\$ 961.55
Annual Carrying Charge	12.73%	12.73%	12.73%	12.73%	12.73%	12.73%
Per Month Charge	\$ 6.69	\$ 6.58	\$ 6.58	\$ 7.18	\$ 7.84	\$ 10.20

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Typical Bills by Rate Schedule

Residential Service - Rate R

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 30.12	\$ 30.43	\$ 0.30	1.01%
200	46.43	47.04	0.61	1.31%
250	54.59	55.35	0.76	1.39%
300	62.75	63.66	0.91	1.45%
400	79.06	80.27	1.21	1.53%
500	95.37	96.89	1.52	1.59%
600	111.68	113.50	1.82	1.63%
650	119.84	121.81	1.97	1.64%
700	127.99	130.12	2.12	1.66%
750	136.15	138.42	2.27	1.67%
1,000	176.93	179.96	3.03	1.71%
1,500	258.49	263.04	4.55	1.76%
2,000	340.05	346.11	6.06	1.78%
2,500	421.61	429.19	7.58	1.80%
3,000	503.17	512.26	9.09	1.81%
5,000	829.41	844.56	15.15	1.83%
7,500	1237.21	1259.94	22.73	1.84%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 13.81	\$ 13.81	\$ -
Distribution Charge per kWh	0.04508	0.04811	0.00303
Transmission Charge per kWh	0.03011	0.03011	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00982	0.00982	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

Residential Service - Uncontrolled Water Heating

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 18.20	\$ 18.16	\$ (0.05)	-0.27%
200	31.54	31.44	(0.10)	-0.31%
300	44.87	44.73	(0.15)	-0.33%
400	58.21	58.01	(0.20)	-0.34%
500	71.54	71.30	(0.25)	-0.34%
600	84.87	84.58	(0.29)	-0.35%
700	98.21	97.87	(0.34)	-0.35%
800	111.54	111.15	(0.39)	-0.35%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 4.87	\$ 4.87	\$ -
Distribution Charge per kWh	0.02210	0.02161	(0.00049)
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00982	0.00982	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

Residential Service - Controlled Water Heating

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 19.42	\$ 18.23	\$ (1.19)	-6.13%
200	30.26	30.08	(0.18)	-0.59%
300	41.10	41.93	0.83	2.02%
400	51.94	53.78	1.84	3.54%
500	62.79	65.64	2.85	4.54%
600	73.63	77.49	3.86	5.24%
700	84.47	89.34	4.87	5.77%
800	95.31	101.19	5.88	6.17%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 8.58	\$ 6.38	\$ (2.20)
Distribution Charge per kWh	0.00131	0.01141	0.01010
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00568	0.00568	-
System Benefits Charge	0.00743	0.00743	-

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Typical Bills by Rate Schedule

Residential Service - Optional Time of Day

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		BILL DIFFERENCE	
TOTAL ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 48.46	\$ 48.76	\$ 0.30	0.63%
200	64.84	65.45	0.61	0.93%
250	73.03	73.79	0.76	1.04%
300	81.22	82.13	0.91	1.12%
400	97.61	98.82	1.21	1.24%
500	113.99	115.50	1.51	1.33%
750	154.94	157.21	2.27	1.47%
1,000	195.90	198.93	3.03	1.55%
1,500	277.80	282.35	4.54	1.64%
2,000	359.71	365.77	6.06	1.68%
2,500	441.62	449.20	7.57	1.72%
3,000	523.53	532.62	9.09	1.74%
5,000	851.16	866.31	15.15	1.78%
7,500	1,260.70	1,283.43	22.72	1.80%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 32.08	\$ 32.08	\$ -
<u>Energy Charge On Peak kWh</u>			
Distribution	\$ 0.14407	\$ 0.14710	\$ 0.00303
Transmission	0.03011	0.03011	-
Stranded Cost Recovery Charge	0.00844	0.00844	-
System Benefits Charge	0.00743	0.00743	-
<u>Energy Service Charge</u>	0.07068	0.07068	-
Total per On Peak kWh	0.26073	0.26376	0.00303
<u>Energy Charge Off Peak kWh</u>			
Distribution	\$ 0.00210	\$ 0.00513	\$ 0.00303
Transmission	0.01966	0.01966	-
Stranded Cost Recovery Charge	0.00844	0.00844	-
System Benefits Charge	0.00743	0.00743	-
<u>Energy Service Charge</u>	0.07068	0.07068	-
Total per Off Peak kWh	0.10831	0.11134	0.00303
% Sales On Peak	36%	36%	
% Sales Off Peak	64%	64%	

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

Residential Load Control Service - Radio Controlled

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 20.73	\$ 18.81	\$ (1.92)	-9.26%
200	31.53	30.62	-0.91	-2.89%
300	42.34	42.44	0.10	0.24%
400	53.14	54.25	1.11	2.09%
500	63.95	66.07	2.12	3.32%
600	74.75	77.88	3.13	4.19%
700	85.56	89.70	4.14	4.84%
800	96.36	101.51	5.15	5.34%
900	107.17	113.33	6.16	5.75%
1,000	117.97	125.14	7.17	6.08%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 9.92	\$ 6.99	\$ (2.93)
Distribution Charge per kWh	0.00131	0.01141	0.01010
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

Residential Load Control Service - 8 Hour Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		BILL DIFFERENCE	
TOTAL ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 20.73	\$ 18.81	\$ (1.92)	-9.26%
200	31.53	30.62	(0.91)	-2.89%
300	42.34	42.44	0.10	0.24%
400	53.14	54.25	1.11	2.09%
500	63.95	66.07	2.12	3.32%
600	74.75	77.88	3.13	4.19%
700	85.56	89.70	4.14	4.84%
800	96.36	101.51	5.15	5.34%
900	107.17	113.33	6.16	5.75%
1,000	117.97	125.14	7.17	6.08%
1,200	139.58	148.77	9.19	6.58%
1,500	172.00	184.22	12.22	7.10%
1,800	204.41	219.66	15.25	7.46%
2,000	226.02	243.29	17.27	7.64%
2,500	280.05	302.37	22.32	7.97%
3,000	334.07	361.44	27.37	8.19%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 9.92	\$ 6.99	\$ (2.93)
Distribution Charge per kWh	0.00131	0.01141	0.01010
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

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Residential Load Control Service - 8 Hour No Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		BILL DIFFERENCE	
TOTAL ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 19.39	\$ 18.20	\$ (1.19)	-6.14%
200	30.19	30.01	(0.18)	-0.60%
300	41.00	41.83	0.83	2.02%
400	51.80	53.64	1.84	3.55%
500	62.61	65.46	2.85	4.55%
600	73.41	77.27	3.86	5.26%
700	84.22	89.09	4.87	5.78%
800	95.02	100.90	5.88	6.19%
900	105.83	112.72	6.89	6.51%
1,000	116.63	124.53	7.90	6.77%
1,200	138.24	148.16	9.92	7.18%
1,500	170.66	183.61	12.95	7.59%
1,800	203.07	219.05	15.98	7.87%
2,000	224.68	242.68	18.00	8.01%
2,500	278.71	301.76	23.05	8.27%
3,000	332.73	360.83	28.10	8.45%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$8.58	\$6.38	(2.20)
Distribution Charge per kWh	\$0.00131	\$0.01141	0.01010
Transmission Charge per kWh	\$0.02331	\$0.02331	-
Energy Service Charge	\$0.07068	\$0.07068	-
Stranded Cost Recovery Charge	\$0.00532	\$0.00532	-
System Benefits Charge	\$0.00743	\$0.00743	-

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

Residential Load Control Service - 10/11 Hour Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		BILL DIFFERENCE	
TOTAL ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 23.26	\$ 19.83	\$ (3.43)	-14.76%
200	36.60	32.66	(3.94)	-10.76%
300	49.94	45.50	(4.44)	-8.90%
400	63.28	58.33	(4.95)	-7.82%
500	76.62	71.17	(5.45)	-7.11%
600	89.95	84.00	(5.95)	-6.62%
700	103.29	96.84	(6.46)	-6.25%
800	116.63	109.67	(6.96)	-5.97%
900	129.97	122.51	(7.47)	-5.74%
1,000	143.31	135.34	(7.97)	-5.56%
1,200	169.99	161.01	(8.98)	-5.28%
1,500	210.01	199.52	(10.49)	-5.00%
1,800	250.02	238.02	(12.00)	-4.80%
2,000	276.70	263.69	(13.01)	-4.70%
2,500	343.40	327.87	(15.53)	-4.52%
3,000	410.09	392.04	(18.05)	-4.40%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$9.92	\$6.99	(2.93)
Distribution Charge per kWh	\$0.02665	\$0.02161	(0.00504)
Transmission Charge per kWh	\$0.02331	\$0.02331	-
Energy Service Charge	\$0.07068	\$0.07068	-
Stranded Cost Recovery Charge	\$0.00532	\$0.00532	-
System Benefits Charge	\$0.00743	\$0.00743	-

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

Residential Load Control Service - 10/11 Hour No Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		BILL DIFFERENCE	
TOTAL ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 21.92	\$ 19.22	\$ (2.70)	-12.34%
200	35.26	32.05	(3.21)	-9.10%
300	48.60	44.89	(3.71)	-7.64%
400	61.94	57.72	(4.22)	-6.81%
500	75.28	70.56	(4.72)	-6.27%
600	88.61	83.39	(5.22)	-5.90%
700	101.95	96.23	(5.73)	-5.62%
800	115.29	109.06	(6.23)	-5.41%
900	128.63	121.90	(6.74)	-5.24%
1,000	141.97	134.73	(7.24)	-5.10%
1,200	168.65	160.40	(8.25)	-4.89%
1,500	208.67	198.91	(9.76)	-4.68%
1,800	248.68	237.41	(11.27)	-4.53%
2,000	275.36	263.08	(12.28)	-4.46%
2,500	342.06	327.26	(14.80)	-4.33%
3,000	408.75	391.43	(17.32)	-4.24%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$8.58	\$6.38	(2.20)
Distribution Charge per kWh	\$0.02665	\$0.02161	(0.00504)
Transmission Charge per kWh	\$0.02331	\$0.02331	-
Energy Service Charge	\$0.07068	\$0.07068	-
Stranded Cost Recovery Charge	\$0.00532	\$0.00532	-
System Benefits Charge	\$0.00743	\$0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

Typical Bills by Rate Schedule

General Service 1 Phase

(A)	(B)	(C)	(D)	(E) = (D) - (C)	(F) = (E) / (C)
USAGE		TOTAL MONTHLY BILL		BILL DIFFERENCE	
MONTHLY DEMAND	MONTHLY USE	CURRENT	PROPOSED	AMOUNT	PERCENT
(KW)	(KWH)				
3	375	\$ 87.29	\$ 69.29	\$ (18.00)	-20.62%
3	1,000	168.40	146.32	(22.08)	-13.11%
6	750	157.64	135.60	(22.04)	-13.98%
6	1,500	243.76	224.61	(19.16)	-7.86%
12	1,500	351.46	338.31	(13.16)	-3.74%
30	6,000	1,114.44	1,166.22	51.78	4.65%
40	10,000	1,684.94	1,788.44	103.50	6.14%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 16.21	\$ 16.21	\$ -
<u>Demand Charge >5kWh</u>			
Distribution	\$ 9.49	\$ 10.49	\$ 1.00
Transmission	7.77	7.77	-
Stranded Cost Recovery Charge	0.69	0.69	-
Total	\$ 17.95	\$ 18.95	\$ 1.00
<u>Energy Charge < 500kWh</u>			
Distribution	\$ 0.07604	\$ 0.02805	\$ (0.04799)
Transmission	0.02807	0.02807	-
Stranded Cost Recovery Charge	0.00732	0.00732	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total	\$ 0.18954	\$ 0.14155	\$ (0.04799)
<u>Energy Charge 501 - 1500 kWh</u>			
Distribution	\$ 0.01884	\$ 0.02268	\$ 0.00384
Transmission	0.01056	0.01056	-
Stranded Cost Recovery Charge	0.00732	0.00732	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total	\$ 0.11483	\$ 0.11867	\$ 0.00384
<u>Energy Charge >1500 kWh</u>			
Distribution	\$ 0.00666	\$ 0.01709	\$ 0.01043
Transmission	0.00566	0.00566	-
Stranded Cost Recovery Charge	0.00732	0.00732	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total	\$ 0.09775	\$ 0.10818	\$ 0.01043

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

General Service 3 Phase

(A)	(B)	(C)	(D)	(E) = (D) - (C)	(F) = (E) / (C)
USAGE		TOTAL MONTHLY BILL		BILL DIFFERENCE	
MONTHLY DEMAND (KW)	MONTHLY USE (KWH)	CURRENT	PROPOSED	AMOUNT	PERCENT
3	375	\$ 103.47	\$ 85.47	\$ (18.00)	-17.39%
3	1,000	184.58	162.50	(22.08)	-11.96%
6	750	173.82	151.78	(22.04)	-12.68%
6	1,500	259.94	240.79	(19.16)	-7.37%
12	1,500	367.64	354.49	(13.16)	-3.58%
30	6,000	1,130.62	1,182.40	51.78	4.58%
40	10,000	1,701.12	1,804.62	103.50	6.08%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 32.39	\$ 32.39	\$ -
<u>Demand Charge >5kWh</u>			
Distribution	\$ 9.49	\$ 10.49	1.00
Transmission	7.77	7.77	-
Stranded Cost Recovery Charge	0.69	0.69	-
Total	\$ 17.95	\$ 18.95	\$ 1.00
<u>Energy Charge < 500kWh</u>			
Distribution	\$ 0.07604	\$ 0.02805	\$ (0.04799)
Transmission	0.02807	0.02807	-
Stranded Cost Recovery Charge	0.00732	0.00732	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total	\$ 0.18954	\$ 0.14155	\$ (0.04799)
<u>Energy Charge 501 - 1500 kWh</u>			
Distribution	\$ 0.01884	\$ 0.02268	\$ 0.00384
Transmission	0.01056	0.01056	-
Stranded Cost Recovery Charge	0.00732	0.00732	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total	\$ 0.11483	\$ 0.11867	\$ 0.00384
<u>Energy Charge >1500 kWh</u>			
Distribution	\$ 0.00666	\$ 0.01709	\$ 0.01043
Transmission	0.00566	0.00566	-
Stranded Cost Recovery Charge	0.00732	0.00732	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total	\$ 0.09775	\$ 0.10818	\$ 0.01043

Note: Immaterial differences due to rounding.

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Typical Bills by Rate Schedule

General Service - Uncontrolled Water Heating

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 18.15	\$ 18.10	\$ (0.05)	-0.27%
200	31.42	31.32	(0.10)	-0.31%
300	44.70	44.55	(0.15)	-0.33%
400	57.97	57.78	(0.20)	-0.34%
500	71.25	71.01	(0.25)	-0.34%
600	84.53	84.23	(0.29)	-0.35%
700	97.80	97.46	(0.34)	-0.35%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 4.87	\$ 4.87	\$ -
Distribution Charge per kWh	0.02210	0.02161	(0.00049)
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00924	0.00924	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

Public Service Company of New Hampshire
d/b/a Eversource Energy
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October 9, 2020
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Typical Bills by Rate Schedule

General Service - Controlled Water Heating

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 19.39	\$ 18.20	\$ (1.19)	-6.14%
200	30.19	30.01	(0.18)	-0.60%
300	41.00	41.83	0.83	2.02%
400	51.80	53.64	1.84	3.55%
500	62.61	65.46	2.85	4.55%
600	73.41	77.27	3.86	5.26%
700	84.22	89.09	4.87	5.78%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 8.58	\$ 6.38	\$ (2.20)
Distribution Charge per kWh	0.00131	0.01141	0.01010
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

Public Service Company of New Hampshire
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Typical Bills by Rate Schedule

General Service Load Control Service - Radio Controlled

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 20.73	\$ 18.81	\$ (1.92)	-9.26%
200	31.53	30.62	(0.91)	-2.89%
300	42.34	42.44	0.10	0.24%
400	53.14	54.25	1.11	2.09%
500	63.95	66.07	2.12	3.32%
600	74.75	77.88	3.13	4.19%
700	85.56	89.70	4.14	4.84%
800	96.36	101.51	5.15	5.34%
900	107.17	113.33	6.16	5.75%
1,000	117.97	125.14	7.17	6.08%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 9.92	\$ 6.99	\$ (2.93)
Distribution Charge per kWh	0.00131	0.01141	0.01010
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

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Typical Bills by Rate Schedule

General Service Load Control Service - 8 Hour Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 20.73	\$ 18.81	\$ (1.92)	-9.26%
200	31.53	30.62	(0.91)	-2.89%
300	42.34	42.44	0.10	0.24%
400	53.14	54.25	1.11	2.09%
500	63.95	66.07	2.12	3.32%
600	74.75	77.88	3.13	4.19%
700	85.56	89.70	4.14	4.84%
800	96.36	101.51	5.15	5.34%
900	107.17	113.33	6.16	5.75%
1,000	117.97	125.14	7.17	6.08%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 9.92	\$ 6.99	\$ (2.93)
Distribution Charge per kWh	0.00131	0.01141	0.01010
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

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Typical Bills by Rate Schedule

General Service Load Control Service - 8 Hour No Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 19.39	\$ 18.20	\$ (1.19)	-6.14%
200	30.19	30.01	(0.18)	-0.60%
300	41.00	41.83	0.83	2.02%
400	51.80	53.64	1.84	3.55%
500	62.61	65.46	2.85	4.55%
600	73.41	77.27	3.86	5.26%
700	84.22	89.09	4.87	5.78%
800	95.02	100.90	5.88	6.19%
900	105.83	112.72	6.89	6.51%
1,000	116.63	124.53	7.90	6.77%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 8.58	\$ 6.38	\$ (2.20)
Distribution Charge per kWh	0.00131	0.01141	0.01010
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

Public Service Company of New Hampshire
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Typical Bills by Rate Schedule

General Service Load Control Service - 10/11 Hour Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 23.26	\$ 19.83	\$ (3.43)	-14.76%
200	36.60	32.66	(3.94)	-10.76%
300	49.94	45.50	(4.44)	-8.90%
400	63.28	58.33	(4.95)	-7.82%
500	76.62	71.17	(5.45)	-7.11%
600	89.95	84.00	(5.95)	-6.62%
700	103.29	96.84	(6.46)	-6.25%
800	116.63	109.67	(6.96)	-5.97%
900	129.97	122.51	(7.47)	-5.74%
1,000	143.31	135.34	(7.97)	-5.56%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 9.92	\$ 6.99	\$ (2.93)
Distribution Charge per kWh	0.02665	0.02161	(0.00504)
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

Public Service Company of New Hampshire
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October 9, 2020
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Typical Bills by Rate Schedule

General Service Load Control Service - 10/11 Hour No Switch

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 21.92	\$ 19.22	\$ (2.70)	-12.34%
200	35.26	32.05	(3.21)	-9.10%
300	48.60	44.89	(3.71)	-7.64%
400	61.94	57.72	(4.22)	-6.81%
500	75.28	70.56	(4.72)	-6.27%
600	88.61	83.39	(5.22)	-5.90%
700	101.95	96.23	(5.73)	-5.62%
800	115.29	109.06	(6.23)	-5.41%
900	128.63	121.90	(6.74)	-5.24%
1,000	141.97	134.73	(7.24)	-5.10%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 8.58	\$ 6.38	\$ (2.20)
Distribution Charge per kWh	0.02665	0.02161	(0.00504)
Transmission Charge per kWh	0.02331	0.02331	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

Typical Bills by Rate Schedule

General Service - Optional Time of Day Single Phase

(A)	(B)	(C)	(D)	(E)	(F)	(G) = (F) - (E)	(H) = (G) / (E)
MONTHLY DEMAND	MONTHLY USE	ON-PEAK USE	OFF-PEAK USE	TOTAL MONTHLY BILL		BILL DIFFERENCE	
(KW)	(kWh)	(kWh)	(kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
12	1,500	600	900	\$ 413.66	\$ 439.34	\$ 25.68	6.21%
12	1,500	900	600	427.16	452.84	25.68	6.01%
12	3,000	1,200	1,800	578.34	604.02	25.68	4.44%
12	3,000	1,800	1,200	605.33	631.01	25.68	4.24%
30	4,500	1,800	2,700	1,053.52	1,117.72	64.20	6.09%
30	4,500	2,700	1,800	1,094.01	1,158.21	64.20	5.87%
30	9,000	3,600	5,400	1,547.55	1,611.75	64.20	4.15%
30	9,000	5,400	3,600	1,628.54	1,692.74	64.20	3.94%
50	7,500	3,000	4,500	1,727.88	1,834.88	107.00	6.19%
50	7,500	4,500	3,000	1,795.36	1,902.36	107.00	5.96%
50	15,000	6,000	9,000	2,551.27	2,658.27	107.00	4.19%
50	15,000	9,000	6,000	2,686.24	2,793.24	107.00	3.98%
75	11,250	4,500	6,750	2,570.82	2,731.32	160.50	6.24%
75	11,250	6,750	4,500	2,672.05	2,832.55	160.50	6.01%
75	22,500	9,000	13,500	3,805.92	3,966.42	160.50	4.22%
75	22,500	13,500	9,000	4,008.37	4,168.87	160.50	4.00%

	Current Rate	Proposed Rate	Difference
Customer Charge - Single Phase	\$ 41.98	\$ 41.98	\$ -
<u>Demand Charges</u>			
Distribution	\$ 13.23	\$ 13.92	\$ 0.69
Transmission	5.12	5.12	-
Stranded Cost Recovery	0.35	0.35	-
Total Demand Charge	17.25	19.39	0.69
<u>Energy Charge On Peak kWh</u>			
Distribution	\$ 0.05335	\$ 0.05335	\$ -
Transmission	-	-	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total per On Peak kWh	0.13678	0.13678	-
<u>Energy Charge Off Peak kWh</u>			
Distribution	\$ 0.00836	\$ 0.00836	\$ -
Transmission	-	-	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total per Off Peak kWh	0.09179	0.09179	-

Note: Immaterial differences due to rounding.

Attachment A

Typical Bills by Rate Schedule

General Service - Optional Time of Day Three Phase

(A)	(B)	(C)	(D)	(E)	(F)	(G) = (F) - (E)	(H) = (G) / (E)
MONTHLY DEMAND (KW)	MONTHLY USE (kWh)	ON-PEAK USE (kWh)	OFF-PEAK USE (kWh)	TOTAL MONTHLY BILL		BILL DIFFERENCE	
				CURRENT	PROPOSED	AMOUNT	PERCENT
12	1,500	600	900	\$ 449.08	\$ 457.36	\$ 8.28	1.84%
12	1,500	900	600	462.58	470.86	8.28	1.79%
12	3,000	1,200	1,800	613.76	622.04	8.28	1.35%
12	3,000	1,800	1,200	640.75	649.03	8.28	1.29%
30	4,500	1,800	2,700	1,115.04	1,135.74	20.70	1.86%
30	4,500	2,700	1,800	1,155.53	1,176.23	20.70	1.79%
30	9,000	3,600	5,400	1,609.07	1,629.77	20.70	1.29%
30	9,000	5,400	3,600	1,690.06	1,710.76	20.70	1.22%
50	7,500	3,000	4,500	1,818.40	1,852.90	34.50	1.90%
50	7,500	4,500	3,000	1,885.88	1,920.38	34.50	1.83%
50	15,000	6,000	9,000	2,641.79	2,676.29	34.50	1.31%
50	15,000	9,000	6,000	2,776.76	2,811.26	34.50	1.24%
75	11,250	4,500	6,750	2,697.59	2,749.34	51.75	1.92%
75	11,250	6,750	4,500	2,798.82	2,850.57	51.75	1.85%
75	22,500	9,000	13,500	3,932.69	3,984.44	51.75	1.32%
75	22,500	13,500	9,000	4,135.14	4,186.89	51.75	1.25%

	Current Rate	Proposed Rate	Difference
Customer Charge - Three Phase	\$ 60.00	\$ 60.00	\$ -
<u>Demand Charges</u>			
Distribution	\$ 13.23	\$ 13.92	\$ 0.69
Transmission	5.12	5.12	-
Stranded Cost Recovery	0.35	0.35	-
Total Demand Charge	18.70	19.39	0.69
<u>Energy Charge On Peak kWh</u>			
Distribution	\$0.05335	\$ 0.05335	\$ -
Transmission	-	-	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total per On Peak kWh	0.13678	0.13678	-
<u>Energy Charge Off Peak kWh</u>			
Distribution	\$0.00836	\$ 0.00836	\$ -
Transmission	-	-	-
Stranded Cost Recovery Charge	0.00532	0.00532	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.07068	0.07068	-
Total per Off Peak kWh	0.09179	0.09179	-

Note: Immaterial differences due to rounding.

Attachment A

Public Service Company of New Hampshire
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Typical Bills by Rate Schedule

General Service - Space Heating

(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)
USAGE	TOTAL MONTHLY BILL		TOTAL BILL DIFFERENCE	
ENERGY (kWh)	CURRENT	PROPOSED	AMOUNT	PERCENT
100	\$ 18.75	\$ 18.93	\$ 0.18	0.95%
200	34.25	34.61	0.36	1.05%
300	49.76	50.30	0.54	1.08%
400	65.26	65.98	0.72	1.10%
500	80.77	81.67	0.90	1.11%
600	96.28	97.35	1.07	1.12%
700	111.78	113.04	1.25	1.12%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 3.24	\$ 3.24	\$ -
Distribution Charge per kWh	0.03729	0.03908	0.00179
Transmission Charge per kWh	0.02807	0.02807	-
Energy Service Charge	0.07068	0.07068	-
Stranded Cost Recovery Charge	0.01159	0.01159	-
System Benefits Charge	0.00743	0.00743	-

Note: Immaterial differences due to rounding.

Attachment A

Typical Bills by Rate Schedule

Rate GV					
(A)	(B)	(C)	(D)	(E) = (D) - (C)	(F) = (E) / (C)
USAGE		TOTAL MONTHLY BILL		BILL DIFFERENCE	
MONTHLY DEMAND (KW)	MONTHLY USE (KWH)	CURRENT	PROPOSED	AMOUNT	PERCENT
75	15,000	\$ 2,705.86	\$ 2,736.16	\$ 30.30	1.12%
75	30,000	3,916.51	3,946.36	29.85	0.76%
150	30,000	5,187.51	5,248.11	60.60	1.17%
150	60,000	7,608.81	7,668.51	59.70	0.78%
300	60,000	10,137.81	10,259.01	121.20	1.20%
300	120,000	14,980.41	15,099.81	119.40	0.80%
500	100,000	16,738.21	16,940.21	202.00	1.21%
500	200,000	24,809.21	25,008.21	199.00	0.80%
1,000	200,000	33,239.21	33,643.21	404.00	1.22%
1,000	400,000	49,169.21	49,631.21	462.00	0.94%

	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 211.21	\$ 211.21	\$ -
<u>Demand 1-100 kW</u>			
Distribution	\$ 6.07	\$ 6.48	\$ 0.41
Transmission	10.40	10.40	-
Stranded Cost Recovery Charge	0.65	0.65	-
Total	\$ 17.12	\$ 17.53	\$ 0.41
<u>Demand > 100 kW</u>			
Distribution	\$ 5.81	\$ 6.22	\$ 0.41
Transmission	10.40	10.40	-
Stranded Cost Recovery Charge	0.65	0.65	-
Total	\$ 16.86	\$ 17.27	\$ 0.41
<u>Energy Charge 1 - 200,000 kWh</u>			
Distribution	\$ 0.00660	\$ 0.00657	\$ (0.00003)
Transmission	-	-	-
Stranded Cost Recovery Charge	0.00643	0.00643	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.06025	0.06025	-
Total	\$ 0.08071	\$ 0.08068	\$ (0.00003)
<u>Energy Charge >200,000 kWh</u>			
Distribution	\$ 0.00554	\$ 0.00583	\$ 0.00029
Transmission	-	-	-
Stranded Cost Recovery Charge	0.00643	0.00643	-
System Benefits Charge	0.00743	0.00743	-
Energy Service Charge	0.06025	0.06025	-
Total	\$ 0.07965	\$ 0.07994	\$ 0.00029

Note: Immaterial differences due to rounding.

Attachment A

Typical Bills by Rate Schedule

Rate LG

(A)	(B)	(C)	(D)	(E)	(F)	(G) = (F) - (E)	(H) = (G) / (E)
MONTHLY DEMAND (KVA)	MONTHLY USE (KWH)	ON-PEAK USE (KWH)	OFF-PEAK USE (KWH)	TOTAL MONTHLY BILL		BILL DIFFERENCE	
				CURRENT	PROPOSED	AMOUNT	PERCENT
3,000	300,000	120,000	180,000	\$71,471.55	\$72,494.55	\$ 1,023.00	1.43%
3,000	600,000	240,000	360,000	94,582.95	95,608.95	1,026.00	1.08%
3,000	900,000	360,000	540,000	117,694.35	118,723.35	1,029.00	0.87%
3,000	1,200,000	480,000	720,000	140,805.75	141,837.75	1,032.00	0.73%
3,000	1,500,000	600,000	900,000	163,917.15	164,952.15	1,035.00	0.63%
3,000	1,800,000	720,000	1,080,000	187,028.55	188,066.55	1,038.00	0.55%
3,000	2,100,000	840,000	1,260,000	210,139.95	211,180.95	1,041.00	0.50%
				Current Rate	Proposed Rate	Difference	
Customer Charge				\$ 660.15	\$ 660.15	\$ -	
Demand							
Distribution				\$ 5.17	\$ 5.51	\$ 0.34	
Transmission				10.24	10.24	-	
Stranded Cost Recovery Charge				0.49	0.49	-	
Total				\$ 15.90	\$ 16.24	\$ 0.34	
Energy Charge - On-Peak							
Distribution				\$ 0.00553	\$ 0.00554	\$ 0.00001	
Transmission				-	-	-	
Stranded Cost Recovery Charge				0.00519	0.00519	-	
System Benefits Charge				0.00743	0.00743	-	
Energy Service Charge				0.06025	0.06025	-	
Total				\$ 0.07840	\$ 0.07841	\$ 0.00001	
Energy Charge - Off-Peak							
Distribution				\$ 0.00467	\$ 0.00468	\$ 0.00001	
Transmission				-	-	-	
Stranded Cost Recovery Charge				0.00378	0.00378	-	
System Benefits Charge				0.00743	0.00743	-	
Energy Service Charge				0.06025	0.06025	-	
Total				\$ 0.07613	\$ 0.07614	\$ 0.00001	

Note: Immaterial differences due to rounding.

DE 19-057 – APPENDIX 11**Timeline of Events and Filings Relating to Settlement**

- At time Agreement Filed:
 - Step Adjustment 1 Filing Made
 - Work begins on:
 - Advanced Metering Functionality assessment
 - Distribution Condition/Engineering assessment
 - Review of meter retirements
 - Customer survey
 - Outdoor lighting tariff
 - EV rate proposal
 - TOU rate proposal
 - Staff begins work on Business Process Audit
- November 2020, and annually in November:
 - Vegetation Management Plan for following calendar year filed
- March 1 annually:
 - Reliability Report and Vegetation Management Report Filed into new docket for RRA Docket
 - May 1 – Complete RRA filed including all components and supporting testimony and other information
- March 31, 2021:
 - Results of Distribution Condition/Engineering Assessment and Customer Survey filed as supplemental testimony in LCIRP docket
- May 1, 2021 and May 1, 2022:
 - Step Adjustments 2 and 3 filed
- New Start
 - Within 60 days of approval – convene New Start stakeholder group
 - Within 120 days of approval – file stakeholder group report
 - Quarterly – or on schedule set by stakeholder group:
 - New Start Metrics Reported
- Annually:
 - Fee Free Adoption Rate Information Reported

Attachment A

Public Service Company of New Hampshire
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- First Quarter 2021:
 - New outdoor lighting tariff language proposed
- Four Months After Approval of Agreement:
 - EV rate proposal filed
- Six months After Approval of Agreement:
 - TOU rate proposal filed

ATTACHMENT B

STATE OF NEW HAMPSHIRE AUG24'21 PM 1:46 RCVD

YOR

INTERIM COMMISSIONER
Jared Chicoine

DEPUTY COMMISSIONER
Christopher Ellms, Jr.



DEPARTMENT OF ENERGY
21 S. Fruit St., Suite 10
Concord, N.H. 03301-2429

TDD Access: Relay NH
1-800-735-2964

Tel. (603) 271-3670

Website:
www.energy.nh.gov

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August 31, 2021

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, NH 03301

His Excellency and Honorable Councilors:

REQUESTED ACTION

Pursuant to RSA 365:37, II and III, authorize the New Hampshire Department of Energy (Department) to enter into a contract with River Consulting Group, Inc., of Clayton, GA, Vendor Code #877302, to assist and advise the Department in conducting a business process audit of Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource). The contract is to be effective upon the date of Governor and Council approval through December 1, 2022, in an amount not to exceed \$492,258. Funding is 100% Utility Assessment.

Funding is authorized from the account, General Consultants, as follows with the authority to adjust encumbrances in each of the State fiscal years through the Budget Office if needed and justified:

Funding will be available, pursuant to RSA 365:37, II, in account 02-52-52-520010-XXXX0000-046-500464 (pending).

<u>FY 2022</u>	<u>FY 2023</u>	<u>Total</u>
\$400,000	\$92,258	\$492,258

EXPLANATION

The Department respectfully requests authority to enter into a contract in an amount not to exceed \$492,258.00 with River Consulting Group, Inc., a consulting firm specializing in regulated utility management audits. In 2019, Eversource filed its first full distribution rate case in nearly a decade, which was docketed by the New Hampshire Public Utilities Commission ("Commission") as DE 19-057. During that proceeding, the Commission Staff (now, the Department of Energy Staff) filed testimony recommending several capital project disallowances and proposed that an audit of Eversource's business processes be conducted, asserting that the Company did not adequately analyze, explain or justify many of its capital investments and failed to comply with its own budgeting and oversight policies and procedures. Eversource's petition for a distribution rate increase was eventually resolved by Order No. 26,433 (December 15, 2020), which approved a global settlement of all parties and issues that arose during the rate case. In that order, the Commission approved a settlement provision in which the Company agreed to a business process audit by an outside consultant.

ATTACHMENT B

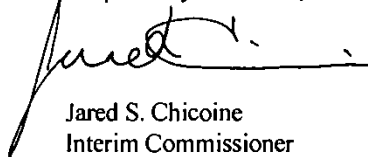
The Commission issued a Request for Proposals (RFP) on May 14, 2021. The notice of the RFP was published in the Union Leader for three days and was posted on the Commission's website. The Commission received four responses to its RFP. An evaluation team made up of the Director of the Electric Division, a Utility Analyst in the Electric Division, and a Staff Attorney/Hearings Examiner reviewed the four RFP responses. The bid responses were scored using the selection criteria identified in the RFP, weighted as follows: qualifications, technical, and practical experience (maximum of 25 points); general experience and qualifications in providing similar services (maximum 25 points); costs (maximum 20 points); clarity and appropriateness of proposed general approaches, and demonstrated knowledge of relevant subject matter (maximum 20 points); and overall responsiveness to the RFP, including completeness, clarity, and quality (maximum 10 points). Interviews were conducted for the top two scoring proposals. River Consulting Group, Inc. was the highest scoring bidder at 78 points versus a 72 point score for the second highest bidder response.

Although the RFP was issued by the Commission, pursuant to RSA 12-P:11, effective July 1, 2021, "[a]ll of the functions, powers, duties, records, personnel, and property of the public utilities commission incorporated in the statutes establishing the department of energy and which replace the authority of the commission with the authority of the department of energy, are hereby transferred, as of July 1, 2021, to the department of energy." Similarly, RSA 12-P:14, effective July 1, 2021, provides that "[e]xisting rules, orders, and approvals of the public utilities commission which are associated with any functions, powers, and duties, transferred to the department of energy pursuant to RSA 12-P:11 or any other statutory provision, shall continue in effect and be enforced by the commissioner of the department of energy until they expire or are repealed or amended in accordance with applicable law." Order No. 26,433 placed a duty on Commission Staff to oversee a business process audit of Eversource which now transfers to the Department of Energy. The RFP process, proposals, and power to award the contract therefore are similarly transferred.

The contract amount will not affect the General Fund. Funds will be assessed pursuant to RSA 365:37, II, which permits the Department to obtain experts and assess the costs to the electric and natural gas utilities who are mandatory parties to the proceeding.

Your consideration of this request is appreciated.

Respectfully submitted,



Jared S. Chicoine
Interim Commissioner

Attachments:
Agreement with Exhibits

ATTACHMENT B

FORM NUMBER P-37 (version 12/11/2019)

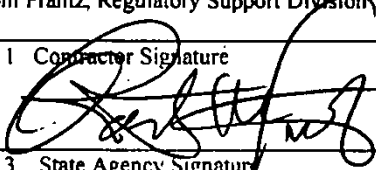
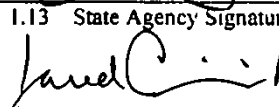
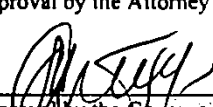
Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name Department of Energy		1.2 State Agency Address 21 S. Fruit Street, Suite 10 Concord, NH 03301	
1.3 Contractor Name River Consulting Group, Inc.		1.4 Contractor Address 77 Wilson Bridge Lane, Clayton, GA 30525	
1.5 Contractor Phone Number 770-331-1941	1.6 Account Number	1.7 Completion Date 12/1/2022	1.8 Price Limitation \$492,258
1.9 Contracting Officer for State Agency Tom Frantz, Regulatory Support Division		1.10 State Agency Telephone Number 603-271-3670	
1.11 Contractor Signature  Date: 7/25/21		1.12 Name and Title of Contractor Signatory Robert M. Grant, President	
1.13 State Agency Signature  Date: 8/17/21		1.14 Name and Title of State Agency Signatory Jared S. Chicoine, Interim Commissioner	
1.15 Approval by the N.H. Department of Administration, Division of Personnel (if applicable) By: _____ Director, On: _____			
1.16 Approval by the Attorney General (Form, Substance and Execution) (if applicable) By:  On: 8/23/21			
1.17 Approval by the Governor and Executive Council (if applicable) G&C Item number: _____ G&C Meeting Date: _____			

ATTACHMENT B

2. SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.17, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds affected by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.

6.3. The Contractor agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

8.3. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

9. TERMINATION.

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State's discretion, deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT B. In addition, at the State's discretion, the Contractor shall, within 15 days of notice of early termination, develop and submit to the State a Transition Plan for services under the Agreement.

10. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

10.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

10.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

11. **CONTRACTOR'S RELATION TO THE STATE.** In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

12.1 The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice, which shall be provided to the State at least fifteen (15) days prior to the assignment, and a written consent of the State. For purposes of this paragraph, a Change of Control shall constitute assignment. "Change of Control" means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.2 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State. The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

13. **INDEMNIFICATION.** Unless otherwise exempted by law, the Contractor shall indemnify and hold harmless the State, its officers and employees, from and against any and all claims, liabilities and costs for any personal injury or property damages, patent or copyright infringement, or other claims asserted against the State, its officers or employees, which arise out of (or which may be claimed to arise out of) the acts or omission of the Contractor, or subcontractors, including but not limited to the negligence, reckless or intentional conduct. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein

Contractor Initials _____
Date _____

ATTACHMENT B

contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than ten (10) days prior to the expiration date of each insurance policy. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("*Workers' Compensation*").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. **NOTICE.** Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

17. **AMENDMENT.** This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

18. **CHOICE OF LAW AND FORUM.** This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party. Any actions arising out of this Agreement shall be brought and maintained in New Hampshire Superior Court which shall have exclusive jurisdiction thereof.

19. **CONFLICTING TERMS.** In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and/or attachments and amendment thereof, the terms of the P-37 (as modified in EXHIBIT A) shall control.

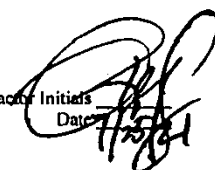
20. **THIRD PARTIES.** The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. **HEADINGS.** The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. **SPECIAL PROVISIONS.** Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.

23. **SEVERABILITY.** In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. **ENTIRE AGREEMENT.** This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.



ATTACHMENT B

EXHIBIT A

SPECIAL PROVISIONS

1. In lieu of the insurance requirement set forth in Paragraph 14 of the General Provisions, the Department will accept commercial general liability insurance against all claims of bodily injury, death, or property damage, in amounts of not less than:
 - \$1,000,000 for each occurrence
 - \$1,000,000 for damage to rented premises
 - \$10,000 for medical expenses (for any one person)
 - \$1,000,000 for personal and advertising injury
 - \$2,000,000 general aggregate
 - \$2,000,000 for products and completed operations aggregate
2. The Contractor is exempt from workers' compensation insurance requirements pursuant to RSA 281-A:2, VIII.

Contractor Initials 
Date 8-17-21
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ATTACHMENT B

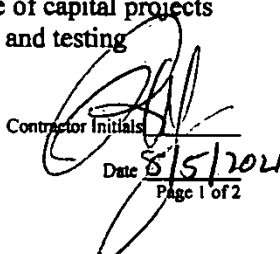
EXHIBIT B

SCOPE OF SERVICES

The Contractor(s) shall be engaged by, and report to, the Department of Energy, and in collaboration with the Department's Regulatory Support Division ("Division"), produce a comprehensive audit of Eversource business processes and provide a final report on those processes which includes recommendations for business process improvements pertaining to Eversource's capital investment planning, budgeting, management and execution.

Specific tasks for the consultant may include, but are not limited to, the following:

1. Review and assessment of the Company's capital planning, budgeting, approval, and management oversight, including:
 - a. Company's budgeting and approval process for capital expenditures;
 - b. Company's information systems used in work planning, tracking, and accounting.
 - c. Initial project design and development of budgets, cost estimates, revised budgets and budget variances;
 - d. Internal accounting for capital projects and administrative support;
 - e. Decision making by project managers involving design changes, engagement and hiring of outside contractors and the Company's oversight of contractors;
 - f. Decision making by project managers in addressing and controlling project costs including factors that necessitate the involvement of upper management;
 - g. Reviews by upper management of project costs and cost overruns and the application of cost controls; and
 - h. Compliance of the above-listed items with good utility practices.
2. Review and evaluation of capital project documentation, including:
 - a. Compliance with documentation policies and filing requirements;
 - b. Initial project assessment and analysis in the project approval documentation including consideration and analysis of known and foreseeable costs and risks;
 - c. Use of supplement requests/change order requests, including root cause analysis and lessons learned;
 - d. Source documentation and supporting documentation; and
 - e. Recommendations for improving and enhancing the above documentation process.
3. Selective Project Review: The consultant will select a sample of capital projects for 2020 and 2021 to be included as a part of its examination and testing involving the above listed processes.

Contractor Initials 
Date 8/5/2021
Page 1 of 2

ATTACHMENT B

In the process of preparing each deliverable, the consultants will work closely with the Division in order facilitate effective **knowledge transfer of each issue**. The consultant will also provide litigation services to the Division, consistent with the proposal outlined in the RFP. The work of the consultant will be subject to an evaluation of progress achieved against the above-mentioned scope and tasks to take place after completion of the key deliverables identified during the project scoping meeting.

This exhibit is intended as a summary of the work described in RFP #2020-006 and Contractor's Response to RFP #2020-006, and is not intended to limit the scope of services as set forth therein.

1. Project Schedule

Contractor shall commence work immediately following approval of this Agreement by the Governor and Executive Council. Contractor shall schedule an initial project scoping meeting with the Division to occur during September 2021, or a mutually agreeable date within 30 days following approval of this Agreement by the Governor and Executive Council. The purpose of the meeting shall be to review and refine the scope, task, and project approach requirements; to establish a project plan and schedule with key milestones and deliverables, as applicable; and to establish project management and communications protocols to ensure that the information requirements of both the Division and Contractor are satisfied.

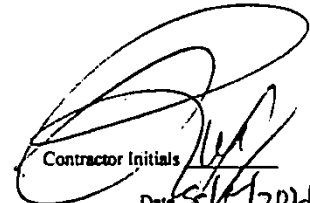
2. Project Management

Status calls or meetings shall be conducted by Contractor's project manager with the Division, on a monthly basis or when requested by the Division, to discuss project status, progress, action items, and budget status.

For any activities not addressed in the project schedule section above or requiring modification as the work progresses, Contractor shall work with the Division to set a mutually agreeable schedule and related budget.

3. Additional Requirements

Contractor shall maintain confidential all non-public information to which it has access until such time as it is instructed otherwise by the Division. In the process of preparing any and all deliverables, Contractor shall work closely with the Division in order to facilitate effective **knowledge transfer** on each issue. At the conclusion of performance of services hereunder, Contractor shall make available to the Division summaries of significant work papers and source documents as requested.


Contractor Initials _____
Date 8/15/2021
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ATTACHMENT B

EXHIBIT C

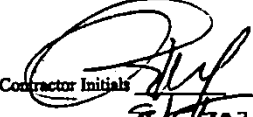
CONTRACT AMOUNT, TERMS AND METHODS OF PAYMENT

1. This contract becomes effective on the date of approval by the Governor and Executive Council and concludes on December 1, 2022.
2. The River Consulting Group, Inc. will charge for professional consulting services for time involved and expenses incurred in an amount not to exceed \$ \$492,258. Services will be provided as set forth in Exhibit B. The Detailed Program Budget and Staffing section in Contractor's proposal dated June 9, 2021 describes reasonable, expected allocation of hours for the services, at the following hourly rates:

Name	Labor Rate (fully loaded) (\$/hour)
Robert Grant	\$240/hr
Howard Solganick	\$240/hr
Joseph DeVirgilio	\$240/hr
Ronald D. Willoughby	\$240/hr

All out-of-pocket costs and expenses, including travel, will be invoiced at cost without mark-up and are subject to the Price Limitation set forth below. The Contractor includes the employees and subcontractors identified in the Contractor's proposal. The State will not pay any subcontractor directly for its services to the Contractor. The amount to be paid to the Contractor, including the amounts paid for services provided to the Contractor by any permitted subcontractor, shall not exceed the Price Limitation set forth below. The Contractor shall not substitute or change any subcontractor or other personnel identified in its Proposal without written notice to and the consent of the Department of Energy Regulatory Support Division ("Division"), such consent not to be unreasonably withheld.

3. Price Limitation: The contract price shall not exceed \$492,258 in total.
4. Method of Payment: Payment shall be made as set forth herein below, on completion of the assigned work on the basis of monthly invoices approved by the Division. All invoices shall be supported by a summary of activities that have taken place in accordance with the terms of the contract, along with a detailed listing of expenses incurred and copies of receipts. Invoices will provide adequate back-up including the hours worked per individual during the month and the service provided during those hours. The Division can request additional supporting information, as necessary. Invoices will be submitted to: Business Office, New Hampshire Department of Energy, 21 South Fruit Street, Suite 10, Concord, New Hampshire 03301-2429 or via email to ENGY-BusinessOfficeGroup@energy.nh.gov.

Contractor Initials 
Date 8/18/2021
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ATTACHMENT B


Page 2 of 2
Date 01/01/2021
Contractor Initials

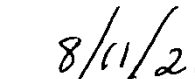
Payments hereunder are contingent upon the availability of funds assessed pursuant to RSA 365:37, II. The Department will assess the costs of the contract to the appropriate party(ies) and upon receipt of payment of the assessment, will process payment to the Contractor.

River Consulting Group, Inc.
CERTIFICATE OF AUTHORITY

I, Janice P. Grant, do hereby certify that:

1. I am the duly elected Secretary of the River Consulting Group, Inc. (the "Corporation") a registered Georgia Corporation.
2. Robert M. Grant is the duly elected President of the Corporation, authorized by the Corporation's by-laws to sign contracts made, accepted, or endorsed by the Corporation.


Janice P. Grant, Secretary


Date

ATTACHMENT B

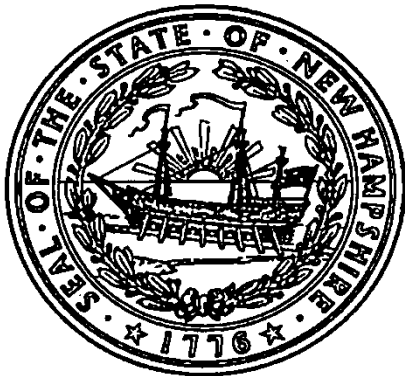
State of New Hampshire
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that RIVER CONSULTING GROUP, INC is a Georgia Profit Corporation registered to transact business in New Hampshire on July 29, 2021. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 877302

Certificate Number : 0005414997



IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 29th day of July A.D. 2021.

A handwritten signature in black ink, appearing to read "Wm Gardner".

William M. Gardner
Secretary of State

ATTACHMENT B



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
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INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> General Liability	X		76 SBW AM6SPT	07/23/2021	07/23/2022	EACH OCCURRENCE \$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000
							MED EXP (Any one person) \$10,000
							PERSONAL & ADV INJURY \$1,000,000
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			76 SBW AM6SPT	07/23/2021	07/23/2022	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000
							BODILY INJURY (Per person)
							BODILY INJURY (Per accident)
							PROPERTY DAMAGE (Per accident)
	UMBRELLA LIAB EXCESS LIAB						EACH OCCURRENCE
	<input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE						AGGREGATE
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				PER STATUTE
							OTH-ER
							E.L. EACH ACCIDENT
							E.L. DISEASE - EA EMPLOYEE
A	Employment Practices Liability Insurance			76 SBW AM6SPT	07/23/2021	07/23/2022	Each Claim Limit \$25,000
							Annual Aggregate Limit \$25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Those usual to the Insured's Operations. Certificate holder is an additional insured per the Additional Insured - State Or Governmental Agency Or Subdivision Or Political Subdivision Permits Or Authorization Form SL3040 attached to this policy.

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Management Audit of Southern Connecticut Gas Company AVANGRID

REDACTED & PUBLIC

Prepared for
The State of Connecticut Public Utilities Regulatory Authority

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January 6, 2017

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Preface

This report was prepared based in part on information not within the control of the consultant, River Consulting Group, Inc. and Raymond G Saleeby, LLC. d/b/a SCG LLC (RCG/SCG LLC). RCG/SCG LLC has not made an analysis, verified, or rendered an independent judgment of the validity of the information provided by others. We believe that the information contained in this report will be reliable under the conditions and subject to the limitations set forth in the report, RCG/SCG LLC does not guarantee its accuracy.

This document and the opinions, analysis, evaluations, and recommendations contained in it are for the sole use and benefit of the contracting parties. There are no intended third party beneficiaries, and RCG/SCG LLC shall have no liability whatsoever to third parties for any defect, deficiency, error, omission in any statement contained in or in any way related to this document or the services provided.

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1. EXECUTIVE SUMMARY

Objective and Scope

The objective of RCG/SCG LLC's review included (1) an investigation and assessment of the Company's business processes, procedures, and policies relating to the management operations and system of internal controls in place and (2) an identification of areas of the Company that might require further investigation.

The scope of RCG/SCG LLC's management audit included eight focus areas:

- Executive Management,
- System Operations,
- Finance,
- Human Resources,
- Customer Service,
- External Relations,
- Support Services, and
- Special Topics.

During RCG/SCG LLC's management audit, 105 interviews were conducted and 715 data requests were reviewed. The team conducted eight field observation site visits, which included tours of the Company's LNG facilities in Milford, some field site visits to observe crews working in the field, a tour of the SCG's service center and warehouse facility in Orange, and its call Center. RCG/SCG LLC interviewed AVANGRID, Avangrid Networks, UIL Gas Networks, and SCG senior management as well as a representative of the Company's unions.

All audit work papers, interview notes, and data responses relied upon in this report are available upon request from PURA.

Overall Assessment

Overall assessments by chapter section.

Executive Management

The Southern Connecticut Gas Company is generally well managed. There are several areas within SCG/UIL gas networks where management needs to focus its attention to improve the overall performance. At the time of the management audit RCG/SCG LLC observed a number of common functions where there were significant disruptions of normal operations brought about by the integration efforts. These disruptions are somewhat expected due to the

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proximity of the audit time frame to that of the AVANGRID purchase which was completed in December of 2015.

Internal Auditing

The Internal Audit department is positioned correctly at the AVANGRID level to provide independent assessments of SCG processes and accounting practices to the AVANGRID board of directors.

Strategic Planning

Due to the recent UIL Holdings sale to Iberdrola USA, now AVANGRID, management's focus is on integration, as such strategic planning at SCG is in the formative stages. Currently, AVANGRID is applying core performance metrics to SCG, causing strategy to become transactional. Strategic level planning initiatives have yet to be identified.

O&M Budget Process

SCG employs O&M budgeting practices consistent with those used by many utility companies and the company is generally effective with financial controls – as evidenced by the small O&M budget variances for SCG. However, there are opportunities to improve the budgeting process so that it serves to “justify” the spending levels and support performance management and process improvement.

Capital Budgeting Process

SCG employs capital budget development processes consistent with those of many utility companies. Oversight of the capital budgeting process by the center for project excellence provides a higher level of scrutiny to capital budget development and approvals. Importantly, SCG has experienced significant variance on capital projects estimates.

System Operations

Requirements Forecasting

The requirements forecasting function is collaboratively performed by multiple areas within the UIL business units, SCG and CNG. The Rates and Regulatory department appropriately develops a forecast to meet the requirements of the financial and regulatory functions. RCG/SCG LLC believes a more formal review by rates and regulatory (along with a consensus executive approval by all involved functions) of the CES forecast prepared by sales and marketing, could refine the CES impact on the forecast.

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Gas Supply

The performance of Gas Supply is only formally compared to one external measure, and its performance is reasonable. Gas Supply reasonably defines its supply portfolio principles, goals, and objectives to ensure continuity of supply. Gas Supply sets appropriate processes to obtain transportation capacity to meet long term needs. Gas Supply Department has a defined process for developing and obtaining commodity at a reasonable cost. RCG/SCG LLC considers the risk management function for Gas Supply reasonable.

Planning and Engineering

UIL Gas Design and Delivery and SCG gas distribution planning and engineering appear to be well organized with the right resources. RCG/SCG LLC chief concerns are with the standardization of materials and equipment, and the process for estimating work. SCG's engineering function could use a higher percentage of engineers supporting their design and estimating activities.

Reliability, Construction, Maintenance, and Operations

The overall SCG distribution reliability is very good and improving as low pressure areas are converted to pressure systems and the mains replacement program progresses. SCG's distribution construction and maintenance operation is reasonably well managed and extremely responsive to leak calls. While there is no formal work management system, as of this writing, they move crews out of the yard very efficiently, but appear to be less consistent in their field productivity management than CNG.

Financial Operations

Finance Organization

SCG's financial support comes from the UIL Holdings shared service organization under the vice president and controller. While the support and the personnel involved are good, the current organization is still in transition following the December 2015 acquisition of UIL Holdings including SCG and needs to be finalized and communicated.

Treasury, Corporate Finance, and Capital Structure

SCG exhibits adequate financial strength as evidenced by their strong balance sheets, access to financing, and solid credit ratings. Both SCG and its sister company CNG, however, have expanded capital spending significantly over the past few years to fund new business and accelerate the replacement of cast iron and bare steel mains. These larger capital requirements will result in growing capital needs and additional rate relief starting with SCG in 2018.

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Even though AVANGRID, Inc. (NYSE: AGR) was spun off from Iberdrola S.A. in December 2015, Iberdrola S.A. (Madrid: IBE), a major European utility based in Spain, still owns 81.5% of AVANGRID. Accordingly, the major credit ratings agencies still consider Iberdrola's corporate credit quality in establishing AVANGRID, Inc. and its major subsidiaries' credit ratings.

Tax

The Southern Connecticut Gas Tax function is well managed and effective and consistent with the needs of the utility. This has resulted in a culture of providing continuous improvement, and accurate and timely filings with a reasonably trained staff.

Human Resources

The human resources organization structure at AVANGRID is consistent with industry practices. It is structured to support the AVANGRID business strategy. It uses HR specialists at SCG headquarters and is consistent with HR best practices. Employee safety performance, diversity and inclusion programs, the variable compensation programs, the number of labor agreements, talent drain and succession planning, and the HR leadership transition are HR's current challenges.

HR Organization

The HR team follows industry standard policies and practices and develops specific programs to address the strategic and tactical needs of the business. Its use of HR specialists at SCG is consistent with HR best practices. Contract services are used consistently with industry practices. Much of the work completed by the HR organization is at the level of best practices. There is no HR leadership dedicated to UIL, but the Senior Director position is expected to be filled in the next several months.

Compensation Policies, Practices and Programs

Compensation strategies, policies, practices and programs for AVANGRID's gas executives, salaried, and hourly employees are consistent with standard industry practices. AVANGRID handles these practices with impartiality, expertise, and a high level of integrity. The total rewards organization and the independent outside compensation consultants have designed and appropriately monitor all the compensation components. However, the target level of variable compensation for non officer salaried employees is lower than industry practice.

Employee Benefits Including Pension Plan, 401K, and OPEBs

AVANGRID total rewards (compensation and benefits responsibility) organization is centralized under the AVANGRID chief HR officer. The director of total rewards is directly

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responsible for the compensation and benefit strategies at AVANGRID networks. The execution of the benefits strategy is the responsibility of the director of benefits.

AVANGRID's employee benefit offerings for health, welfare, and retirement plans are consistent with industry practices and competitive with the marketplace to attract and retain current and future talent. Negotiations with the union locals have been completed to bring the benefit plan into alignment and reduce the overall cost of providing benefits into the future.

Succession Planning, Leadership Identification, Employee Development and Evaluation

RCG/SCG LLC believes the AVANGRID succession planning, leadership identification, and employee development process is consistent with industry best practices. However, implementation at AVANGRID has not been completed below the executive level. As a result of the retirement and resignations associated with the recent merger, AVANGRID is finding it necessary to seek external candidates to fill key senior level position, such as the Director of HR in Connecticut.

Training

Employee training was coordinated, developed, and/or delivered effectively. However, the training paper recordkeeping process needs to be updated to an electronic process consistent with industry practices.

Labor and Employee Relations

Labor and employee relations is staffed with experienced professionals who handle their responsibilities effectively while maintaining a good working relationship with the two major bargaining units (three labor contracts) covering the union employees of SCG. However, AVANGRID does not have a long term strategy to combine the labor unions.

Workforce Planning and Staffing

AVANGRID takes a proactive approach to manpower planning by analyzing their workforce and anticipating their current and future staffing needs, taking into account leadership needs, skills gaps, and diversity goals. Their practice uses a comprehensive assessment of future needs, such as detailed turn over analysis, early identification of high potential employees, identifying future talent needs, and either developing those talents internally or specifically targeting hiring to address the need. However, their planning does not have a link to any work management activities.

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EEO/AA

At AVANGRID, equal employment opportunity (EEO) compliance and affirmative action (AA) planning is accomplished in conjunction with corporate compliance activities associated with the code of conduct. AVANGRID complies with the letter of the law regarding ethics, EEO compliance, and AA planning. Senior management is notified by e mail on the annual performance of the AA plan. While no diversity or inclusion programs are currently implemented at AVANGRID, they have said they are working on re instituting focus on diversity and inclusion in 2017.

Employee Safety

SCG's employee safety performance has not met AVANGRID's management expectations and goals for the last five years. However, executive and management's stated business priorities, reinforced by the safety metrics established for management, demonstrated that improving employee safety performance is no longer a concern.

Payroll Practices

AVANGRID's payroll practices are consistent with industry standards. The process has few manual steps and is not very labor intensive. The time and attendance system was replaced two years ago with workforce software that has the capability to handle all the payroll rules associated with the labor union contract. This change has improved the process and reduced the number of overtime payment errors associated with labor contract interpretation by the employees.

The payroll processing practices are consistent with utility processes with limited field force access to computers. Although AVANGRID is rolling out mobile devices and associated applications it does not have any plans to upgrade to the mobile workforce software application. This will continue the practice of field force time being entered by office personnel.

CUSTOMER SERVICE

SCG responds efficiently to customer requests, issues accurate and timely bills, receives payments, and administers low income programs through multiple channels in a professional, cost effective manner. The area requiring the most attention is in the collection of delinquent accounts for hardship customers causing increased expense and longer receivables over 120 days.

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Call Center Operations

SCG handles customer requests through their call center infrastructure in a professional, cost effective manner; service levels have degraded and volumes have grown over recent years but with budget increases and other focused changes, service levels are improving in 2016.

Credit & Collections and Low Income Programs

SCG has made operational improvements in their collections practices and management, realizing reductions in operational write offs. However, non hardship customers' receivables over 60 days have grown while total receivables have been reduced.

Billing Practices

RCG/SCG LLC concluded that the SCG billing processes are using leading practices that result in timely and accurate billing and remittance processing while also continuing to seek ways to improve the operation by leveraging external service partners.

Meter Reading and AMI

SCG's meter reading is completed on a timely basis with highly accurate readings in a cost effective manner, and continues to improve the operation whenever possible.

Service Theft

SCG does an effective job in pursuing and prosecuting service theft incidents identified through field personnel but continues to rely on reactive techniques for discovery and hasn't effectively used customer messaging for deterrence.

Customer Self Service Technologies

SCG is continually looking for ways to expand customer use of self service technologies to keep pace with the evolving preferences of various customer groups.

Customer Complaints and Inquiry Handling

SCG does an effective job tracking and resolving customer complaints and inquiries.

Customer Satisfaction and Customer Experience

SCG has multiple customer survey instruments in place to provide customer feedback, but they provide little actionable feedback that can be used in plan and invest in customer satisfaction improvement initiatives.

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EXTERNAL RELATIONS

SCG demonstrates effective management of timely message development, administration, and distribution both externally and to employees.

SUPPORT SERVICES

Risk Management

AVANGRID and Avangrid Networks (or Networks) are doing a very credible job to facilitate the oversight of risk management within SCG. Senior executives are actively involved in risk management through risk committees, detailed procedures are in place to drive the steps to manage and mitigate risks, and metrics are in place to monitor performance in key risk areas. One missing component our team identified as critical to gas system safety risk mitigation was a geospatial information system (GIS) system for SCG. Especially given the extensive construction investments in new and replaced pipeline over the next ten years, accurately capturing system attributes is critically important.

Legal

The legal department is generally well managed and serves SCG properly with a large portion of their activities outsourced. But it could be further strengthened with expansion of their written procedures, enhanced goal setting, and the use of a periodic audit of outside counsel's guideline adherence.

Facilities Management

Based on our review of the facilities management guiding documentation, goals, objectives, and performance measurement, RCG/SCG LLC believes that AVANGRID manages its facilities adequately.

Fleet Management

Based on our review of the fleet operations' stated strategy, goals, objectives, and performance measurement, RCG/SCG LLC believes that AVANGRID, for the most part, appropriately manages its transportation services and effectively addresses the SCG's fleet needs. The management of inventory and maintenance records, however, needs improvement.

Document Management

RCG/SCG LLC has found that the AVANGRID's document management practices are consistent with their current policy. However, the current policy and practices are not in alignment with AVANGRID's centralized governance approach.

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Materials Management

Overall, AVANGRID's material management organization (purchasing and logistics) effectively and efficiently manages its purchasing process. Logistics effectively stores and moves materials and supplies to meet the current and future emergency, maintenance, and capital needs of gas operations and the contractors supporting the gas system expansion effort. The key opportunity for improvement and cost reduction is in the standardization of stock codes and material standards across SCG and CNG and the automation of stock out tracking and reporting. Additionally, since neither SCG nor CNG uses bar coding and/or RFID to identify and track its materials, RCG/SCG LLC believes a study of this technology should be undertaken to determine if it can be cost beneficial to be adopted.

Information Technology

AVANGRID's I/T is organized appropriately and consistent with its strategy. I/T has access to senior leadership to ensure I/T solutions are consistent with corporate strategies and the strategic needs are receiving appropriate priority of resources. However, the SCG I/T user community's I/T expectations and current I/T needs are different than those expressed by the I/T organization and has resulted in a level of dissatisfaction in the delivery of I/T services.

Security

AVANGRID's security is organized appropriately and consistent with its strategy. It has access to senior leadership to ensure security solutions are consistent with corporate strategies and the strategic needs are receiving appropriate priority of resources. Leading I/T cyber security measures have been implemented to protect against unauthorized access to sensitive information and/or systems. Periodic internal and external audits are performed to confirm the adequacy of the cyber security and physical security measures. Removal of physical access for terminated employees is an improvement opportunity.

10.1 Affiliate Transactions & Cost Allocation

The Company uses an appropriate cost allocation process that emphasizes direct charging but includes a cost allocation where direct charging is impractical.¹

10.2 Hurdle Rate and CIAC

New business and gas expansion programs are generally well managed. Economic analysis models and the assignment of non firm margin funds to support the programs are also

¹ Response to Data Request EXE012 CNG-SCG Attachment 1.

appropriately applied. However, difficulties in estimation of customer gas usage and construction costs create program challenges.

10.3 Treatment of New Customers for System Expansion Programs

The policies implemented by SCG in selecting the service rates for new customers under the system expansion program are appropriate. We believe clarity should be provided for company employees and through Salesforce system enhancements to adequately capture the various scenarios under which a customer may change their service requirements.

Conclusions and Recommendations

Specific conclusions and recommendations for each of the focus areas follow:

3. Executive Management

3.1 Organization and Planning

Conclusion 3.1.1: *RCG/SCG LLC believes that SCG has a reasonable system to track the 2010 audit recommendations contained in the audit firm's 2010 report and has adequately addressed these recommendations where appropriate and still applicable.*

3.2 Governance and Organization Structure

Conclusion 3.2.1: *RCG/SCG LLC believes governance model is poorly defined and along with its organization it is still in transition and easily misunderstood. In general, while the Grants of Authority clarify decision making, the post merger environment is lacking clear direction, communications, and ownership of elements and lacks a consolidated, written Transition Plan Manual. RCG/SCG LLC also believes that the potential consolidation of SCG with its sister company CNG would provide efficiencies and be in the interest of ratepayers.*

Conclusion 3.2.2: *RCG/SCG LLC believes that while limited to operational and new business area, the High Level Priorities are appropriate, well thought out, and result in improved operations, growth of their gas business, and improved customer service.*

Recommendation 3.2.1: *RCG/SCG LLC recommends that a written Transition Manual be developed clearly defining the new organization structure, roles and responsibilities, systems and processes, and outlining the procedures to be implemented.*

Recommendation 3.2.2: *RCG/SCG LLC recommends that the charter of the AVANGRID Management Committee and the Iberdrola, S.A. duties of its Operating Committee be reviewed, clarified, and communicated as part of a training program to ensure that there is no conflict*

with autonomous governance model of UIL Holdings and to eliminate any current misconceptions throughout the Connecticut utilities' organizations.

Recommendation 3.2.3: *RCG/SCG LLC recommends that a potential consolidation of SCG and CNG be reexamined (with a timeline, including, a detailed cost benefit analysis, the definition and method to overcome any union or other impediments, organizational modifications, and other planning & implementation elements) and re introduced to PURA.*

3.3 Internal Auditing

Conclusion 3.3.1: *RCG/SCG LLC found that the Company adequately addressed the 2010 recommendations regarding the consideration of audit subjects that had been not reviewed in the past five years.*

Conclusion 3.3.2: *RCG/SCG LLC found that SCG does not have a separate internal audit group. Internal audit was provided through UIL, now it is provided through Avangrid. The reporting lines of AVANGRID's Internal Audit Function are appropriate.*

Conclusion 3.3.3: *RCG/SCG LLC found that the IA is well organized and adequately staffed with qualified auditors and management.*

Conclusion 3.3.4: *RCG/SCG LLC found that the original UIL internal auditing group needs technical auditors to support in technical audits, they enlist the appropriate consulting services or individuals from appropriate AVANGRID function.*

Conclusion 3.3.5: *RCG/SCG LLC found that individuals in IA are qualified and participate in continuing professional education.*

Conclusion 3.3.6: *RCG/SCG LLC found that the audit planning process is appropriately risk based and audits are identified and prioritized based upon input from across the organization.*

Conclusion 3.3.7: *RCG/SCG LLC found that the audit execution and follow up processes are rigorous, well defined, and appropriate.*

Conclusion 3.3.8: *RCG/SCG LLC found that the internal audits, performed from 2011 through 2015, demonstrated that the Company's internal audit program ensures independent verification of the accuracy of accounting information and provides objective evaluation (and improvement) of the accounting and operational practices of the Company. However, a full audit of Gas procurement was last done in 2011. UIL has performed two audits of the "Gas Conversion Estimation Process" the first in 2013 and the second just completed in February 2016, but the estimation process remains flawed.*

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Conclusion 3.3.9: *RCG/SCG LLC found that the group monitors and compares itself to industry best practices. It participates in regular peer reviews and adheres to the Institute of Internal Auditors Standards and the Code of Ethics.*

Conclusion 3.3.10: *RCG/SCG LLC found that the Company has a sound process for tracking open audit recommendations and control deficiencies.*

Recommendation 3.3.1: *RCG/SCG LLC recommends that IA ensures that the SCG auditing needs are met going forward, as IA's responsibility expands to cover all AVANGRID business units.*

Recommendation 3.3.2: *RCG/SCG LLC recommends that IA evaluate the proper frequency of performing a full audit of gas procurement.*

Recommendation 3.3.3: *RCG/SCG LLC recommends that IA continue to actively review annually the "gas conversion estimation process." In addition, review the use of the non funded margin reserve account for reasonableness.*

3.4 Strategic Planning

Conclusion 3.4.1: *RCG/SCG LLC found that the recent corporate strategic planning is in its infancy, and for the immediate future, the strategic effort appears to be focused on system and performance metric management and identifying best practices. The 2016 Operational Business Plan is the likely surrogate with some refocusing of its priorities.*

Conclusion 3.4.2: *RCG/SCG LLC found that SCG through UIL and AVANGRID appear to be focused on best practices across all the related gas business units; therefore, the effort is more tactical than visionary.*

Conclusion 3.4.3: *RCG/SCG LLC found that outside of the established CES program, there is not a current strategy to develop other competitive new markets that could better use the existing gas distribution system.*

Conclusion 3.4.4: *RCG/SCG LLC found that management needs to continue its efforts to broadcast the objectives below the UIL management level. The SCG mission is reasonably clear; both executive and senior management understand the mission and general objectives, but there are areas within SCG where the message is not receiving the full support necessary to convey its importance.*

3.5 O&M Budget Process

Conclusion 3.5.1: RCG/SCG LLC determined that O&M budget development is consistent with the practices employed by many utility companies and supports financial control. Further, SCG is effective in controlling costs to budget as indicated by small budget variances.

Conclusion 3.5.2: RCG/SCG LLC found that O&M budget development can be enhanced to better support performance management and better provide justification for the proposed spending levels.

Recommendation 3.5.1: RCG/SCG LLC recommends that SCG enhance the O&M budgeting process to incorporate activity based management principles, including the budgeting of work volume and developing target unit costs. Target unit costs should consider unit cost performance across AVANGRID companies, if not across other gas companies where such data is available. Variance reports should present variances in work volumes and in unit cost performance, along with appropriate variance explanation.

3.6 Capital Budgeting Process

Conclusion 3.6.1: RCG/SCG LLC determined that when viewed on a program or project category basis, SCG has shown fairly wide variances in spending relative to capital budgets as it has expanded spending in new business and pipeline replacement programs.

Conclusion 3.6.2: RCG/SCG LLC found that SCG has experienced relatively wide variations in capital spend as compared to estimates at the project level. These variations are associated with poor estimation (discussed here) and likely issues associated with work execution (discussed further in the System Operations section of the report).

Conclusion 3.6.3: RCG/SCG LLC found that aside from project level estimating challenges, the overall capital budgeting processes and controls are very good.

Conclusion 3.6.4: RCG/SCG LLC found that there are opportunities to improve the use of unit cost management in gas construction projects to support capital budget development and performance management.

Recommendation 3.6.1: RCG/SCG LLC recommends that SCG continue to provide targeted focus to monitoring its construction estimating accuracy, identifying root causes of variation, improving estimating practices using the various tools identified in this Conclusion, and further monitoring project execution practices to determine whether project cost overruns are impacted by these practices.

Recommendation 3.6.2: RCG/SCG LLC recommends that SCG use work volumes and unit cost information to support capital budget development, variance reporting based on work volume

variances and unit cost variances, and for performance management. Further, unit cost targets for budgeting should be used consistently for similar work and in similar conditions across Avangrid Networks gas distribution companies – that is, considering best performers in target setting.

4. System Operations

4.1 Requirements Forecasting

Conclusion 4.1.1: *No recommendations in the Company's prior audit apply to the Forecasting Department.*

Conclusion 4.1.2: *RCG/SCG LLC determined that the Rates and Regulatory Department uses an appropriate process to develop a forecast to meet the requirements of the financial and regulatory organizations for its present customers. There is a collaborative relationship with the Gas Supply function for the development of the peak day forecast.*

Conclusion 4.1.3: *RCG/SCG LLC reviewed the Company's methodology to forecast the expected effects of the Comprehensive Energy Strategy (CES) within Sections 10.2 and 10.3 of this report. However, the linkage between Sales and Marketing and Rates and Regulatory should be strengthened to draw on the forecasters' strengths and insights.*

Conclusion 4.1.4: *RCG/SCG LLC is concerned that there is no formal, integrated approval process for the forecast, which includes significant inputs from both Rates and Regulatory (existing) and Sales and Marketing (CES).*

Conclusion 4.1.5: *RCG/SCG LLC determined that Rates and Regulatory reviews forecast accuracy (forecast to weather normalized sales), and RCG/SCG LLC reviewed the pattern of variance and considers that the forecast is reasonable based on existing constraints and meets the needs of the Company's financial and regulatory organizations.*

Conclusion 4.1.6: *RCG/SCG LLC has determined that the function of forecasting is executed similarly at both CNG and SCG except as needed to meet some minor disparate regulatory situations.*

Recommendation 4.1.1: *RCG/SCG LLC recommends, because of its expertise and existing responsibility for the existing customer forecast, the Company should assign Rates and Regulatory the responsibility to review the CES forecast prepared by Sales and Marketing. Additionally, the combined forecast should be reviewed at the executive level before it is formally issued. This*

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change will ensure the input of Sales and Marketing is tightly coordinated with the existing customer forecast and the resulting forecast meets the needs of the Company.

4.2 Gas Supply

Conclusion 4.2.1: *RCG/SCG LLC has determined that the Gas Supply Department has met the requirements of its recommendations from the prior SCG audit.*

Conclusion 4.2.2: *RCG/SCG LLC has determined that the Gas Supply Department has reasonably defined supply portfolio principles, goals, and objectives to ensure continuity of supply.*

Conclusion 4.2.3: *RCG/SCG LLC has determined that the Gas Supply Department uses appropriate processes to obtain transportation capacity to meet long term needs.*

Conclusion 4.2.4: *RCG/SCG LLC has determined that the Gas Supply Department has defined process for managing its transportation capacity.*

Conclusion 4.2.5: *RCG/SCG LLC has determined that the Gas Supply Department has a defined process for developing and obtaining commodity at a reasonable cost.*

Conclusion 4.2.6: *RCG/SCG LLC considers the risk management function for Gas Supply reasonable with the exception of the location of credit approval. While there is some concern that the negotiation and approval of contracts resides within the purview of the Senior Director of Energy Supply, the volume of reporting, independent calculation and review by Accounts Payable and specifically the PGA process is reassuring when coupled with the volume of Internal Auditing process activity and PURA's lack of adverse findings.*

Conclusion 4.2.7: *RCG/SCG LLC found that Gas Supply does not have specific, documented emergency plans for contingencies and did not document a formal or detailed lessons learned or post event analysis.*

Conclusion 4.2.8: *RCG/SCG LLC found, based on the above, that it considers the Company's actions towards reducing LAUFG reasonable but suggests that the Company should review its methodology to confirm it is up to date, paying specific attention to unbilled volumes.*

Conclusion 4.2.9: *RCG/SCG LLC has determined that the Purchased Gas Adjustment (PGA) process is reasonable.*

Conclusion 4.2.10: *RCG/SCG LLC has concluded that Gas Supply is relying excessively on experience and knowledge rather than documenting important processes and procedures.*

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Conclusion 4.2.11: *RCG/SCG LLC has determined that opportunities exist to more effectively use the planning assets and experience in Gas Supply.*

Conclusion 4.2.12: *RCG/SCG LLC has determined that the Gas Supply process is executed similarly at both CNG and SCG except as needed to meet the different pipeline access situations between the companies.*

Recommendation 4.2.1: *RCG/SCG LLC recommends Gas Supply update its critical skills review, succession planning and training plans on a regular basis due to small size of the Gas Supply group and the specific expertise required for day to day operations and dealing with the regulatory environment.*

Recommendation 4.2.2: *RCG/SCG LLC recommends Gas Supply execute a rigorous, detailed process to determine which processes and procedures should be documented and which related information should be tracked. Gas Supply is responsible for a significant portion of the Company's costs and areas such as off system sales and capacity release, the interruptible process and emergency planning are either not documented or out of date. These processes have significant potential impacts on customers.*

Recommendation 4.2.3: *RCG/SCG LLC recommends Gas Supply execute a rigorous, detailed process to determine the capabilities of its various models, how inputs (including variances and scenarios) are structured, whether forward looking studies should be performed, how the results are catalogued and retained, and consider whether the functions of some models can be performed within other existing model(s). Gas Supply should consider engaging an internal or external consultant to perform this review, which would also consider training recommendations. Gas Supply relies on the experience and knowledge and expertise of its small staff to perform this work, which may place the Company at risk due to employee turnover or other unplanned situations.*

Recommendation 4.2.4: *RCG/SCG LLC recommends the Company update its LAUF methodology and determine the appropriate time period to estimate and report LAUF with due regard to the variability of unbilled sales.*

4.3 Planning and Engineering

Conclusion 4.3.1: *RCG/SCG LLC found that SCG management has begun implementing the recommendations for Gas System Planning and Engineering listed in the 2010 Management Audit, but needs to accelerate the implementation of these recommendations. See RCG/SCG LLC recommendations following this section.*

Conclusion 4.3.2: *RCG/SCG LLC found that SCG's engineering function is staffed with more associates and lacks a reasonable engineering complement due to unfilled engineer vacancies.*

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Conclusion 4.3.3: RCG/SCG LLC found that both SCG and CNG with UIL prepare system forecasts for peak degree day heating using the Stoner Model to evaluate the integrity of the gas distribution systems.

Conclusion 4.3.4: RCG/SCG LLC found that both SCG and CNG with UIL incorporate distribution problem areas in the system planning process.

Conclusion 4.3.5: RCG/SCG LLC found that SCG still has a number of areas where they operate low pressure (approximately seven inches of water column.) SCG has addressed several of the most troublesome areas, but there still exists about 820 miles of facilities operating at low pressure. Management is addressing these areas through their cast iron/ bare steel replacement program which has not been addressed in the existing rates.

Conclusion 4.3.6: RCG/SCG LLC concluded that both SCG and CNG need to improve their estimating practices to minimize the final dollar value of projects falling outside the plus/minus 10% range and increase the number of projects estimated correctly. SCG estimating is less accurate than CNG's estimates

Conclusion 4.3.7: RCG/SCG LLC concluded that another reason for overruns is the difficulty with soil conditions and contractor oversight on change orders or additions to work scope.

Conclusion 4.3.8: RCG/SCG LLC concluded SCG are not taking full advantage of UIL's well conceived Project Management Manual.

Conclusion 4.3.9: RCG/SCG LLC concluded that SCG, through the Gas Construction function, was not consistently assigning early in the plan–design–build process a project manager who can shepherd a project through the review process and provide critical oversight during design and construction.

Conclusion 4.3.10: RCG/SCG LLC concluded SCG LNG operations and capital betterment program are reasonable and well thought out for the size of each company.

Conclusion 4.3.11: RCG/SCG LLC concluded that both SCG and CNG need to standardize across the companies all material, equipment, and procedures for designing and building their distribution systems.

Recommendation 4.3.1: RCG/SCG LLC recommends that SCG continue the implementation of its 2010 management audit recommendations and where appropriate update those to address the concerns identified during this audit.

Recommendation 4.3.2: RCG/SCG LLC recommends that SCG revisit the cost of contractor dig ins and ensure that they include all the costs associated with their crew's efforts to restore the system and not adversely impact the cost of planned maintenance or capital work the crews were

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performing. SCG should consider some form of disincentive to promote contractor's awareness of facilities in and around their work sites.

Recommendation 4.3.3: *RCG/SCG LLC recommends that SCG follow the direction of UIL and add additional degreed engineering personnel.*

Recommendation 4.3.4: *RCG/SCG LLC recommends that SCG continue its vigilant watch for low pressure areas on their respective distribution systems.*

Recommendation 4.3.5: *RCG/SCG LLC recommends that AVANGRID UIL Gas Engineering redesign both SAP's Pay IDs and engineering design tools to better reflect the true cost of construction projects.*

Recommendation 4.3.6: *RCG/SCG LLC recommends that both CNG and SCG participate in non AVANGRID benchmarking studies every three years.*

Recommendation 4.3.7: *RCG/SCG LLC recommends that SCG and CNG develop a common methodology to capture the respective territories' unique soil conditions at a sub regional level and require direct input for municipal induced cost elements before approving design estimates.*

Recommendation 4.3.8: *RCG/SCG LLC recommends that SCG adopt and adapt the entire UIL Project Planning Manual and Project Management Office approach for all large projects.*

Recommendation 4.3.9: *RCG/SCG LLC recommends both SCG and CNG through Corporate Gas Design and Delivery assign a Project Manager to large projects at the beginning of planning phase. Further, as part of the project approval process, institute two levels of management challenge to ensure alternate solutions have been considered and all costs are properly represented.*

Recommendation 4.3.10: *RCG/SCG LLC recommends SCG become more proactive with getting the necessary approval for up grading the Milford LNG facility.*

Recommendation 4.3.11: *RCG/SCG LLC recommends that SCG and CNG both, through Corporate Gas Design and Delivery, assign a Project Manager to large projects at the beginning of planning phase. Further, as part of the project approval process, institute two levels of management challenge to ensure alternate solutions have been considered and all costs are properly represented.*

Recommendation 4.3.12: *RCG/SCG LLC recommends the engineering and construction work to complete the standardization between CNG and SCG within the next two years.*

Recommendation 4.3.13: *RCG/SCG LLC recommends SCG require direct input for municipal induced cost elements before approving design estimates.*

4.4 Reliability, Construction, Maintenance, and Operations

Conclusion 4.4.1: RCG/SCG LLC found that SCG management has implemented some of the recommendations for System Operations and Maintenance listed in the 2010 Management Audit. However, there is still fair amount of work to be done in work management and performance monitoring.

Conclusion 4.4.2: RCG/SCG LLC concluded that the centralization and use of a focused contractor allows Leak Management to produce consistent results. However, contractor dig ins are all too frequent.

Conclusion 4.4.3 RCG/SCG LLC concluded the corrosion management is reasonable for SCG.

Conclusion 4.4.4: RCG/SCG LLC concluded that field crew Planning and Scheduling activity is a manual process with no formal expectations for time to perform the work. The morning flow is very streamlined and conducted under the watchful eye of management.

Conclusion 4.4.5: RCG/SCG LLC concluded that SCG crew short cycle work orders are inconsistent with other utility companies; orders don't include man hour estimates to complete projects.

Conclusion 4.4.6: RCG/SCG LLC concluded that SCG supervisory management of crews while in the field needs to be enhanced to ensure work orders are completed in safe and efficient manner. Further, agreed upon lunch breaks are followed in the field personnel.

Conclusion 4.4.7: RCG/SCG LLC concluded that the SCG Service Center is well situated to minimize crew windshield time for the territory covered. This may change with the gas expansion program and may require new locations, satellite locations, or at a minimum redeployment of crews.

Conclusion 4.4.8: RCG/SCG LLC concluded that SCG is outsourcing most construction work and a number of other functions that could impact its system's knowledge base. SCG doesn't have GIS, so asset information needs to be maintained on their digital maps.

Recommendation 4.4.1: RCG/SCG LLC recommends that SCG formalize the Planning and Scheduling of Gas Construction and Maintenance to permit better control over the crew workday. Create a formal one week look ahead for work orders.

Recommendation 4.4.2: RCG/SCG LLC recommends that SCG immediately adopt placing the estimated man hours on all work orders to help set expectations for both crews and management

performance and to minimize cost overruns resulting from inappropriate crew configurations. Supervisors will manage to these hour estimates.

Recommendation 4.4.3: *RCG/SCG LLC recommends SCG devote more time in the field to managing crew performance on assigned planned projects.*

Recommendation 4.4.4: *RCG/SCG LLC recommends that SCG and CNG develop a common strategy and methodology for annually re evaluating service center satellite locations in light of the aggressive expansion program. Focus of the methodology should be on minimizing both crew windshield and leak response times.*

Recommendation 4.4.5: *RCG/SCG LLC recommends that CNG and SCG develop a common methodology for capturing specifics of soil conditions and obstacles found by both contractors and company crews. In addition, both companies should capture municipal requirements traffic control and post dig in street and landscaping restoration. We understand that CNG is using GIS and SCG is using digital mapping, but the form of the information should be the same regardless of the mapping storage medium.*

Recommendation 4.4.6: *Accelerate the investments in GIS for SCG. As a first step, confirm the new data model or adapt from the existing CNG data model so it is clear what kind of asset attributes are important to capture. Develop other means for capturing the data that will ultimately be required for the SCG GIS system when implemented. Given the aggressive construction programs over the next five to ten years, we believe accelerating investments in GIS, including the planned upgrades to GIS for CNG, is in the best interests of CNG and SCG customers.*

5. Financial Operations

5.1 Finance Organization

Conclusion 5.1.1: *RCG/SCG LLC believes that SCG has a reasonable system to track the 2009 external audit recommendations contained in the NorthStar Consulting June 2010 final report related to the financial functions and has adequately addressed these recommendations where appropriate and still applicable. In addition, the Internal Audit recommendations are tracked, managed, and responded to appropriately.*

Conclusion 5.1.2: *RCG/SCG LLC believes that SCG is served well by the Shared Services Controller's financial operations organization; however, given the transition to its new post merger organization, specific areas of responsibility and ownership for functional components need to be finalized from the top of the organization and communicated throughout the company.*

Conclusion 5.1.3: *RCG/SCG LLC found that the financial area personnel participate in a reasonable level of training and have annual individual performance assessments to maintain an appropriate and strong level of talent; however turnover, workforce aging, and a current shortage of personnel is a challenge as it would be for any company.*

Conclusion 5.1.4: *RCG/SCG LLC found that the policies and procedures that are in place are used and useful, but benchmarking or best practice programs are currently limited. In addition RCG/SCG LLC found that the Main SAP system used by the financial shared services organization is not the upgraded version used by AVANGRID and has a number of disadvantages. RCG/SCG LLC believes that upgrading to the newer version is necessary and should be planned as soon as possible.*

Recommendation 5.1.1: *RCG/SCG LLC recommends that consideration be given to expand the current Internal Audit activity within UIL established during the earlier audit to include the Shared Services Controller function.*

Recommendation 5.1.2: *RCG/SCG LLC recommends for the benefit of all stakeholders that, beginning at the AVANGRID level, the financial group's ultimate organization, and functional roles and titles be finalized and communicated.*

Recommendation 5.1.3: *RCG/SCG LLC recommends that steps be taken by the Shared Services UIL Controllers organization to fill any positions that are still needed and reauthorized once the transitioned organization is finalized. Consider establishing a mentoring process to capitalize on the experience levels that exist.*

Recommendation 5.1.4: *RCG/SCG LLC recommends that a detailed needs analysis of upgrading to the SAP System currently being used by AVANGRID be performed to ensure this particular upgrade and timing are justified; a cost benefit analysis should be performed, and if warranted, coupled with a formal implementation plan.*

Recommendation 5.1.5: *RCG/SCG LLC recommends that a Benchmarking and Best Practices program be designed and implemented for the entire UIL Shared Services financial functional area.*

5.2 Treasury, Corporate Finance, and Capital Structure

Conclusion 5.2.1: *RCG/SCG LLC found that the management process and systems used within the firm's Treasury function is reasonable and yields effective results even with an unclear organizational alignment.*

Conclusion 5.2.2: RCG/SCG LLC found that while the full write off of the Customer Rate Credits in 2015 skewed the numbers, SCG's financial statistics are reasonable and in some cases better than the norms in its industry.

Conclusion 5.2.3: RCG/SCG LLC found that SCG has and plans to maintain an appropriate capital structure to optimize the cost of capital for ratepayers while still preserving adequate financial strength and ready access to additional capital as needed. However, rate relief will have to be approved over the next few years to fund the companies' growing capital spending programs.

Conclusion 5.2.4: RCG/SCG LLC found that both SCG and its sister company, CNG, have and maintain appropriate credit ratings that enable them to access additional capital at reasonable rates and terms. The Connecticut Public Utilities Regulatory Authority (PURA) has been supportive of both companies by supporting an equity component that is higher than industry average.

Conclusion 5.2.5: RCG/SCG LLC found that because AVANGRID, Inc. is still 81.5% owned by Iberdrola S.A. of Spain, its credit rating is still influenced significantly by the credit rating and outlook of Iberdrola.

Recommendation 5.2.1: RCG/SCG LLC recommends that the current UIL Holdings Treasury & Cash Management Process be reviewed and revised as needed and expanded to include the Virtual Money pool, the Avangrid Credit Facility, and the bi lateral Loan Agreement procedures.

5.3 Accounting

Conclusion 5.3.1: RCG/SCG LLC found that the while not benchmarked or having a Best Practice Review, accounting systems, processes and staffing in support of SCG's accounting, tax, and reporting needs are effective yielding reasonable results for the time being but, as concluded earlier, manual process and International requirements will require a system upgrade. Further the Accounts Payable area is well managed but does not have a Priority Vendor program in place.

Recommendation 5.3.1: RCG/SCG LLC recommends that consideration be given to performing a SCG Best Practices and Benchmarking effort, perhaps by the Strategy Team, focused on the Shared Services Accounting function.

Recommendation 5.3.2: RCG/SCG LLC recommends that a Priority Vendor program be established within SCG and its sister CNG to increase the number of vendors capable of working within guidelines developed regarding Vendor Automation requirements.

5.4 Tax

Conclusion 5.4.1: RCG/SCG LLC found that the Tax Department supporting SCG operates efficiently, takes steps to continuously add value and improve, has adequate and trained staff, and has generally performed well without either tax filing issues or negative Audit Results.

Conclusion 5.4.2: RCG/SCG LLC found that the process used to ensure accurate and timely submission of tax returns was reasonable and effective.

Conclusion 5.4.3: RCG/SCG LLC found that the training of the Tax staff was adequate to ensure that the skills and awareness of current and pending tax regulation changes.

6. Human Resources

6.1 HR Organization

Conclusion 6.1.1: RCG/SCG LLC found that the HR organization thinks, plans, and acts strategically and is organized to meet to support these efforts. However, implementation of HR policies and programs is impacted by the lack of HR leadership focused on UIL and SCG.

Conclusion 6.1.2: RCG/SCG LLC found that the HR team is strategic, expert, passionate, and committed. They employ industry standard HR practices and procedures. In spite of the lack of local leadership and a strong emphasis on labor relations at the HR Specialist level, they provide creative, legal, and good results.

Recommendation 6.1.1: RCG/SCG LLC recommends that the AVANGRID HR leadership position be filled as soon as practicable and a set of HR directed operational objectives be targeted for completion within the first 90 days.

Recommendation 6.1.2: RCG/SCG LLC recommends that the HR Balanced Scorecard contain a Diversity/Inclusion metric.

6.2 Compensation Policies, Practices and Programs

Conclusion 6.2.1: RCG/SCG LLC found that AVANGRID's compensation strategy, policies, components, and procedures are consistent with industry experience and practice.

Conclusion 6.2.2: RCG/SCG LLC found the utility is effectively using benchmarking for its total compensation for executives, supervisors, professional, and hourly workers.

Conclusion 6.2.3: RCG/SCG LLC found AVANGRID's compensation practices to be mostly consistent with good business and utility practices except for the short term incentive target levels for non officer salaried employees.

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Conclusion 6.2.4: RCG/SCG LLC found HR's management and control of the performance evaluation is consistent with industry practices.

Recommendation 6.2.1 RCG/SCG LLC recommends that the short term incentive (variable compensation) component target of the total cash compensation for all non officer salaried employees be increased consistent with benchmark variable compensation data and with maintaining a competitive range of total cash compensation.

6.3 Employee Benefits Including Pension Plan, 401K, and OPEBs

Conclusion 6.3.1: RCG/SCG LLC found AVANGRID's benefits packages for current employees of SCG and the associated pension/OPEB/401k practices are in line with those of other Connecticut utilities and industry practices.

Conclusion 6.3.2: RCG/SCG LLC found that AVANGRID has been proactive in seeking opportunities to reduce the overall cost of their benefit offerings and the cost impact of the Pension, 401k, and OPEB Plans serving SCG employees.

6.4 Succession Planning, Leadership Identification, Employee Development and Evaluation

Conclusion 6.4.1: RCG/SCG LLC found AVANGRID has a well defined formal succession planning process (Talent Cycle) that integrates talent identification and employee development. The approach is consistent with best practices. The process includes the identification of key positions, of high potential employees and the associated development process to address the "brain drain" associated with baby boomer retirements. However, RCG/SCG LLC found succession planning and associated development planning and implementation has not been communicated and therefore very few management employees are aware of the succession plan for their position.

Recommendation 6.4.1: RCG/SCG LLC recommends that AVANGRID complete the Talent Cycle process as planned for year 2017, update it annually thereafter, and communicate to the management organization that the process has been complete and succession candidates have been identified for key positions.

6.5 Training

Conclusion 6.5.1: RCG/SCG LLC concluded that the enterprise training is developed and conducted using industry practice techniques.

Conclusion 6.5.2: RCG/SCG LLC found the Compliance training is completed annually. The paper based recordkeeping of completed operations compliance training, however, is inconsistent with leading industry practices.

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Recommendation 6.5.1: *RCG/SCG LLC recommends that the compliance training completion records for training completed by SCG be entered into the centralized recordkeeping system immediately following such training.*

6.6 Labor and Employee Relations

Conclusion 6.6.1: *RCG/SCG LLC determined that the AVANGRID labor relations organization is appropriately staffed with experienced professionals, provides a dedicated labor professional to handle the SCG's two labor contracts, and has completed work stoppage planning.*

Conclusion 6.6.2: *RCG/SCG LLC found that the labor agreements do not contain barriers to increased productivity, increased work flexibility, and increased use of contractors.*

Conclusion 6.6.3: *RCG/SCG LLC found the number of labor relations contracts and local unions is not consistent with companies the size of SCG and may pose a future barrier to management's potential effort to consolidate the operations of SCG and CNG.*

Conclusion 6.6.4: *RCG/SCG LLC found that all filling of vacancies are reviewed and approved by HR to determine the need for a replacement and the most effective way to meet the need.*

Recommendation 6.6.1: *RCG/SCG LLC recommends that the AVANGRID develop a long term strategy to consolidate the union employees of SCG and CNG into one labor union and contract.*

6.7 Workforce Planning and Staffing

Conclusion 6.7.1: *RCG/SCG LLC concluded that SCG management met the intent of the two 2010 SCG Management Audit recommendations.*

Conclusion 6.7.2: *RCG/SCG LLC found that AVANGRID's Human Resources Strategic Workforce Plan and the associated processes to be comprehensive and consistent with the employment environment utilities are currently encountering.*

Conclusion 6.7.3: *RCG/SCG LLC found that AVANGRID's staffing budget process is focused on current headcount and future turnover and does not integrate with any work management or project management forecasts and/or programs.*

Recommendation 6.7.1: *RCG/SCG LLC recommends that SCG integrate their work management and project management staffing requirements and forecasts formally into the staffing budgeting process.*

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6.8 EEO/AA

Conclusion 6.8.1: RCG/SCG LLC found that AVANGRID's EEO/AA policies and procedures comply with the letter of the law. However, it is lacking any programs directed at Diversity or Inclusion, which is necessary to reach to best practices.

Recommendation 6.8.1: RCG/SCG LLC recommends that AVANGRID develop a Diversity and Inclusion program consistent with Best in Class Companies that reaches well beyond compliance and addresses any cultural barriers to full inclusion in employment for all qualified candidates and employees. Such Program must include an annual formal presentation to the senior leaders of AVANGRID and a report back to all employees.

6.9 Employee Safety

Conclusion 6.9.1: RCG/SCG LLC concluded that the AVANGRID has the strategies, policies, and procedures in place and consistent with industry practices; the roles and responsibilities are clearly delineated; and the safety personnel are executing their responsibilities. However, in some of the functional areas at SCG, operational management is not executing their responsibilities effectively as reflected in the safety results.

Conclusion 6.9.2: RCG/SCG LLC concluded that improving employee safety performance is no longer a concern of AVANGRID's gas executive team and SCG.

Recommendation 6.9.1: RCG/SCG LLC recommends that AVANGRID HR Safety Team Goal include a metric tied to improving safety performance at SCG. Such a metric target should be safety performance at a level that is at least in the second Quartile of AGA Gas Company benchmarking companies.

Recommendation 6.9.2: RCG/SCG LLC recommends that SCG's executive and management scorecards used in their performance appraisal system and variable compensation include a metric tied to improving safety performance at SCG. Such metric target should be safety performance at a level that is in at least the second Quartile of AGA Gas Company benchmarking companies.

6.10 Payroll Practices

Conclusion 6.10.1: RCG/SCG LLC found the time and attendance collection and processing practices are consistent with those of utilities having similar penetration of computers in their field operations. The time and attendance process has few manual steps.

Conclusion 6.10.2: RCG/SCG LLC found that supervisory review and approval process is working well and has kept the payroll errors to a minimum.

Conclusion 6.10.3: *RCG/SCG LLC determined that payroll processing of time data requires a minimum amount of data checking and correction.*

Conclusion 6.10.4: *RCG/SCG LLC found the use of payroll direct deposits is high for an organization that does not require all employees to use it. However, the printing of payroll advice summaries for union employees enrolled in direct deposit is inconsistent with industry practices.*

7. CUSTOMER SERVICE

Conclusion 7.0.1: *RCG/SCG LLC concluded that SCG has met the intent of the 2010 management audit recommendations. Eight recommendations were made in the Customer Service Operations area of the audit.*

7.1 Call Center Operations

Conclusion 7.1.1: *RCS/SCG LLC has identified how SCG addressed the 2010 audit recommendations regarding the call center in the beginning of the Customer Service chapter above.*

Conclusion 7.1.2: *RCS/SCG LLC found that SCG's Call Center has experienced increased call volumes over recent years, with degraded service levels, while staffing budgets have remained consistent.*

Conclusion 7.1.3: *RCS/SCG LLC has concluded that SCG has put in place reliable technology to provide customers with self service options for many of their requests, helping to offload voice calls to agents for customers to handle their requests via self service options.*

Recommendation 7.1.1: *RCG/SCG LLC recommends an analysis be undertaken to better understand why SCG call volumes have increased in recent years, specifically who's calling (in order to create a better understanding of market segments), why they're calling, what alternatives are available today or could be created to self serve, proactive techniques to provide requested information before a phone call is made, or avoid the request. In addition, in conjunction with the recommendations from section 7.2 of this chapter, Credit & Collections and Low Income Programs, it's important to gain insight into how much the financial hardship policies are affecting the call volumes.*

Recommendation 7.1.2: *RCG/SCG LLC recommends a thorough analysis be conducted to evaluate consolidation of call centers, perhaps initially in a virtual manner across gas and/or electric companies in Connecticut or across Avangrid Networks companies and then evaluate physical consolidation of centers across the Avangrid Networks business, insuring the Ring Fence*

Agreement² commitment remains. Potential benefits include economies of scale across staffing models, deeper competencies across major business functions, and better leverage of strategic technologies. As part of the analysis, seeking customer feedback on service functions they might have an interest in that isn't currently available with smaller, individual company budgets, and it should be identified along with a pro forma financial model of the economic differences in distributed, virtually consolidated, and physically consolidated (multiple centers for back up and overflow) call centers. Challenges to consolidation will continue to involve multiple unions and other corporate issues that will need to be addressed.

Recommendation 7.1.3: *RCG/SCG LLC recommends enhancements to existing technology platforms and delivery of additional functions that will enhance the customer experience with the utility, improve service delivery, offload calls to self service, and lower overall costs for customer support. Recommendations include improving the corporate web site to provide more personalized information and enable functions on the web site and/or mobile platform for service requests including self service move in/move out, appointment scheduling, payment arrangements, and payment extensions. Through ongoing customer dialogue, identification of what's important to customers should be carried out and how they want to be informed (potentially proactively) of areas such as alerts or notifications that a bill is due or past due, the ability to make a payment on a mobile device, or awareness of field work in a customer's neighborhood that will impact their service.*

7.2 Credit & Collections and Low-Income Programs

Conclusion 7.2.1: *RCG/SCG LLC did not find any recommendations for Credit & Collections/ Low Income programs resulting from the 2010 SCG Company audit.*

Conclusion 7.2.2: *RCG/SCG LLC concluded that the SCG Credit & Collections team has reduced the level of write offs and billing that have gone into the current year's collections expense over recent years to be more in line with other natural gas companies in the northeastern United States.*

Conclusion 7.2.3: *RCG/SCG LLC concluded that Low Income programs are administered properly by SCG but contribute to the difficulty in experiencing a higher collections success rate.*

Conclusion 7.2.4 *RCG/SCG LLC concluded that accounts receivable for non hardship customers have grown longer and larger in recent years than might have been anticipated.*

Recommendation 7.2.1: *RCG/SCG LLC recommends that SCG should continue to pursue the identified collection improvement initiatives as well as benchmark other gas and non energy*

² Interview J Earley, May 5, 2016

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consumer based industries to refine best practices in the activities of notifying customers, analyzing which customers to pursue, and reducing write offs. SCG needs to maintain focus on non hardship financial customers to reverse the trend of longer accounts receivables for this segment.

Recommendation 7.2.2: *RCG/SCG LLC recommends that, without regulatory change to Connecticut's low income programs, SCG evaluate and conduct a thorough and detailed analysis to identify initiatives and evaluate the cost/benefits of various proactive and innovative programs to lower the financial burden on the utility and its ratepayers by reducing expected losses from uncollectible expenses of hardship customers and/or reducing extended accounts receivables. Some of these programs might include:*

- *Means testing for medical hardship;*
- *Leveraging digital channels, especially with low income customers, as many don't have home phones any more, with proactive alerts that might include SMS/text notifications for balance due, minimum balance due, apply for an extension, balance past due, shut off notifications rather than paper (opt in that can be gained through waiving fees at some earlier point);*
- *Reviewing deposit program, especially for students, to include a parental or guardian guarantor after determining how many students from financially stable families have their accounts end up delinquent and/or written off;*
- *Conducting analytics to better understand customer situations to identify early warning signals that might indicate that something more definitive should be done by the utility earlier;*
- *Conduct an ongoing analysis to review those customer accounts that have been in hardship status for more than one year to better understand how long they've participated, success rates, and total outstanding balance averages for this group;*
- *Modifying the regulatory reimbursement levels for the utility and potentially float with fuel charges or price of natural gas to change the levels of reimbursement; and*
- *Conducting analyses of customer profiles that are in financial hardship status evaluating their home (age, vintage of furnace and/or water heater, size, usage of gas vs. other similar homes), income levels, etc. and develop a program to retro fit a certain number of homes per year to reduce their wasted energy usage and lower the home's future bills.*

7.3 Billing Practices

Conclusion 7.3.1: *There were no 2010 audit recommendations for the Billing Practices area.*

Conclusion 7.3.2: *RCG/SCG LLC concluded that billing generation is done in a timely and accurate manner.*

Conclusion 7.3.3: *RCG/SCG LLC found that SCG remittance processing is using industry leading practices, resulting in timely and accurate customer payment processing. They also offer payment options comparable to leading industry participants.*

Recommendation 7.3.1: *RCG/SCG LLC recommends redesigning the bill, including sister company's bills with the appropriate variety of individual company logos, to personalize messaging to customers whether they receive paper or eBills. Additionally, enhancing the eBill, potentially an interactive bill delivered via email or SMS, and offering a different experience may drive more customers to higher adoption rates. Recently, eBill adoption has stagnated and even reversed.³ Customers constantly seek new information and innovative vehicles for reviewing information and satisfying requests. Messaging on the bills can drive eBill adoption, other utility programs, safety, seasonal or storm planning, etc. Additionally, where possible, offering electronic payments for customers who don't adopt eBills will help drive more electronic payments for customers. Currently, only customers subscribed to eBill are able to make recurring payments electronically. Online and/or regular payments have been proven to reduce delinquent payments for some customers.*

Recommendation 7.3.2: *RCG/SCG LLC recommends evaluating a consolidation of the billing clerks across gas and/or electric companies to gain economies of scale.*

7.4 Meter Reading and AMI

Conclusion 7.4.1: *RCG/SCG LLC did not identify any 2010 audit recommendations made for the meter reading area.*

Conclusion 7.4.2: *RCG/SCG LLC concluded that the meter reading function accurately reads the vast majority of meters each month in a timely manner.*

7.5 Service Theft

Conclusion 7.5.1: *RCG/SCG LLC did not find any recommendations for Service Theft resulting from the 2010 audit.*

³ Response to Data Request CS015, page 34.

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Conclusion 7.5.2: *RCG/SCG LLC concluded that SCG has a reasonable process and adequately staffed function within Credit & Collections for pursuing and stopping identified service theft.*

Conclusion 7.5.3: *RCG/SCG LLC concluded that many of SCG's practices for identifying service theft are traditional and reactive in nature, highly dependent on field employees in the course of their field activities to come across, evidence of theft. As AMI/AMR meters in place have now limited the amount of time Company employees are exposed to the meters, alternative and complementary methods for identification may make the process more effective and deliver better results.*

Recommendation 7.5.1: *RCG/SCG LLC recommends SCG develop a program to coordinate with local media and regularly publicize through social media, billing messages, the corporate website and other forums stories about gas service theft to serve as a deterrent due to the chances of being caught, legal consequences, and safety issues. In parallel messages, it is important to make potential customers aware of assistance programs that may be available to them if having trouble paying their bill.*

Recommendation 7.5.2: *RCG/SCG LLC recommends preemptive research and sophisticated analytics be developed and used to identify potential theft that is unidentified by field personnel.*

Recommendation 7.5.3: *RCG/SCG LLC recommends SCG put in place more thorough tracking of not only activities but also the results of service theft investigations, including final outcomes, revenues lost, and re captured revenue.*

7.6 Customer Complaints and Inquiry Handling

Conclusion 7.6.1: *RCG/SCG LLC found one recommendation from the 2009 Audit that has yet to be addressed, the institution of a gas marketer Complaint Log.*

Conclusion 7.6.2: *RCG/SCG LLC concluded that SCG handles customer complaints and inquiries in a manner consistent with leading industry practices.*

Recommendation 7.6.1: *RCG/SCG LLC recommends that SCG continue to drive down complaint sources across the corporation through root cause analysis. Additionally, there is no common tracking/follow up system that is used by the company across the immediate Complaint team that others can view, such as call center supervisors. RCG/SCG LLC recommends deploying a complaints management system that creates follow up actions, reports progress, and notifies owners of pending actions to be taken.*

7.7 Customer Satisfaction and Customer Experience

Conclusion 7.7.1: RCG/SCG LLC concluded that SCG has contradictory satisfaction research that is also inadequate for identifying what customers want in areas identified for improvement since there is an insufficient level of details on findings to prescribe what and how to change.

Conclusion 7.7.2: RCG/SCG LLC concluded that SCG does not have effective instruments in place to track customer satisfaction on an ongoing basis versus once a year, preventing them from discerning trends or reactions to events or intentional changes in service offerings or delivered.

Conclusion 7.7.3: While RCG/SCG LLC was not aware of any major emergencies in recent years, SCG appears well positioned to communicate effectively both internally and externally during any such event.

Conclusion 7.7.4: RCG/SCG LLC found that SCG coordinates across functions in speaking with the public in the areas of public events, corporate activities, energy conservation, and safety.

Recommendation 7.7.1: RCG/SCG LLC recommends that SCG conduct deeper research to gain customer insight into where their customer base gets information about Company programs and status. Additionally, this insight should offer deeper understanding to how and where customers would like to satisfy requests such as starting service, paying bills, and reviewing consumption. As enhancements are made to existing processes in the call center or self service channels, it's important to gauge regular and ongoing feedback from customers to discern how changes were received and if adjustments are necessary.

Recommendation 7.7.2: RCG/SCG LLC recommends that for the annual customer satisfaction surveys conducted, more dialogue and detailed analysis be added in order to better understand why customers feel more or less satisfied with specific offerings, interactions, and messages. Without more detailed clarity, it will be difficult to improve specific and overall satisfaction levels or understand what moves the needle up or down.

7.8 Customer Self-Service Technologies

Conclusion 7.8.1: RCG/SCG LLC has concluded that SCG is well positioned for continuing to expand their self service technologies to improve their customers' experience and hold expenses in check.

Recommendation 7.8.1: RCG/SCG LLC recommends that a focused study/analysis be undertaken to put in place a detailed plan for prioritization, digital design, the case for change and deployment of self service technologies based on customer preferences, economic impact, strategic fit, and least risk/easiest to do to determine prioritization.

8. EXTERNAL RELATIONS

Conclusion 8.1.1: RCG/SCG LLC concluded that SCG has met the intent of the 2010 management audit recommendation. One recommendation was made in the Marketing area of the audit.

Conclusion 8.1.2: RCG/SCG LLC found the groups comprising the External Affairs function (Sales & Marketing, Regulatory Affairs, Governmental Relations, Corporate Communications, and C&LM) for the Company work in close conjunction with each other and other customer facing organizations preparing focused and effective messages, developing forward thinking messaging and promotions strategies, and delivering them through diverse mediums.

Conclusion 8.1.3: RCG/SCG LLC found sales and marketing efforts around CES are outstanding and continue to influence results in the Company's gas territory and across the state through regulatory and legislative influence.

Conclusion 8.1.4: RCG/SCG LLC has concluded that even though many of the External Affairs' organizations are focused across Avangrid Network companies, little negative impact will be experienced by local customers and in fact, by leveraging deeper subject matter expertise across a larger group, such as corporate communications, the customer experience will be better and communications more effective.

Recommendation 8.1.1: RCG/SCG LLC recommends that the Company expand efforts to leverage more digital channels in the future. This includes more personalized messaging for Sales & Marketing to residential prospects or customers. It also includes expanding social media to increase the number of followers from hundreds to multiple thousands. This will provide more consistent and timelier communications to those customers choosing to follow, as this population continues to grow. This will also contribute to the improved awareness of what SCG and Avangrid Networks are doing in the community, and of conservation programs offered, and should contribute to overall customer satisfaction. This will require further analysis on how to and when to promote these channels in order to heighten adoption rates.

9. SUPPORT SERVICES

9.1 Risk Management

Conclusion 9.1.1: RCG/SCG LLC found that the Risk Management group is organized to provide senior management attention to Risk Management.

Conclusion 9.1.2: RCG/SCG LLC found that the Risk Management group has established extensive policies and procedures to support Risk Management for the AVANGRID companies. Further, the company has an excellent process for measuring and monitoring risk.

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Conclusion 9.1.3: *RCG/SCG LLC determined that Risk Management is doing a good job in efforts to “embed” itself within the business units to help them manage risks.*

Conclusion 9.1.4: *RCG/SCG LLC determined that the AVANGRID Business Continuity Planning (BCP) has adequate policies, procedures, and processes. These policies and procedures are implemented and followed by the Companies.*

Recommendation 9.1.1: *RCG/SCG LLC recommends SCG provide more detailed risk mitigation action steps and assignments in its risk register tracking mechanism, consistent with company policy.*

9.2 Legal

Conclusion 9.2.1: *RCG/SCG LLC found that, based on a review of the limited number of departmental policies and procedures, the legal process, and their outside counsel retention and billing guidelines, SCG’s legal affairs are managed reasonably. But additional policies and procedures appear to be necessary to ensure the fundamental legal, ethical, and company supportable requirements are followed.*

Conclusion 9.2.2: *RCG/SCG LLC concluded that while clear goals were available in the past that were measurable and part of the balanced scorecard, they were not always challenging and often based on essentially doing their routine job and resulting in positive but easily achievable stretch targets even with a shortage of staff. In addition, as a result of the merger of UIL Holdings Corporation and Iberdrola USA (Now AVANGRID), the 2016 goals, objectives, and performance metrics still remain under development.*

Conclusion 9.2.3: *RCG/SCG LLC found that with the significant amount of legal outsourcing, the need to control outside firms is critical and the Legal department uses reasonable systems, guidelines, contracts, and oversight to effectively manage the outsourced services and control costs.*

Recommendation 9.2.1: *RCG/SCG LLC recommends that the Legal Department conduct a comprehensive needs analysis to determine the need and appropriate wording for a comprehensive set of written procedures and policies, serving as a ready reference, reflecting today’s requirements and providing clear legal, ethical, and company supported direction to the entire UIL organization and ensuring appropriate consistency throughout AVANGRID itself.*

Recommendation 9.2.2: *RCG/SCG LLC recommends that the Legal Department work to develop a set of performance metrics with executive buy in to trend and measure using a SMART (specific, measurable, achievable, relevant, and time based) methodology. These metrics can feed into the Balanced Scorecard program, which will encourage continual performance improvement, progress reviews, and management reporting.*

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Recommendation 9.2.3: *RCG/SCG LLC recommends that in light of the Legal Department's dependency on outside legal counsel and its reliance on the Retention and Billing Guidelines for Outside Counsel, consideration be given to having an audit of the actual application of the Guidelines by at least two currently contracted firms.*

General Services

9.3 Facilities Management

Conclusion 9.3.1: *RCG/SCG LLC found that the AVANGRID Facility organization is well qualified and appropriately organized to meet AVANGRID's facilities management needs.*

Conclusion 9.3.2: *RCG/SCG LLC found that the AVANGRID Facility Management organization has adequate departmental policies and procedures, goals, objectives, and space planning guidelines, and regular internal client feedback to meet the facilities management needs of the SCG.*

Conclusion 9.3.3: *RCG/SCG LLC found that AVANGRID has taken steps to reduce substantially its environmental impact at its facilities.*

9.4 Fleet Management

Conclusion 9.4.1: *RCG/SCG LLC found that Fleet operations have adequate policies and procedures. However, adherence to these procedures in the area of accounting control and data maintenance is lacking.*

Conclusion 9.4.2: *RCG/SCG LLC determined that Fleet is appropriately organized and logically located to meet SCG's requirements. However, Fleet does not use any workload driven staffing analysis.*

Conclusion 9.4.3: *RCG/SCG LLC found that the Fleet has adequate departmental goals and objectives. However, cost per fleet unit and vehicle utilization additionally needs to be tracked and reported out to management.*

Recommendation 9.4.1: *RCG/SCG LLC recommends that Fleet implement the AVANGRID staffing analysis process that calculates staffing requirement based on project work volumes.*

Recommendation 9.4.2: *RCG/SCG LLC recommends that Fleet add to their metrics a cost per unit measure and vehicle utilization measure.*

9.5 Document Management

Conclusion 9.5.1: *RCG/SCG LLC concluded that Records Management's policies and procedures are adequate.*

Conclusion 9.5.2: *RCG/SCG LLC concluded that Records Management policies and procedures are inconsistent with the AVANGRID centralized governance approach, and do not address electronic record creation and electronic conversion of paper records.*

Recommendation 9.5.1: *RCG/SCG LLC recommends that AVANGRID develop a policy to govern the maintenance of electronic documents and the electronic scanning of critical paper documents not housed in fire retardant waterproof storage within the AVANGRID facilities.*

9.6 Materials Management

Conclusion 9.6.1: *RCG/SCG LLC found that AVANGRID has adequate policies and procedures for its procurement and materials processes. However, several IT opportunities have yet to be addressed.*

Conclusion 9.6.2: *RCG/SCG LLC found that the AVANGRID Materials Management has appropriate department planning and uses appropriate means to monitor success in meeting the needs of SCG and performing beyond industry performance. However, there was little evidence of commitment to move beyond industry level performance.*

Conclusion 9.6.3: *RCG/SCG LLC found that materials management warehouse facilities and space utilization are within expected norms.*

Recommendation 9.6.1: *RCG/SCG LLC recommends that AVANGRID standardize the gas material stock codes for similar materials and move to one stock code list for all gas materials.*

Recommendation 9.6.2: *RCG/SCG LLC recommends that AVANGRID automate the stock out tracking of gas materials.*

Recommendation 9.6.3: *RCG/SCG LLC recommends that AVANGRID re assess the cost benefit of implementing either Bar Coding or RFID material tracking for all gas materials.*

Recommendation 9.6.4: *RCG/SCG LLC recommends that AVANGRID take the recommended next steps to move its Purchasing function to maturity, specifically with regard to risk identification and communication, towards the best in class maturity level.*

9.7 Information Technology

Conclusion 9.7.1: *RCG/SCG LLC concluded that the AVANGRID I/T organization's policies, systems and procedures are consistent with industry practices and address the appropriate aspects of the business's I/T.*

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Conclusion 9.7.2: RCG/SCG LLC concluded that I/T has in place operational KPIs and project management tracking consistent with industry practices. However, they do not periodically survey the satisfaction of their end users.

Conclusion 9.7.3: RCG/SCG LLC concluded that the newly implemented AVANGRID I/T organizational structure is consistent with industry best practices and should improve I/T's ability to address project management needs associated with the long term projects while continuing to service the short term needs of current end users. However, the role of the I/T Business Relationship Manager for SCG needs to be better defined and his reporting location changed to better meet the needs of the gas businesses.

Conclusion 9.7.4: RCG/SCG LLC concluded that AVANGRID's I/T technology and major systems in place and under development/roll out should be effective in addressing the strategic needs of SCG. However, the post roll out support from the user's perspective has been limited and affects the full utilization of the applications.

Conclusion 9.7.5: RCG/SCG LLC concluded that the SCG has access to I/T project funding and support.

Conclusion 9.7.6: RCG/SCG LLC concluded that SCG use of mobile devices is inconsistent with industry practices and AVANGRID's Mobile Device Rule.

Recommendation 9.7.1: RCG/SCG LLC recommends that AVANGRID's I/T organization perform a periodic (bi annual) end user satisfaction survey.

Recommendation 9.7.2: RCG/SCG LLC recommends that the role of the I/T Business Relationship Manager for SCG be better defined and that his reporting location be changed to meet the I/T needs of the gas businesses.

Recommendation 9.7.3: RCG/SCG LLC recommends that each software system implemented at SCG have a designated super user to support the day to day utilization of the systems including the production of Crystal reports against the systems' database.

Recommendation 9.7.4: RCG/SCG LLC recommends SCG adopt the AVANGRID Mobile Device Rule.

9.8 Security

Conclusion 9.8.1: RCG/SCG LLC concluded that AVANGRID Security function has adequate departmental policies and procedures. These policies and procedures address the appropriate aspects of security, including extensive information on cyber security, physical security, and fire safety.

Conclusion 9.8.2: RCG/SCG LLC concluded that AVANGRID Physical Security function is well planned and executed at SCG. However, the timely termination of access control for terminated employees' needs improvement.

Recommendation 9.8.1: RCG/SCG LLC recommends AVANGRID Security compare the HR list of terminated employees/contractors regularly against the active access control listing to ensure the terminated employees/contractors do not have access control.

10. SPECIAL TOPICS

10.1 Affiliate Transactions & Cost Allocation

Conclusion 10.1.1: RCG/SCG LLC determined the Company has an adequate cost allocation system and policies and procedures for affiliate transactions.

Conclusion 10.1.2: RCG/SCG LLC determined the Company's cost allocation methodology is appropriate for assigning shared services costs from UIL Holdings Corporation to the operating utilities.

Conclusion 10.1.3: RCG/SCG LLC found SCG does not have unregulated operations. Accordingly, there is no concern that ratepayers are unduly subsidizing an unregulated subsidiary.

Conclusion 10.1.4: RCG/SCG LLC found SCG has employee codes of conduct that oblige employees to adhere to company affiliate transaction and cost allocation policies.

Conclusion 10.1.5: RCG/SCG LLC found Internal Audit periodically reviews adherence to UIL Holdings Corporation Cost Accounting Methodology Manual.

Conclusion 10.1.6: RCG/SCG LLC concluded that the Company applies reasonable costs for services.

Recommendation 10.1.1: RCG/SCG LLC recommends that the internal audit group schedule an audit every two years to review the cost allocation manual and process and other affiliate transactions to ensure (1) that actual practice does comply with the governing documentation and (2) that the governing documentation does indeed cover all current activity. In addition, the biennial internal audit should determine whether SCG has developed new cost allocation bases for certain shared service functions that are more accurate than the Massachusetts formula.

Recommendation 10.1.2: RCG/SCG LLC recommends that the Company continue to participate in additional industry studies or develop their own peer group analysis of shared services costs to ensure appropriate levels of service costs.

Recommendation 10.1.3: *RCG/SCG LLC recommends SCG consider, where practical, other cost allocation bases besides the Massachusetts Formula to distribute certain costs more effectively.*⁴

10.2 Hurdle Rate and CIAC

Conclusion 10.2.1: *RCG/SCG LLC found SCG efforts to forecast new customer growth are reasonable considering the conditions of market prices for oil and natural gas.*

Conclusion 10.2.2: *RCG/SCG LLC determined the tool used by SCG to evaluate economic feasibility of new business projects (the Hurdle Rate Model) is reasonable and it is applied appropriately.*

Conclusion 10.2.3: *RCG/SCG LLC found the application of the Non Firm Margin (NFM) program to encourage oil to gas conversion by CNG and SCG is appropriate including the selection process undertaken by the companies.*

Conclusion 10.2.4: *RCG/SCG LLC reasoned that economic feasibility analyses for new business projects should be considered with caution due to estimating accuracy issues associated with customer gas usage and construction costs. As a consequence, there are risks that certain projects would have been rejected if estimates were more accurately reflected in the models.*

Recommendation 10.2.1: *RCG/SCG LLC recommends as suggested by Concentric Energy Advisors, SCG continue to pursue root cause analyses to determine reasons for missing estimates both on the customer gas usage side and on construction cost estimates. On the latter, recommendations were provided in the Capital Budgeting Processes section of this report. Regarding the estimation of customer gas usage, we recommend the consideration of using a professional econometrician, perhaps a professor at a local college, to explore other models and algorithms to better predict customer gas usage. While the focus would be on the residential side, perhaps additional modeling can be done as well on the C&I side.*

10.3 – Treatment of New Customers for System Expansion Programs

Conclusion 10.3.1: *RCG/SCG LLC found SCG company policies and procedures to select the appropriate rate schedules for gas expansion customers and classifying those customers for meeting ten year gas conversion goals are mostly appropriate, but we recommend clarity and change of policy in a few instances.*

Recommendation 10.3.1: *RCG/SCG LLC recommends SCG should provide clarity on the application of standard versus SE rates to new customers as part of the system expansion*

⁴ <https://www.aga.org/knowledgecenter/natural-gas-101/natural-gas-glossary/m>

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program. The “eleven scenarios” do not adequately capture all the nuances of customer changes in service requirements. Clarity on these rules would minimize errors in application of these rates.

With regard to classifying customers as system expansion customers, we believe rules should be followed similar to the decision framework used for determining applicable rate schedules, and that an inactive meter beyond one year is not a distinction of importance. As well, customers that experience increases in load beyond 150 Mcf per year should not be counted as system expansion customers.

To assist with the clarity of policies, the following steps should be taken:

- Salesforce CRM should be configured to follow the company policies including the nuances described in this report. Questions should be posed in the application to trigger the proper treatment.
- Rate schedules should be modified to include adequate descriptions to fit these rules regarding when an SE rate would apply (and when it would not apply).
- The policies described in this report should be periodically reviewed by Internal Audit to assess compliance.

2. INTRODUCTION

Background

The State of Connecticut Public Utilities Regulatory Authority (PURA) retained River Consulting Group, Inc. and Raymond G Saleeby, LLC (RCG/SCG LLC) to perform a diagnostic management audit of Southern Connecticut Gas Company (“SCG” or “Company”).

SCG, established in 1847, is a wholly owned subsidiary of UIL and now Iberdrola under the name AVANGRID Inc. serves customers as a regulated natural gas distribution company. SCG delivers natural gas to approximately 185,000 customers in 23 towns in central Connecticut. SCG has annual revenues of approximately \$314 million in 2015 and \$1,021 billion in total assets.

AVANGRID Inc. (NYSE: AGR) is a diversified energy and utility company with more than \$30 billion in assets and operations in 25 states. The company operates regulated utilities and electricity generation through two primary lines of business.

- AVANGRID Networks includes eight electric and natural gas utilities, serving 3.1 million customers in New York and New England.
- AVANGRID Renewables operates 6.3 gigawatts of electricity capacity, primarily through wind power, in states across the United States. AVANGRID employs 7,000 people.

AVANGRID Inc. was formed by a merger between Iberdrola USA and UIL Holdings Corporation in 2015. IBERDROLA S.A. (Madrid: IBE), a worldwide leader in the energy industry, owns 81.5% of AVANGRID Inc.

Objective and Scope

The objective of RCG/SCG LLC’s review included (1) an in depth investigation and assessment of the SCG’s business processes, procedures, and policies for management operations and system of internal controls in place and (2) an identification of areas of the Company that might require further investigation.

The scope of RCG/SCG LLC’s management audit included eight focus areas:

- Executive Management,
- System Operations,
- Finance,
- Human Resources,
- Customer Service,
- External Relations,
- Support Service, and
- Special Topics.

During the course of RCG/SCG LLC's management audit, over 105 interviews were conducted and 715 data requests were reviewed. The team conducted eight field observation site visits, which included tours of the Company's LNG facilities in Milford, some field site visits to observe crews working in the field, a tour of the CNG's service center and warehouse facility in Orange. RCG/SCG LLC interviewed AVANGRID, UIL, and SCG senior management.

Approach

RCG/SCG LLC's management audit methodology allowed the Company the opportunity to explain their processes fully while providing to the auditors the means to observe, question, and otherwise interact with key personnel to ensure complete understanding of the business practices. For each of the eight focus areas, RCG/SCG LLC prepared initial data requests to examine the documentation produced from the business and by which the business operates. RCG/SCG LLC also scheduled interviews and provided interview guides, for key personnel to obtain information concerning (1) the communication/integration of corporate policy and activity, (2) departmental activity, (3) clarification of responses received through data requests, and (4) additional issues/questions generated through previous data requests and other interviews.

The data request/response process and interview scheduling was an iterative process based on the need for clarification to understand process and practice fully and for information concerning emerging potential issues.

Well into the data gathering activity of the project, but still overlapping it, the auditors began analysis of the information, including determining the efficacy and efficiency of operations as well as the possible effect of any potentially ineffective or inefficient activity. This report provides the results of that analysis along with recommendations to correct or alter any activities to move closer toward ideal performance.

Report Organization

The report is organized by focus area as noted under Scope (above). Within each focus area chapter, sections concerning major elements (groups, departments, initiatives, projects, etc.) are delineated. Each chapter is discussed, normally providing Objectives and Scope, Overall Assessment (in All Caps and Bold print), Evaluation Criteria (as applicable), Conclusions, Analysis and Recommendations. If a chapter has multiple sectional topics, the conclusions (and analysis) and recommendations will be provided by section. The report includes an appendix defining Acronyms.

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RCG/SCG LLC included the 27 Special Topics identified in the RFP for this project integrated into the focus areas of this report where applicable. The following list identifies those special topics by chapter in which their analysis appears.

Chapter 3 – Executive Management

- Interest Area 5 – Improve cost estimation

- Interest Area 6 – Potential Synergies

- Special Topic 7 – AVANGRID impact on SCG financial position

- Special Topic 12 – O&M Budget Process

- Special Topic 17 – Cost Control Functions (covered in 12 & 19)

- Special Topic 19 – Capital Budget Process

Chapter 4 – System Operations

- Interest Area 1 – Capacity Arrangements

- Interest Area 2 – Off system & Capacity optimizations

- Interest Area 4 – LNG

- Interest Area 5 – Improve cost estimation

- Special Topic 2 – Gas Commodity Procurement

- Special Topic 3 – Pipeline capacity Agreements

- Special Topic 4 – CT Comprehensive Energy Strategy (as it impacts Gas Forecasting & Supply)

- Special Topic 8 – Gas Supply Function

- Special Topic 13 – Construction Management Function

- Special Topic 15 – Lost & Unaccounted for Gas (also identified as Special Topic 5)

- Special Topic 17 – Cost Control Functions (Project Estimation and Management)

Chapter 5 – Finance

- Special Topic 5 – Treasury Function

- Special Topic 6 – Capital Structure

- Special Topic 7 – AVANGRID Impact on SCG Financials

- Special Topic 11 – Internal Audit Practices

- Special Topic 17 – Cost Control Functions

Chapter 6 – Human Resources

- Special Topic 16 – Payroll Practices

- Special Topic 20 – Pension Plan Comparisons

- Special Topic 21 – Post Retirement Benefits

- Special Topic 22 – 401K Savings Plan

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Chapter 7 – Customer Service

Special Topic 14 – Billing Practices

Special Topic 18 – Receivables Collection Process

Special Topic 24 – Costs & Sales Forecasting Techniques

Chapter 9 – Support Services

Special Topic 10 – Inventory Control Function

Chapter 10 – Special Topics

Special Topic 1 – Affiliate Transactions

Special Topic 9 – Cost Allocation Process

Special Topic 23 – Hurdle Rate

Special Topic 24 – Cost & Sales Forecasting Techniques

Special Topic 25 – Costs & Sales Large Variances

Special Topic 26 – CIAC

SPECIAL TOPIC (Add in) **Treatment of New Customers for System Expansion Programs**

3. EXECUTIVE MANAGEMENT

Objectives and Scope

The Executive Management audit area includes a review of AVANGRID'S and SCG's Parent (UIL) Board of Directors, officers, organization structure, strategic and corporate planning, corporate communications and control, administration, and regulatory compliance. In addition, it captures RCG/SCG LLC's review of the O&M and Capital budgeting process. Internal Auditing and the Parent Company impact on the financials and potential synergies.

The Company leadership including the Boards of Directors has a fiduciary responsibility to ensure the utility's overall direction, strategies and overall policies are both appropriate and contributing to health of the business. In addition, along with the CEO, it is the Board's responsibility to develop and maintain a system of Governance, and anticipate and respond to problems and opportunities.

RCG/SCG LLC believes that an effective executive management and governance approach should have:

- An experienced and knowledgeable Board of Directors (BOD) with appropriate committees to provide effective oversight and direction that benefit Connecticut gas customers and at least one board member who has specific knowledge of the history and environment that Connecticut utilities operate within;
- An executive management structure with the right people focusing on the needs of Connecticut customers, and with a willingness to make hard decisions;
- Leadership that sets high standards for themselves, their organization, and its people, and creates and communicates its vision;
- An executive team that assesses performance and develops and mentors those that will follow;
- A management team and strategic planning process properly focused on delivering the best service possible at a reasonable cost to Connecticut customers;
- A set of strategic plans and objectives grounded in delivering safe and reliable services at competitive prices to Connecticut customers;
- An effective corporate management process with strong oversight methods for addressing operational, legal, and regulatory issues coupled with formal performance reporting;
- A clear and defined budgeting process with a formal timetable and criteria;

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- Clearly articulated budgets reflecting the O&M needs of the gas distribution systems, generally expressed in formal programs (repair, cathodic protection, gas leak survey, etc.) with effective estimating and regular executive visibility and control of O&M budgets;
- Formal capital committee oversight with regular evaluation of the rate of spending and budget adjustments for unforeseen events; and
- A system planning process tied to capital budgets as well as expected new business growth predicted by load forecasting.

Overall Assessment

THE SOUTHERN CONNECTICUT GAS COMPANY IS GENERALLY WELL MANAGED. THERE ARE SEVERAL AREAS WITHIN SCG/UII GAS NETWORKS WHERE MANAGEMENT NEEDS TO FOCUS ITS ATTENTION IMPROVE THE OVERALL PERFORMANCE. AT THE TIME OF THE MANAGEMENT AUDIT RCG/SCG-LLC OBSERVED A NUMBER OF COMMON FUNCTIONS WHERE THERE WERE SIGNIFICANT DISRUPTIONS OF NORMAL OPERATIONS BROUGHT ABOUT BY THE INTEGRATION EFFORTS. THIS DISRUPTION IS SOMEWHAT EXPECTED DUE TO THE PROXIMITY OF THE AUDIT TIME FRAME TO THAT OF THE AVANGRID PURCHASE WHICH WAS COMPLETED IN DECEMBER OF 2015.

Evaluation Criteria

RCG/SCG LLC applied the following evaluation criteria to the executive management review. For uniformity, the capital and operations and maintenance (O&M) budgeting material is presented in the last sections of this chapter.

- To what extent did the Company implement its last audit recommendations?
- Are governance, organizational structure, missions, and relationships within The Company appropriate as they relate to the business model?
- Are organizational responsibilities for planning priorities and budgeting allocations reasonable and appropriate?
- Are the Board of Directors and executive and senior management appropriately involved in the development of budgeting guidelines and periodic budget reviews and approvals for the Company? Does the parent BOD devote adequate time to the business of the Company?
- Does Company management use appropriate measurable goals, metrics, key performance indicators, etc. to achieve the corporate mission and objectives, and the performance improvement process at successive levels of management?

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- Does management's performance comply with procedures and practices related to the scope of this audit (i.e., internal controls, internal audit function, and the Sarbanes Oxley Act) and are performance and compliance accurately reported?
- Are management performance and compensation programs in alignment with the corporate mission, objectives, and goals at all organizational levels?
- Does the Company appropriately and accurately factor its financial position and the level of its rates into the budgeting process?
- What is the Company's approach to competitive issues for new markets; i.e., what new markets are being considered by the Company, how would the costs for entry into those markets be funded, and would the Company's entry into those markets serve to help or hinder competition in those new markets?
- Is the corporate strategy documented? Is it forward thinking – visionary?
- Are the planning assumptions defined? Do they consider multiple scenarios – potential best, most likely, or worst scenarios for the future?
- Is the mission clear? Understood and embraced by employees?
- Are the values defined? Do employees understand what these values mean and what behaviors they should cultivate to be consistent with these values?
- Have the major strategic priorities been defined? Do the strategic priorities address such areas as fiscal viability and profitability, public trust, customer service, process improvements, organizational change, economic development for the region, environment, and initiatives to sustain continuous improvement and learning within the workforce?
- Are the plans updated to reflect changes, accomplishments, and lessons learned?
- What are the roles of the executive and senior management in the O&M budgeting process? What processes are used by the Board to oversee O&M budgets? What is the level of budget detail the Board sees and what are their responsibilities with regard to the budgets?
- What are the budgeting guidelines, practices, and procedures, including "zero-based" and other alternative methods?
- Is budgeting formally linked to strategic initiatives?
- Is there clear and independent oversight of O&M budgets all the way up to and including the BOD?

- Is there a formal process for handling emergency spending and integrating results into existing O&M budgets?
- What is the construction/capital priority setting process?
- How does the capital budgeting process function in the Company (including project authorization, project appropriation, increase/decrease of authorization /appropriation, capital budget status reporting, validation in advance of appropriation, funding controls, and other elements of the capital budgeting process)?
- How does management oversee and control capital budgeting (including the methodologies used to control and manage program and project capital costs in the near and long term; the annual process for reviewing and determining whether total capital planned expenditures are adequate; cost control systems and processes from both a top down and bottom up perspective; controls to ensure that increases and decreases to the construction budget/expenditures are justified and appropriately approved)?

3.1 Organization and Planning

Objective & Scope

Since the last audit in 2008, Iberdrola USA and UIL Holdings Corporation announced the closing of the merger between their companies in December 2015. The merger created a diversified energy and utility company with \$30 billion in assets and operations in 25 states. The company operates under the name AVANGRID, Inc., and it trades on the New York Stock exchange under the symbol AGR. AVANGRID has two primary business segments:⁵

- AVANGRID Networks combines the resources and expertise of eight electric and natural gas utilities with an \$8.3 billion rate base serving 3.1 million customers in New York and New England. SCG, through UIL Group and UIL Holdings, reports into this organization.
- AVANGRID Renewables operates 6.3 GW of generation capacity, primarily through 53 wind farms in 18 states which makes Avangrid Renewables the country's second largest producer of wind energy.

This merger could result in numerous positive changes for SCG and the other utilities that are part of Avangrid Networks.

⁵ AVANGRID 2016 Investor Day Presentation and www.avangrid.com/

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Transitioning to a new management structure and processes, following the merger, will for any company require communication, clear direction, and a sound plan that includes the need to operate the utility business in a sound, safe, and cost effective manner and unimpeded by the organizational and governance modifications that would assuredly occur.

Evaluation Criteria

RCG/SCG LLC applied the following evaluation criteria to the organization and planning review.

- To what extent did the Company implement its last audit recommendations?
- Are governance, organizational structure, missions, and relationships within The Company appropriate as they relate to the business model?
- Are organizational responsibilities for planning priorities and budgeting allocations reasonable and appropriate?

Conclusions

Conclusion 3.1.1: *RCG/SCG LLC believes that SCG has a reasonable system to track the 2009 audit recommendations contained in the audit firm's 2010 report and has adequately addressed these recommendations where appropriate and still applicable.*

Analysis

RCG/SCG LLC examined the 2010 SCG management audit recommendations made by NorthStar Consulting. A total of 29 recommendations were tabulated, some of which were to be addressed at the Parent level. RCG/SCG LLC reviewed the system and process used to manage their response to the recommendations that had been developed.

There were 29 recommendations shown in the NorthStar Management Audit⁶ of SCG:

- SCG agreed with 19.5 of the recommendations,
- 4 recommendations were no longer applicable
- They disagreed with 2.5 recommendations, and
- They partially agreed to 3 recommendations.

We reviewed each recommendation along with the rationale for disagreement or the plan to implement the recommended corrective actions. We also reviewed interim stages and the as completed explanation.

⁶ Response to Data Request GEN012 Attachment 2

For each of the recommendations acted upon, the ownership and planned action was reasonable. The implementations of the corrective actions were done on a timely basis with status reports often done quarterly and only one recommendation remained ongoing until the first quarter of 2016. Each of the recommendations that were acted upon was reported on until completed. We found that the recommendations and SCG actions were both aligned and resulted in appropriate solutions.

3.2 Governance and Organization Structure

Conclusions

Conclusion 3.2.1: *RCG/SCG LLC believes governance model is poorly defined and along with its organization it is still in transition and easily misunderstood. In general, while the Grants of Authority clarify decision making, the post merger environment is lacking clear direction, communications, and ownership of elements and lacks a consolidated, written Transition Plan Manual. RCG/SCG LLC also believes that the potential consolidation of SCG with its sister company CNG would provide efficiencies and be in the interest of ratepayers.*

Analysis

RCG/SCG LLC collected data covering mission of the organization and reviewed all organizational changes made within SCG, its Shared Service organization within UIL, and AVANGRID. In addition, we conducted interviews throughout the SCG organization and sought detailed organizational charts of all structural elements showing the current relationships, names, and titles and reporting chain in all Shared Service Groups working in any way with SCG.

In addition, RCG/SCG LLC reviewed the detailed governance structure including the UIL Holdings' Grants of Authority,⁷ the AVANGRID Management Committee and its charter,⁸ the Iberdrola SA Operating Committee along with its charter.⁹

The Governance model has established the SCG Board and the UIL Holdings Board as having the sole managerial and supervision responsibility for SCG and its sister company CNG. A UIL President and CEO was appointed by the UIL Board and authorized to control all business affairs within the context of a UIL Grants of Authority. Generally, it's said that final decisions related to management and operations of SCG are made by UIL or the executives at SCG. However, the charter of the AVANGRID Management Committee makes this less than clear.

⁷ Response to Data Request GEN017 Attachment 1 Grants of Authority

⁸ Response to Data Request GEN017 Attachment 2, the AVANGRID Management Committee Charter

⁹ Response to Data Request GEN017 Supplement Attachment 1 INTERNAL RULES ON COMPOSITION AND DUTIES OF THE OPERATING COMMITTEE

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AVANGRID has worked to ensure that subsidiary companies (UIL, SCG, and CNG) are reasonably coordinated and to help identify and disseminate intercompany best practices. The AVANGRID Management Committee was established in May of 2016 to provide technical, informational and management support to the AVANGRID CEO and an informative and coordinating role for the activities of the subsidiary Companies including SCG now referred to as within the AVANGRID Group. While this committee is said to be a non executive function committee, its charter makes this unclear to RCG/SCG LLC and SCG management. For example¹⁰ the committee is to provide support to the CEO of AVANGRID in the supervision of the AVANGRID Group to review and recommend to the Board action including purchases of goods and services greater than \$1 million, consulting services of any amount (excluding ordinary course of business such as lawyers for litigation), intercompany contracts and arrangements, top management appointments, and annual budgets.

In addition, Iberdrola S.A. has a corporate governance system which is sustained by three main pillars¹¹:

- *Iberdrola, S.A., a holding company, the main function of which is to act as an entity owning the equity stakes in the country sub holding companies,*
- *The country sub holding companies, which group together the equity stakes and the energy heads of business companies acting in the different territories, and*
- *The head of business companies.*

In this system, AVANGRID is the U.S. country sub holding company, with strengthened autonomy as an SEC registered public company trading under NYSE rules, including independent board members, a fully qualified audit committee, and public reporting and disclosure. AVANGRID Networks is the AVANGRID head of business subsidiary for the U.S. network companies (i.e., gas and electric delivery utilities) have autonomy, including independent board members, a majority of independent members meeting SEC qualifications for its audit committee, and meeting SEC Sarbanes Oxley reporting and disclosure standards. UIL Holdings Corporation, the AVANGRID Networks subsidiary for the Connecticut and Massachusetts network companies, also is said to have autonomy for local decision making and a board comprised of the U.S. network executives, including the Connecticut and Massachusetts President and CEO. As stated previously, UIL Holdings is intended to have the authority and responsibility for the day to day operations of the Connecticut and Massachusetts utilities, including The United Illuminating Company, SCG, and CNG.

¹⁰ Response to Data Request GEN017 Attachment 2, the AVANGRID Management Committee Charter

¹¹ Response to Data Request GEN017 Supplement Attachment 1 INTERNAL RULES ON COMPOSITION AND DUTIES OF THE OPERATING COMMITTEE

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Like AVANGRID's Management Committee, Iberdrola, S.A. has a non executive Operating Committee that provides technical information and management support to the Iberdrola Group Chairman and chief executive officer for the strategic organization and coordination of the Iberdrola Group. This committee is said not to have any executive responsibilities. Like the Management Committee, this Iberdrola Operations Committee was established to ensure the coordination of its subsidiary companies, including UIL Holdings and SCG and CNG, and to identify and disseminate best practices within the AVANGRID Group. This Operating Committee is said to only establish methodologies, analysis systems, procedures for the supervision of decisions, and monitoring instruments at the Iberdrola Group level. To the extent the Operating Committee is an Iberdrola non executive body and the management and governance of SCG is done at the SCG level as well as at the UIL Holdings level – its parent company—the Iberdrola Operating Committee does not discuss SCG's strategic, management, or business matters regarding those companies and exclusively receives aggregate information for some aspects such as, among other things, the procurement volume of purchases in the whole Group.

However, we again found the duties of the operating committee may conflict with autonomous governance model of UIL Holdings. The duties are spelled out in corporate documents:¹²

1. It is a core duty of the Operating Committee to provide technical, informational, and management support with respect to the supervision and monitoring and strategic planning duties of the businesses that the Board of Directors of the Company must define for the Group as a whole and that its chairman & chief executive officer must promote and implement together with the chief operating officer and the rest of the management team, thus permitting the development of the Group's Business Model, based on the coexistence of a decentralized structure of decision making processes and the global integration of the businesses.

2. In this regard, the Operating Committee shall establish methodologies, analysis systems, procedures for the supervision of decisions, and monitoring instruments at the Group level, in the interest and for the benefit of all the companies thereof, with due respect at all times for the scope of the day to day management and effective administration within the power of the corporate governance and management decision making bodies of each of the business sub holding companies.

¹² Response to Data Request GEN017 Supplement Attachment 1 INTERNAL RULES ON COMPOSITION AND DUTIES OF THE OPERATING COMMITTEE

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3. In order to perform its duties, the Operating Committee shall promote the establishment of internal rules (regarding investments and divestments, purchases, corporate services, etc.) that shall serve as instruments of coordination for the benefit and in the interest of all the Group companies, thereby facilitating the supervision and monitoring of decision making in order to ensure compliance with the management strategies and guidelines established by the Board of Directors of the Company, as the controlling company within the Group.

The Grants of Authority documentation however provided more clarity. It detailed the general structure of the delegation of authority for clearly identified matters and expenditures for UIL Holdings and its subsidiaries. It covers Business Strategy, Purchase Decisions, Contractual Agreements, Union Contracts, Litigation and Insurance Settlements, Bank Credit, Loans and Extensions of Credit, Vendor Payments, Asset Sales, and numerous other items. We found this documentation to provide a reasonable level of management authority and control.

Finally, a firm organizational structure diagram covering the names, organizational relationships, and titles and reporting chain for all Shared Service Groups working in any way SCG was not available despite repeated requests until after the conclusion of our data collection and interviewing efforts. Shared Services provides back office support for SCG and its sister company CNG. This includes:

- Human Resources,
- Safety,
- Facilities,
- Environmental,
- Legal,
- Purchasing,
- Information Technology,
- Corporate Finance/Treasury, and
- Fleet/Logistics.

In addition, numerous published titles within shared services did not reflect the actual responsibilities of the people who currently have that title. It was clear the Transition to the merged organization has not been completed and Transition Planning generally remains a work in progress despite the time that has elapsed. A written Transition Plan should have been developed in the very early stages of the acquisition of the UIL Holdings.

In addition, it appears that only union issues and relationships prevent even a potential of merging SCG with CNG. However, In March 2011, as part of a settlement with OCC to resolve the appeals of the 2008 rate cases for SCG and CNG, the parties proposed the combination of SCG and CNG for regulatory purposes. In PURA's review of that settlement agreement, PURA

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disallowed the combination as proposed, indicating that a complete 16 43 application would be required. Subsequent to that decision, UIL has done further investigation into the possible combination of the two companies, but no decision has been made whether to combine the companies. No timeline has been developed to reexamine the potential consolidation.

The potential consolidation of SCG with its sister company CNG would benefit ratepayer for the following reasons:

- Resources could be more readily shared across the two gas companies,
- Any inconsistencies created by the different union contracts could be resolved, potentially to the benefit of the customer and employee, and
- Common material and equipment identification could lead to lower per unit purchasing prices, benefiting the customer.

The remaining Gas Operations, Customer & Business Services, and Business Services and Control organizations are covered in their related chapters in this report.

Priorities

Conclusion 3.2.2: *RCG/SCG LLC believes that while limited to operational and new business area, the High Level Priorities are appropriate, well thought out, and result in improved operations, growth of their gas business, and improved customer service.*

Analysis

The UIL Holdings' Mission for its four utility companies (UI, SCG, SCG, and Berkshire Gas) is "We create value as a premier provider of utility and energy related services" and its Vision is "We are a trusted industry leader."

In addition, UIL Holdings has established Long term Strategic Objectives:

- Shareholders
 - Top Quartile Total Shareholder Return
 - Sustained Dividend Increases with Payout Ratio at 65%
 - Maintain Investment Grade Rating
- Customers
 - First Quartile Northeast Electric Reliability
 - First Quartile Natural Gas Infrastructure Integrity & Safety
 - First Quartile Customer Satisfaction
- Employees
 - Accident Free Workplace
 - One Company Culture

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- Engage Diverse Workforce

Given the UIL Holdings Mission, Vision, and Strategic Objectives, the Connecticut Gas Mission Strategic Objectives were designed to be supportive:¹³

- Mission for the Connecticut Gas Companies including SCG
 - To provide safe, reliable, and high quality services to our customers and value to our shareholders.
- Strategic Objectives
 - Achieve best in class infrastructure integrity and safety.
 - Expand the opportunity CT homes and businesses to access natural gas.
 - Increase shareowner value; maintain investment grade credit rating.
 - Enhance Public Education Awareness.
 - Improve the capability of the CT Gas Companies to meet customer needs and expectations.

In this context, executive management has defined a number of High Level Priorities for its Connecticut gas utilities.¹⁴ RCG/SCG LLC reviewed these high level priorities and evaluated the rationale and the goals and objectives of the Priority projects. The actual management of the projects is covered in their relevant sections of the Management Audit report. The High Level Priorities were limited to gas operations and growth. They include:

- Gas Safety to address past high profile incidents: Action is being taken to improve pipeline safety and address the root causes of high profile incidents and PURA fines. The targets include:
 - 3rd Party damage;
 - Leak response;
 - Leak Surveying;
 - Leak management;
 - Emergency response;
 - Fugitive methane;
 - Technology Assessment; and
 - Emergency preparedness.
- Operational Enhancements;
 - Mobile Work Management including effective scheduling & dispatch;
 - One common platform and increased technology usage

¹³ CT & MA Operations Gas 2016 Operational Business Plan, Feb. 2016

¹⁴ Management Audit Kickoff Presentation May 2016 and 2016 Operational Business Plan

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- Modernize aging software infrastructure
- Increased productivity and cost reduction
- Customer Experience;
 - Deliver an insight based, relevant customer experience to their customers
 - Expand the Voice of the Customer
 - Develop a state of the art Website
 - Improve channel analytics
- Gas Growth;
 - Establish and work to achieve CES Gas Growth goals
 - Aggressive projected growth in annual customer count
 - Significant Natural Gas Infrastructure Expansion Plan
- Capital Plan, Major Capital Projects;
 - \$424.2 million Major Capital Projects Plan
 - In 2016, new business will account for \$39.1 million, Gas Replacements \$89.4 million, and Gas, LNG \$31.2 million.

These are well thought out and reasonable priorities and cascade off the admirable strategies set by UIL Holdings. If their targets are met, SCG will be in a better position to continue to support the gas needs for its current and future customers. It is clear from all our audit interviews that SCG and its sister gas company in Connecticut, CNG, are generally devoting resources that the high level priorities require. There remain opportunities to fine tune a number of these areas. This fine tuning is covered in the remainder of this document.

Recommendations

Recommendation 3.2.1: *RCG/SCG LLC recommends that a written Transition Manual be developed clearly defining the new organization structure, roles and responsibilities, systems and processes, and outlining the procedures to be implemented.*

Recommendation 3.2.2: *RCG/SCG LLC recommends that the charter of the AVANGRID Management Committee and the Iberdrola, S.A. duties of its Operating Committee be reviewed, clarified, and communicated as part of a training program to ensure that there is no conflict with autonomous governance model of UIL Holdings and to eliminate any current misconceptions throughout the Connecticut utilities' organizations.*

Recommendation 3.2.3: *RCG/SCG LLC recommends that a potential consolidation of SCG and CNG be reexamined (with a timeline, including, a detailed cost benefit analysis, the definition and method to overcome any union or other impediments, organizational modifications, and other planning & implementation elements) and re introduced to PURA.*

3.3 Internal Auditing

Objectives and Scope

There were no requested formal evaluation criteria for the Internal Audit function. However, the Institute of Internal Auditors defines internal auditing as “an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations.” Auditing helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Overall Assessment

THE INTERNAL AUDIT DEPARTMENT IS POSITIONED CORRECTLY AT THE AVANGRID LEVEL TO PROVIDE INDEPENDENT ASSESSMENTS OF SCG PROCESSES AND ACCOUNTING PRACTICES TO THE AVANGRID BOARD OF DIRECTORS.

Before the Iberdrola UIL merger, Internal Audit (IA) reported to the UIL board of directors and now reports to the AVANGRID board of directors. It is professionally staffed with individuals who meet the requirements of IA auditors. The Director and both Managers are well qualified to perform the necessary functions. One manager has since been promoted to the Director level to manage all AVANGRID IA for Internal Controls and Financial Reporting. During our review the IA function went from 10 individuals, including one administrator, to 22, via consolidation, in recognition that they will now be responsible for auditing all AVANGRID business units.

The audit planning process is appropriately risk based, and audits are identified and prioritized based upon input from across the organization which is reviewed annually and the master list of audit areas are kept in the Audit Universe Excel spreadsheet.¹⁵ This data base is used to identify the coming year’s planned audits and is based on a formal numeric risk assessment value.

IA now reports results to the AVANGRID Board of Directors’ (ABOD) Audit Committee which is what RCG/SCG LLC would expect. They provide an oral report to the Audit Committee. The oral report was instituted back in 2012. IA’s Senior Director delivers the report which is supplemented by a pre BOD meeting with the board’s committee members, IA’s directors, and managers to discuss in detail the areas where the ABOD members may have questions.

SCG does not have a separate internal audit function. Internal audit was provided through UIL, now AVANGRID. The internal audit reporting lines are appropriate with the AVANGRID’s new

¹⁵ Rossi Interview 060616, Belfonti Interview 060616 & 071116, and Response to Data Request IA009 Attachment 1, Audit Universe Database

head of Internal Controls and Financial Reporting/Director Financial Controls, who in turn reports to Vice President and functionally to the ABOD Audit Committee.¹⁶ These reporting lines help ensure IA has the autonomy, authority, and support it needs to accomplish its assignments throughout the organization.

The group monitors and compares itself to the audit industry best practices. It participates in peer reviews and adheres to the Institute of Internal Auditors Standards and the Code of Ethics.

Evaluation Criteria

RCG/SCG LLC's evaluation of the UIL/AVANGRID internal audit function focused on the Internal Auditing's (IA) organizational structure and reporting lines, responsibilities, experience and training, audit planning, audit execution and follow up, and best practices. Therefore, our criteria for IA are:

- Is the internal auditing function appropriately positioned to allow complete objectively?
- Does internal auditing report results to the board of directors?
- Does internal auditing have a risk based method for determining what needs to be reviewed?
- Does internal auditing maintain an annual plan of future audit activities?
- Is the internal auditing team qualified to perform the required audit analysis?
- Is there a formal process for auditors and IA management to maintain and expand their training?

Conclusions

Conclusion 3.3.1: *RCG/SCG LLC found that the Company adequately addressed the 2010 recommendations relating to the Internal Audit function and the Audit Committee.*

Analysis

The 2010 Management Audit included the following recommendations¹⁷:

VI 1: Require that internal audits conducted of SCG operations and functions be performed by a team of internal auditors (two or more individuals) comprised of

¹⁶ Belfonti Interview 071116

¹⁷ Response to Data Request GEN012 Attachment 2

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at least one individual from outside the SCG/CNG legacy companies, to assure perspective and that a variety of skills and expertise are applied to the assessment of SCG's operations.

Company Response: Complete. Various audits that are scheduled in CY 2011 will be performed by several different UIL internal audit department auditors.

VI 2: Conduct a broad and comprehensive risk assessment profile of SCG operations, including operational, procurement and supply, regulatory, and customer service factors, along with more traditional accounting and insurance issues, and then develop and implement a specific plan to mitigate and monitor the highest risk areas within the company.

Company Response: Complete. The UIL Internal Audit Department is in the process of performing its annual risk assessment of its subsidiaries to ascertain the high risk areas of responsibility within the company.

RCG/SCG LLC generally feels that with SCG responses to these 2010 Audit recommendations related to the Internal Audit function are reasonable and have been appropriately addressed.

SCG in the body of UIL/AVANGRID prepares formal audit reports that are reviewed by the managers and Directors. The results are presented to the ABOD Audit Committee verbally on a quarterly basis.¹⁸ On the final recommendation, we would point out that the ownership in 2010 was with Iberdrola directly, subsequently changed to UIL. Then in December of 2015 back to Iberdrola, when UIL was purchased by Iberdrola and added to the newly rebranded Iberdrola USA, now known as AVANGRID.

Conclusion 3.3.2: *RCG/SCG LLC found that SCG does not have a separate internal audit group. Internal audit was provided through UIL, now it is provided through AVANGRID. The reporting lines of AVANGRID's Internal Audit Function are appropriate.*

Analysis

RCG/SCG LLC found that the Internal Audits reporting is a shared services function. The IA lines are appropriate with the Senior Director of Internal Audit reporting functionally to AVANGRID's new head of Internal Controls and Financial Reporting/Director Financial Controls Audit Committee of the ABOD. These reporting lines help ensure IA has the independence, authority, and support it needs to accomplish its mission throughout the organization. IA's

¹⁸ Belfonti Interview 060616, Rossi Interview 060616

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approach to auditing is very much a team effort and enlists support from the functions under study.¹⁹

Conclusion 3.3.3: *RCG/SCG LLC found that the IA is well organized and adequately staffed with qualified auditors and management.*

Analysis

The IAD group is organized as follows.

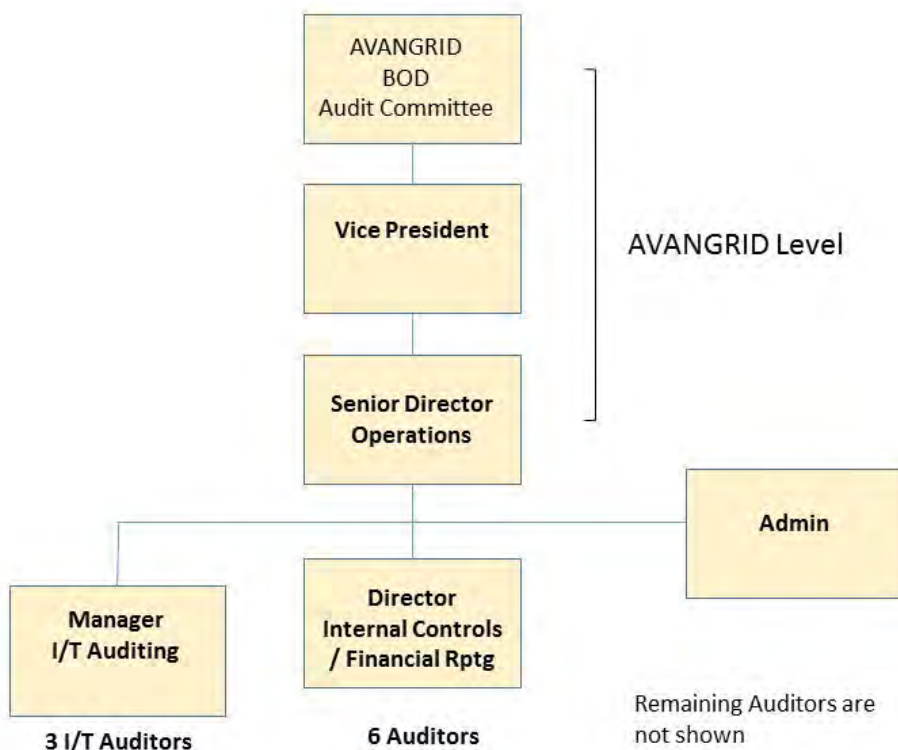


Exhibit 1 - IA Organization

IA is responsible for the following:

- Planned Audits,
- Sarbanes Oxley Section 404 Audit Coverage,
- Investigations/Special Projects, and
- Consulting on existing or proposed systems, projects, plans, policies, and procedures of the Company.

The group supports several strategic initiatives, including the continued implementation of the SAP accounting system phased rollout to ensure controls are in place and SOX Section 404

¹⁹ Belfonti interview 060616

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testing. When the new director joined UIL a little over five years ago there were over 600 SOX controls which had to be audited. With the installation of SAP that number has been reduced to 229 controls, due to the automation of financial processes.

Of the six non I/T auditors performing audits, three of them are assigned to gas auditing.²⁰

Conclusion 3.3.4: *RCG/SCG LLC found that the original UIL internal auditing group needs technical auditors to support in technical audits; they enlist the appropriate consulting services or individuals from appropriate AVANGRID function.*

Analysis

IA makes use of a small group of consultants to augment their staff to support in technical areas, where those resources are not found in IA. IA also uses AVANGRID technical resources as appropriate, particularly in I/T.²¹ This use of external support is due in part to the major releases of SAP and other programs.

Conclusion 3.3.5: *RCG/SCG LLC found that individuals in IA are qualified and participate in continuing professional education.*

Analysis

The group is well organized and adequately staffed. Individuals are qualified and participate in continuing professional education.

In addition to holding undergraduate degrees, most of the original nine professionals within the internal audit group have advanced professional designations. IA management has between 5 to 21 years of UIL audit experience. Several have work at major accounting firms or other industries in an audit capacity. All of the professional staff are members of the Institute of Internal Audits (IIA).²²

Each member of the audit staff, including managers, has a goal associated with his or her personal and professional development. Training is planned each year based on the individual auditor's need and skill level. Professional certifications require minimum of 40 training hours. For example, CIAs (Certified Internal Auditors) must complete and report 80 hours of Continuing Professional Education credits every two years.²³

²⁰ Interview with Belfonti 060616

²¹ Interview with Wyslick 060616

²² Interviews with Rossi, Belfonti, and Wyslick 060616

²³ Interview with Belfonti 060616

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IA personnel attend seminars and conferences that cover a variety of subject matter related to the internal audit profession. Professional associations, such as the Institute of Internal Auditors (IIA) and the Information Systems Audit and Control Associations (ISACA), generally sponsor the seminars and conferences attended. Below is a listing of the training programs by year, starting in 2013.

2013 Training:

- American Gas Association/Edison Electric Institute Utility Auditor Training
- SAP Project System Overview
- Storm Training – Wires Down and Defensive Driving
- UIL Risk Management Training
- Current Accounting and Reporting Developments
- SAP Fraud Webcast
- 2013 COSO Framework Update
- Association of Certified Fraud Examiners Annual Conference & Exhibition
- Fraud's Hidden Costs to You and Your Organization
- SAP Finance Overview
- SAP Reporting
- SAP Bank Accounting
- Business Continuity Management
- Excel Speed Tips
- Audit Evidence & Professional Judgment: How to Effectively Use Critical Thinking
- SAP Consolidations Reporting
- Storm Training – Municipal Liaison Guidelines
- FEMA Incident Command Training
- Content Server Basic Training & Projects Analysis
- Finance Interrogatory Process for Rate Cases
- FASB/IASB Proposed Lease Accounting Changes
- Quality Assessment Reviews: Adding Value to Your Organization
- NERC Compliance – General Awareness Training

2014 Training:

- Storm Training – Wires Down and Defensive Driving
- Cyber security: Changes in NERC CIP Compliance for Gas and Power Utilities
- High Impact Excel: Vlookup Edition
- Fraud Bribery and Corruption: A Tale of Two Cases
- Achieving Professional Excellence by Raising the Bar

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- Cyber Insecurity – How Safe can the Company Assets Be?
- Keeping the Risk Universe Current
- Your Role in Sustaining a Culture That Deters Fraud
- COSO 2013 Part I – Control Environment & Risk Assessment Components
- Overview & Update on Accounting for Rate Regulated Activities
- Outage Management and the Data Revolution
- COSO 2013 Part II – Control Activities, Information and Communication, Monitoring Activities
- COSO 2013 Part III –Transition and Other Considerations
- Individual Leadership: Managing Your Time as if it was Your Money
- IT Auditing Principles for Internal Auditors
- Managing Audits as Projects
- Power & Utilities Technical Update
- Audit Analytics for the SAP Vendor Masterfile
- Cyber Security Evolution – What Boards are Talking About
- ACL – Auditing & the SAP Environment
- COSO 2013 – The Implications to IT Controls

2015 Training:

- NERC Compliance Training
- Continuous Monitoring over SAP Configurable Controls
- Conducting a SharePoint Audit & Resolving Challenges
- SAP Configurable Controls over G/L Entries
- Current Accounting and Reporting Developments – PwC webcast
- All about Analytics – Turn Enterprise Data into Your Biggest Asset Against Risk
- Economic and Risk Outlook Campaign
- SAP Cyber security – Protecting SAP from Vulnerabilities, Threats, and Attacks
- How to Maximize Your Strategic Thinking for the Audit World
- The New International Professional Practices Framework
- Center for Governance Quarterly Webcast
- American Gas Association Chief Audit Executives Conference & Training
- Hot Topics in Lease Accounting
- Navigating the FASB's New Consolidation Standard
- Establishing Effective SAP Controls in Your Organization
- American Gas Association/Edison Electric Institute Utility Auditor Training
- American Gas Association/Edison Electric Institute Utility Accounting Training

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- FERC Accounting & Reporting
- Misplaced Trust: Investigating Vendor Fraud
- Build a Value Driven GRC Roadmap
- UIL IT Security Awareness Training

2016 Training:

The current year training plan includes training on new internal audit software, new internal controls software, International Financial Reporting Standards (IFRS), and training on the new revenue recognition standard. Staff and management will be attending American Gas Association utility auditor training as well as the Chief Audit Executive Conference. NERC compliance and Fraud training are also planned.²⁴ Included in the above list of programs are those associated with the electric business only, but the listing is very broad and comprehensive.

Augmenting the existing IA staff is a small number of external consultants used to evaluate specialized or technical areas.

Sourcing for the full time auditors is from both internal posting and externally through recruiters.

With respect to SAP training, UIL brought in a trainer to train the folks responsible for SAP and its oversight at a savings of 50% over away training.²⁵

Conclusion 3.3.6: *RCG/SCG LLC found that the audit planning process is appropriately risk based and audits are identified and prioritized based upon input from across the organization.*

Analysis

The development of the annual Audit Plan is among the most critical activities that IA management performs. The Audit Plan is developed to provide a thorough and effective planning process to ensure that a meaningful and challenging plan is designed to provide Company management with timely and useful feedback on the Company's operations and control environment.

IA prepares a planning calendar annually working from the Audit Universe database (AUD). The IA management team will:

- Review historical audits,

²⁴ Response to Data Request IA002 Attachment 1 Training Programs from 2013-2016

²⁵ Interview with Belfonti 060616

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- Meet with executives (VPs and above); IA management views this process as a partnership with AVANGRID management,
- Identify the frequency of the required audits,
- Assess the potential risk, weighted for fraud, safety, or danger to the public,
 - Rank all audits' risk from 0 to 5, five being highest risk,
 - Focus on higher risk areas first,
 - Determine when the last audit was done, and
 - Executive Management areas of concern.
- Criteria for audit selection,
 - Annual audit vs. special purpose audits; three to five percent annually for special purpose audits, and
 - SOX compliance audits are the largest driver, 25% of the \$1.5M.²⁶

IA management pays close attention to adherence to budget and schedule. Past trends indicate:

- Internally performed audits always finish on budget, and
- External audits, \$3M total annual, tend to overrun by about \$20,000.²⁷

The percentage of IA's gas related work is estimated between 25% and 30%.²⁸ This level may include some indirect processes found in electric as well as gas. In a review of the audits contained in the AUD RCG/SCG LLC found that only 6% of the items were directly attributed to the natural gas business, while electric had 10% and I/T had 27%. The remaining 57% were corporate related.²⁹ That said, many of these corporate areas directly impact the gas business processes.

IA expense is allocated to the two gas companies as follows: SCG 14% and SCG 17%. The cost allocation model is audited every two years (completed 2016 review for 2014 and 2015). However, Accounting does one every 6 months—therefore they seldom if at any time find issues with how the allocation is determined.³⁰

Conclusion 3.3.7: *RCG/SCG LLC found that the audit execution and follow up processes are rigorous, well defined, and appropriate.*

²⁶ Interview with Rossi 060616

²⁷ Interview with Rossi 060616

²⁸ Interview with Rossi 060616

²⁹ Response to Data Request IA009 Audit Universe Database

³⁰ Interviews with Rossi 060616 & Belfonti 060616

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Currently, the audit structure is determined by the Senior Director, who sets the; audit scope, risk level, requirements, and audit program.

The auditors plan the audit, if new, and execute the audit according to the plan. Typical audits can range from 150 hours for small audits to 400 hours for large or regulatory compliance audits. Audits examine areas including: compliance with company rules and processes, and regulatory compliance. As an example, new business cost estimation will evaluate the overall customer acquisition from marketing to installation.

Findings, conclusions, and recommendations, if required, are developed based on examination, judgment, discussion, and company process requirements, rules, and regulatory compliance requirements. Conclusions are generally considered audit issues while observations are considered minor. Recommendations are action items that require management attention to address.³¹

The review process is rigorous. First a peer review is done to ensure the quality of the audit work and results. Next the Senior Director reviews all reports leaving the IA department. This is critical as the senior Director has a clear understanding of how to explain the issues and the level of information required to support the explanation to the BOD. Currently, IA uses a long report format, but AVANGRID's approach is to say it in one page, which is likely where IA reports will end up.³²

Conclusion 3.3.8: *RCG/SCG LLC found that the internal audits, performed from 2011 through 2015, demonstrated that the Company's internal audit program ensures independent verification of the accuracy of accounting information and provides objective evaluation (and improvement) of the accounting and operational practices of the Company. However, a full audit of Gas procurement was last done in 2011. UIL has performed two audits of the "Gas Conversion Estimation Process," the first in 2013 and the second just completed in February 2016, but the estimation process remains flawed.*

Analysis

The following Exhibit shows the internal audits performed from 2011 through 2015,³³ demonstrates that the Company's internal audit program ensures independent verification of the accuracy of accounting information, and provides objective evaluation (and improvement) of the accounting and operational practices of the Company.

³¹ Interview with Belfonti 060616

³² Interview with Rossi 060616

³³ Response to Data Request IA005

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YEAR	AUDIT AREA/TITLE	COMPLETION DATE
2011	Electronic Funds Transfer (UIL Holdings Corp. wide audit)	Apr-12
	Gas Procurement	Nov-11
	Gas SCADA Cyber security	Nov-11
	Physical Security	Dec-11
	SAP Phase 1 (Back Office Migration)	Nov-11
2012	Cost Accounting Methodology Manual (UIL Holdings Corp. wide audit)	Jan-13
	Purchased Gas Adjustment	May-13
	Request for Proposal & Bid Deviations (UIL Holdings Corp. wide audit)	Jun-12
	SAP Phase II Deployment (Customer Information System)	May-12
2013	Collections Charge-off Process (UIL Holdings Corp. wide audit)	Dec-13
	Escheat Process audit (UIL Holdings Corp. wide audit)	Feb-13
	Environmental-Hazardous Materials (UIL Holdings Corp.-wide audit)	Feb-14
	Gas Conversion Estimation Process	May-13
	Safety Monitoring (UIL Holdings Corp.-wide audit)	Apr-13
	Scrap Process & Procedures (UIL Holdings Corp.-wide audit)	Sep-13
	Ten Year Plan Cast Iron Bare Steel Replacement	Mar-14
2014	Cost Accounting Methodology Manual (UIL Holdings Corp.-wide audit)	Mar-15
	Material Issuance Process (UIL Holdings Corp.-wide audit)	Sep-14
	Rate Implementation & Rate Changes (UIL Holdings Corp.-wide audit)	Dec-14
	Ten Year Plan LNG Plant Modernization	Jan-15
2015	Contractors and Consultants (UIL Holdings Corp.-wide audit)	Jun-15
	Fleet Management (UIL Holdings Corp.-wide audit)	Sep-15
	Gas Conversion Estimation Process	Feb-16
	Gas Storage & Inventory	Feb-16
	Ten Year Plan Gas Expansion Project	Mar-16
	Unbilled Revenue Process (UIL Holdings Corp.-wide audit)	Jul-15

Exhibit 2 - IA Audits Performed from 2011-2015

The RCG/SCG LLC team is using several of these audits to better understand the processes and progress made by SCG.

The AVANGRID tracks open audit recommendations. IA's guidance on closing identified issues is 90 days. The one exception to this is I/T systems, which by their very nature can take longer to complete.³⁴

As shown in the above Exhibit, a full audit of gas procurement was last done in 2011. IA management gave the following reasons for this:

- IA indirectly reviews gas supply and purchasing through SOX and the required controls annually,

³⁴ Interview with Belfonti 060616

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- Reviews the bi annual supply and demand,
- Reviews CEI new capacity contracts, and
- Both AVANGRID accounting and PURA review monthly invoices for gas procurement.³⁵

There are two areas that concern RCG/SCG LLC. First is gas procurement, the largest expense area in the natural gas business with the potential of the greatest financial risk. Gas procurement has not received a full audit since 2011. RCG/SCG LLC is concerned that the incremental reviews performed since then may leave some level of exposure. Second, AVANGRID has performed two audits of the “Gas Conversion Estimation Process” the first in 2013 and the second just completed in February 2016, but the process remains flawed. Based on work found in the Engineering, Gas Distribution Construction, and Maintenance areas of the audit, the process used to estimate gas conversion and main replacements is suspect. Please see Chapter 4, System Operations and Section 3.6, Capital Budgeting Process.

Conclusion 3.3.9: *RCG/SCG LLC found that the group monitors and compares itself to industry best practices. It participates in regular peer reviews and adheres to the Institute of Internal Auditors Standards and the Code of Ethics.*

Analysis

The Institute of Internal Auditors (IIA) requires an independent quality assurance review every five years to evaluate compliance to standards. The report is issued to the Audit Committee. The last audit was completed in March 2013.³⁶

Conclusion 3.3.10: *RCG/SCG LLC found that the Company has a sound process for tracking open audit recommendations and control deficiencies.*

Analysis

IA tracks open audit recommendations and provided RCG/SCG LL a copy of their current control deficiencies status for 2016. The status report included the audit finding and description and the management action completion date. The following Exhibit provides the open audit recommendations for UIL.

The deficiency and the action required to correct the problem are described along with the current status and additional actions by IA. In this case the deficiency is open.

RCG/SCG LLC believes IA has a sound process for tracking open items. As stated earlier, IA promotes completing these open items within 90 days.

³⁵ Interview with Rossi 060616

³⁶ Response to Data Request IA012 Attachment 1

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Control Deficiency No.	Co.	Business Process	Process Objective	Risks Which Threaten the Process Objective	Description of Current Control	Description of Control Deficiency	Preliminary Observations/Recommendations" or Better Practice" Control	Description of Improved Controls Implemented/ Status Update Note: remediation testing is performed for periods after the new or remediated control implementation date.	Status (Closed, Open, TBD)	IT Support Needed (Yes/No)
G-2	SCG, CNG, BGC, UI	Entering and approving employee time.	To ensure that all time is reported accurately, authorized and is coded to valid accounts.	Time reported may not be accurate or is unapproved. Employees may be paid for time not worked or earned.	All UIL employees are required to enter their hours worked into Workforce Time/Labor Management on a weekly basis. All time sheets, except for crew are approved electronically in the Workforce/Labor Management system by the employee's supervisor prior to the payroll being processed. Crew time sheets are manually signed by a supervisor before the time is entered into WorkForce by a time keeper. For employees without immediate access to a computer, timesheets are forwarded to assigned timekeepers who enter the information into the system. In the event the supervisor is unavailable to approve time for direct reports, it is approved by the next-level manager or UIL Payroll (part of the required payroll processing). If a supervisor was not able to approve the timesheet, Payroll will send an email to them requesting their approval and the supervisor must review the employee's time to ensure accuracy and reply with their approval via email.	During the Round 1 timesheet approval testing, we noted certain employees' timesheets were not approved. For employees who did not submit their timesheet to their supervisor in a timely manner, or are not approved by their supervisor, there were multiple instances when a manual email from Payroll was sent instructing the employee to have their supervisor manually approve their timesheet, sign, and reply with their approval via email or by printing and sending a copy of the approved timesheet to Payroll. However, the employees never replied with their approval via email or by printing and sending a copy of the approved timesheet to Payroll as required.	Payroll should work with the employees and applicable departments to remind them that when an employee does not submit their timesheet to their supervisor in a timely manner, or the supervisor does not approve their direct report's timesheet in Workforce, the employee and supervisor will receive an email from Payroll requesting their approval and instructing the supervisor to review the employee's time to ensure accuracy. They should then reply with their approval via email or by printing and sending a copy of the approved timesheet to Payroll. A notification should go out to the applicable employees to remind them of this required process.	Internal Audit sent an email to the applicable employees and their supervisors to remind of the required process. Remediation testing will be performed once the required remediation sample size is available.	Open	No

Exhibit 3 - List of Control Deficiencies

Recommendations

Recommendation 3.3.1: *RCG/SCG LLC recommends that IA ensures that the SCG auditing needs are met going forward, as IA's responsibility expands to cover all AVANGRID business units.*

Recommendation 3.3.2: *RCG/SCG LLC recommends that IA evaluate the proper frequency of performing a full audit of gas procurement.*

Recommendation 3.3.3: *RCG/SCG LLC recommends that IA continue to actively review annually the "gas conversion estimation process." In addition, review the use of the non funded margin reserve account for reasonableness.*

3.4 Strategic Planning

Objectives and Scope

Strategic Planning is critical to today's utilities. Utility executives have to navigate a complex environment that sometimes has planning elements competing for limited resources. The environmental changes facing natural gas utilities include:

- *From a customer perspective:* In recent years, a shift has occurred in how utilities manage customer expectations, which are being formed by non utility businesses. One example is customer expectations of service level to customer inquiries.
- *Competing energy Sources:* Oil pricing has been volatile over the last year with oil dropping dramatically from near high in June 2014 of about \$114 per barrel to the current price of about \$51.00 per barrel and even reaching a 52 week low of \$27.82 over the last two months.
- *Fall of natural gas commodity price:* The natural gas price has fallen from a high in mid 2014 of over \$6/MMBtu in mid 2014 to the current price of \$2.95 /MMBtu
- *Aging Distribution Infrastructure:* Most natural gas utilities have a lot of bare steel and cast iron pipe over 30 years old on their systems causing a lot of leaks that must be repaired or replaced. This leads to significant capital expenditures to replace this failing infrastructure.
- *Inadequate infrastructure asset management:* Many utilities rely on a combination of old paper records along with human knowledge of their utility system to know where things are. This means finding some pipe is a significant effort and the subsoil conditions are lost over time, making estimating of repair and replacement more difficult.

- *Evolving municipal requirements:* From the community restoration requirements to the use of overtime for public safety officers, such as traffic control, impact the cost of repairing and replacing pipe in the ground.
- *Aging work force:* This leads to loss of critical institutional knowledge of the system and efficient or effective methods.

Compounding this difficulty is the rising cost of maintaining a complex gas distribution system coupled with the pressure to manage financials aggressively. In the case of SCG and CNG, having been bought and sold a number of times since the beginning of this century with the most recent sale in December 2015, their priorities shift with the change in ownership.

In this section, RCG/SCG LLC reviews SCG's efforts, as part of both AVANGRID and UIL, to envision and plan for the future while balancing all the competing interests of its stakeholders.

Overall Assessment

DUE TO THE RECENT UIL HOLDINGS SALE TO IBERDROLA USA, NOW AVANGRID, MANAGEMENT'S FOCUS IS ON INTEGRATION; AS SUCH STRATEGIC PLANNING AT SCG IS IN THE FORMATIVE STAGES. CURRENTLY, AVANGRID IS APPLYING CORE PERFORMANCE METRICS TO SCG, CAUSING STRATEGY TO BECOME TRANSACTIONAL. STRATEGIC LEVEL PLANNING INITIATIVES HAVE YET TO BE IDENTIFIED.

Prior to the most recent sale of the company, there appears to have been a reasonably robust strategic plan. This plan led the company to work with the State of Connecticut legislative and executive branches to create Connecticut's Comprehensive Energy Strategy (CES) program. As a result of the recent Iberdrola USA UIL Holdings acquisition, SCG through UIL elevated its strategic planning and performance management effort, while integrating the two. By management's admission, the companies are still finalizing much of the integration efforts, so the strategic planning process is not yet fully defined.³⁷

However, there is a 2016 Operational Business Plan³⁸ for the Connecticut and Massachusetts gas business units. This operational plan clearly states the Mission, Vision, Strategic Objectives, and Initiatives for 2016. Their 2016 high level operational planning priorities³⁹ include:

- Gas Safety,
- Operational Enhancements/Customer Experience,
- Gas Growth, and

³⁷ Response to Data Request EXE002

³⁸ Response to Data Request EXE030

³⁹ May 2016 Management Audit Kickoff Presentation

- Capital Plan, Major Capital Projects.

It appears that AVANGRID management has overlaid some of these initiatives with another set of initiatives that are aimed at creating a “one gas company” model. This will be discussed later in this section.

Evaluation Criteria

RCG/SCG LLC proposed the following evaluation criteria as the principal areas of investigation and the foundation for this study area’s chapter in the final report:

- Is there a formal strategic plan and process?
- Does the plan reflect the needs of the gas business going forward – is it visionary?
- What is the Company’s approach to competitive issues for new markets; i.e., what new markets are being considered by the Company, how would the costs for entry into those markets be funded, and would the Company's entry into those markets serve to help or hinder competition in those new markets?
- Are the planning assumptions defined? Do they consider multiple scenarios – potential best, most likely, or worst case scenarios for the future?
- Is the mission clear and communicated, understood and embraced by employees?
- Are the values defined? Do employees understand what these values mean and what behaviors they should cultivate and practice to be consistent with these values?
- Have the major strategic priorities been defined? Do the strategic priorities address such areas as fiscal viability and profitability, public trust, customer service, process improvements, organizational change, economic development for the region, environment, and initiatives to sustain continuous performance improvement and learning within the workforce?

Conclusions

Conclusion 3.4.1: *RCG/SCG LLC found that the recent corporate strategic planning is in its infancy, and for the immediate future, the strategic effort appears to be focused on system and performance metric management and identifying best practices. The 2016 Operational Business Plan is the likely surrogate with some refocusing of its priorities.*

Analysis

The strategic planning mission is to catalyze opportunities to better meet the needs of SCG customers, and increase the customer and shareholder value of AVANGRID by identifying growth opportunities grounded in sound strategic and business analysis. While framing AVANGRID's and UIL's Connecticut gas policy agenda and establishing UIL as the region's energy thought leader.

The Customer focus component of the strategy is the adoption of the utility model wherein the customer is kept well informed and has a definite say in how he or she will use energy. Critical to the customer, is SCG's unwavering management direction to reduce response time to gas odor calls, which they routinely beat the metrics set. In 2012, SCG participated in PSEG's annual benchmarking effort, to a highly limited degree, but doesn't appear to value participation in JD Power's Customer Survey. Its neighbor Eversource Energy's Yankee Gas Services does participate.

Management is moving forward with its accelerated mains replacement programs.

Management has stated in the 2016 Operational Business Plan, a "One Company Culture" for all employees. This is a good beginning, but the plan should be promoting a "One Company Approach." This would align all elements of the business: strategy, policy, and process, much like what Eversource Energy is doing. However, the former management team didn't promote this strategy between SCG and SCG. As result, there are still different unions for each core function, work practices vary, materials are not consistently identified between the two companies, and the approach to safety varies.

Prior to the recent merger, SCG was heavily involved in the formulation of Connecticut's CES program. SCG management rightly understood the importance of this initiative and was an active partner with the State to formulate the program.

Currently, the President of Connecticut and Massachusetts Operations and the President and Chief Operating Officer of Connecticut Gas Operations and the gas leadership team address the UIL gas strategic plan.⁴⁰ This is the thought leadership group; as of this writing, it is unclear how this group will change as the transition exercise unfolds.

The current Mission is stated: "We create value as a premier provider of utility and energy related services."

RCG/SCG LLC finds this mission to be very broad. More importantly, what makes them a premier provider of utility services? They have multiple companies with a number of call centers and modes of customer contact. Are they being proactive with all customers' energy needs? How

⁴⁰ Response to Data Request Exe005

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do they compare to Eversource Energy? Given that there doesn't appear to be any recent comparative metric information or a specific definition of "premier provider," their progress towards their stated mission will remain unknown.

The Vision is "We are a trusted industry leader." How do they know that if they are not continuously comparing themselves with other non AVANGRID companies? Or for that matter are they sampling customers' responses to this claim?

In any event, since a mission statement describes what a company wants to do now, and a vision statement describes what a company wants to be in the future, it appears that there is some room to differentiate the type of statements selected for the company.

There are the three common stakeholders they try to address: the shareholders, customers, and employees, each with core objectives.

- For the Shareholders deliver:
 - Top quartile total shareholder returns,
 - Sustained dividend increase with a Payout Ratio at 65%, and
 - Maintain an investment grade credit rating.
- For the Customers deliver:
 - First quartile Natural Gas infrastructure integrity and safety, and
 - First quartile customer satisfaction.
- For the Employees deliver:
 - Accident Free Workplace,
 - One Company Culture, and
 - Engaged diverse workforce.

The other parts of a management audit explore these and other stated objectives and identify the progress made against them.

Conclusion 3.4.2: *RCG/SCG LLC found that SCG through UIL and AVANGRID appear to be focused on best practices across all the related gas business units; therefore, the effort is more tactical than visionary.*

Analysis

Our interviews of executive management through the director level showed an understanding and ownership for the mission and the objectives of the strategic initiatives. Further the current metrics are clear and tracked, even though in some cases in customer service they may be reported in different forms. However, visionary strategies, like the CES initiative, are not apparent from the materials RCG/SCG LLC reviewed or interviews conducted. These visionary strategies are now the responsibility of the AVANGRID strategic planning function.⁴¹

Conclusion 3.4.3: *RCG/SCG LLC found that outside of the established CES program, there is not a current strategy to develop other competitive new markets that could better use the existing gas distribution system.*

Analysis

Outside of the CES program that looks to convert oil heating customers to natural gas, there doesn't seem to be any plan to identify and develop new markets or new natural gas technologies like natural gas vehicles or absorption air conditioning. This may be a direct result of SCG focusing its limited resources on the CES program.

The natural gas vehicle industry has significant up front infrastructure costs associated with building a network of fueling stations throughout the territory. Further, the automotive makers need to gear up to produce these vehicles. The cost for these third parties could be prohibitive in today's market and the current relatively stable gasoline prices. Further, SCG could have to upgrade some portions of its distribution system to support natural gas fueling stations. All these efforts hinge on the public's willingness to buy the vehicles. Another issue is the competition with electric/hybrid vehicles, which is finally seeing some growth across the country. Natural gas absorption air conditioning is another market that would be great for SCG, since the new load would not be competing for capacity on the distribution system during exiting peak usage periods. One concern here is this could be a more limited market due to the level of sophistication of the cooling equipment. New construction would be the most likely candidate since the system could be built with gas cooling in mind. Retrofitting existing facilities could present challenges to construction and the costs could make it prohibitive.

SCG should be following these two markets closely and looking for opportunities to promote them. For instance, short distance fleets like the US Postal Service and other local delivery/service fleets could be a significant market since they would have the fueling points at their dispatch centers.

Conclusion 3.4.4: *RCG/SCG LLC found that management needs to continue its efforts to broadcast the objectives below the UIL management level. The SCG mission is reasonably clear;*

⁴¹ Interview: Donnelly 061516

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both executive and senior management understand the mission and general objectives, but there are areas within SCG where the message is not receiving the full support necessary to convey its importance.

Analysis

Our interviews of executive management through the director level showed an understanding and ownership for the mission and the objectives and initiatives.

RCG/SCG LLC did observe during our interview process that, below the Director level, crew efficiency performance metrics are absent. This is covered later in the Construction and Maintenance section of this report. Several management personnel and many of the union personnel could only articulate management's directive and metrics on response to gas odor calls.

Management needs to do a better job of getting their message out and ensuring it is received by the first line supervisors and the union personnel.

Recommendations

None – We have two reasons for not including recommendations. First, AVANGRID may be formulating specific strategic plans for their entire operation. Second, we are making a number of recommendations in other areas that address the most pressing issues for SCG.

3.5 O&M Budget Process

Objective and Scope

This section addresses the SCG O&M budgeting processes to understand how the companies develop the budgets, assess or justify the spending levels, and monitor spending relative to the budgeted values. Further, it addresses whether the budget allocations adequately support company operations safely, effectively, and efficiently. Some of the principles associated with assessing the reasonableness of the O&M budgeting processes are also appropriate for consideration in the capital budgeting process, to be discussed in the next section.

Overall Assessment

SCG EMPLOYS O&M BUDGETING PRACTICES CONSISTENT WITH THOSE USED BY MANY UTILITY COMPANIES AND THE COMPANY IS GENERALLY EFFECTIVE WITH FINANCIAL CONTROLS – AS EVIDENCED BY THE SMALL O&M BUDGET VARIANCES FOR SCG. HOWEVER, THERE ARE OPPORTUNITIES TO IMPROVE THE BUDGETING PROCESS SO THAT IT SERVES TO “JUSTIFY” THE SPENDING LEVELS AND SUPPORT PERFORMANCE MANAGEMENT AND PROCESS IMPROVEMENT.

Evaluation Criteria

The evaluation criteria for assessing O&M budgeting processes include the following. Some of these criteria apply as well to the capital budgeting process, described in the next section.

- What are the roles of executive and senior management in the O&M budgeting process? What processes are used by the Board to oversee O&M budgets? What is the level of budget detail the Board sees and what are their responsibilities with regard to the budgets?
- What are the budgeting guidelines, practices, and procedures, including “zero-based” and other alternative methods?
- Is budgeting formally linked to strategic initiatives?
- Is there clear and independent oversight of O&M budgets all the way up to and including the BOD?
- Is there a formal process for handling emergency spending and integrating results into existing O&M budgets?
- Is the process reasonable for assessing the “right” level of O&M spending?
- Is the budgeting process focused solely on financial controls or does it support operation decision making?
- Are the variance analysis processes meaningful and do they lead to appropriate corrective actions?
- Are there early warnings in variance reporting as well to lead to appropriate corrective actions?

Conclusion 3.5.1: *RCG/SCG LLC determined that O&M budget development is consistent with the practices employed by many utility companies and supports financial control. Further, SCG is effective in controlling costs to budget as indicated by small budget variances.*

Analysis

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O&M budgets are developed based upon cost center. This approach supports financial controls as each cost center has a manager responsible for the budget in that part of the business. Further, budgets are developed and organized by resource type, as indicated below:⁴²

Regular Labor	Overtime Labor	Employee Benefits	Contracts
UIL Charges	IUMC Charges	Uncontractable Expense	Materials
Rents/Leases	Corporate Insurance	Travel	Conservation
Other General Expense	Transportation	Collection Expense	Regulatory Amortization
Apparance Service Revenue			

Exhibit 4 - Resource Based Budget Categories

Historical trends indicate increasing annual O&M spending for SCG, as shown in the following Exhibit:⁴³

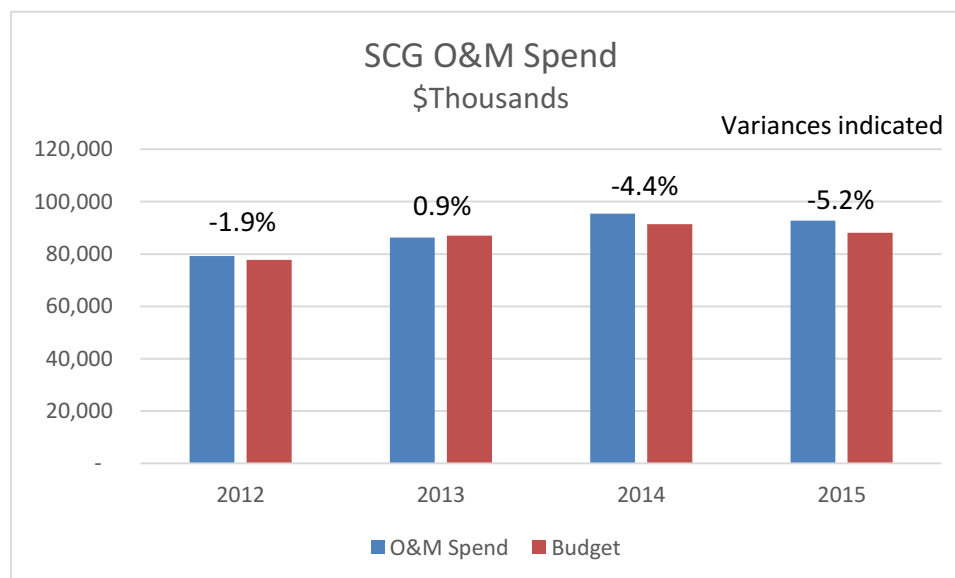


Exhibit 5 - SCG O&M Spending Trends

The data demonstrate relatively small annual spending variances relative to budget values – generally 5% or less. These results are very common among utility companies where management personnel are held accountable for maintaining O&M costs within approved budgets.

Further analysis of cost components contributing to increasing O&M costs are as follows:

⁴² Response to Data Request BUD007 CNG-SCG Attachment 1

⁴³ Analysis based on BUD007 CNG-SCG Attachment 1



Exhibit 6 - SCG O&M Costs by Cost Component

While some increases are evident in labor related expenses, usually attributed to supporting the customer growth initiative, the other increases are associated with corporate allocations and the conservation programs. According to SCG corporate allocations are greater due to higher capital spending, higher revenues, and higher payroll. As discussed in the 10.1 Affiliated Transaction and Corporate Allocations section of this report, these factors are components of the “Massachusetts Formula⁴⁴” used to allocate costs between affiliated entities, thereby resulting in increasing cost trends. Finally, conservation costs have increased as required to support regulatory mandates for conservation and are recovered through the Conservation Adjustment Mechanism (CAM).⁴⁵

Other expenses also show an increase in cost, particularly in 2014. This increase was a result of higher uncollectible expense. See Section 7.2 Credit & Collections and Low Income Programs.

Variance reports are produced monthly and are provided both for individual cost center reporting as well as on corporate performance management scorecards. As is evidenced by the small annual variances, these costs are scrutinized closely by management and responsible cost centers.

⁴⁴ See Foot Note 4

⁴⁵ Response to Data Request BUD006 CNG-SCG Attachment 2

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As is common in the utility industry, the budget process is initiated through the provision of a calendar providing deadlines for budget submittal as well as instructions for completing the budget,⁴⁶ UIL recently implemented a new budgeting system (TM1) which provides improved functionality and ease of use for budget collection and budget review. As will be discussed in the next conclusion, there are opportunities to further enhance TM1 to allow the budget to serve for more than financial controls.

Conclusion 3.5.2: *RCG/SCG LLC found that O&M budget development can be enhanced to better support performance management and better provide justification for the proposed spending levels.*

Analysis

While the AVANGRID CT Gas companies follow practices consistent with those of many utility companies, these practices fail to fully provide adequate justification for spending levels. Leading companies across industries employ “value based” budget practices that effectively link dollars spent to achievements anticipated. Stated another way, while many utilities budget by resource type (e.g., labor, materials, supplies, and expenses) and effectively budget dollars, leading companies’ budget work and then price the work. It is work or activities that consume resources. While resource based budgeting works for financial control it does not support operational control.

An example is provided below. The budget for repairing cut service lines is composed of two primary factors, a projection of the volume of work multiplied by the target unit cost to complete that work.

$$2500 \text{ cut service line repairs} \times \$175 \text{ per repair} = \$437,500$$

Once a budget is established in this case for cut service line repairs, it can be translated to resources that are consumed by this work to satisfy FERC accounting requirements and financial reporting. That is, with a target of \$175 per repair, this can be disaggregated into its cost components of labor and materials.

The value of this “activity based” approach to budgeting is that it provides much more meaningful variance analysis. Using the example above, suppose that actual costs came in at \$640,000. The normal response is that the particular business unit overspent, but there is often not more granularity in the explanation. And the corrective actions associated with the “blown

⁴⁶ Response to Data Request BUD008 CNG-SCG Attachment 1

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budget” are not clear. Suppose that the company was right on target at \$175 per repair, but under forecast the number of cut service lines. The proper response would be to analyze why the volume of service line cuts were higher than expected. It could be a poor forecast but it also could represent a growth in contractors ignoring the requirements to request a locate service, or an error in locating company facilities prior to excavation. Corrective actions would be focused on why the volume of service line cuts has risen.

On the other hand, suppose the forecast for cut service lines was exactly correct, but the reason for the budget overrun was the average cost per repair exceeded the \$175 per repair target. The response to this variance would be different. It should now be focused on why the cost per repair was higher than target. This would indicate a process improvement opportunity or a simple productivity issue.

Further, measurement of unit cost performance allows the operating entity to compare its performance to other work entities or service centers within the company. In addition, CNG and SCG unit cost performance can be compared to the unit cost performance of the AVANGRID sister gas companies or even other gas distribution companies in the Northeast. There are six gas distribution companies in AVANGRID, including similar service centers or regions within those companies, to benchmark unit cost performance. Our consultants have seen many instances where companies have posted competing productivity performance among operating regions, which invariably ends up improving productivity as no center likes to be “at the bottom of the list.”

More broadly, for any repetitive “blanket” type work, the budget can be represented in this manner. As a result, variance analyses will be more meaningful and will likely lead to process improvements and cost reductions. Below are examples from a gas distribution company many years ago that used these principles to “justify” the O&M budget.

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Operational Excellence

Fiscal Year 2000

Monthly Rates

All Service Cent Cost per Unit

<u>Distribution</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>	<u>March</u>
Rechecks	\$36.16	\$31.28	\$35.56	\$23.57	\$22.11	\$28.55
Locate - Company	\$9.39	\$8.46	\$8.91	\$8.45	\$10.86	\$8.00
Locate - Contractor	\$10.95	\$11.73	\$11.08	\$10.88	\$11.84	\$12.09
Repair and Maintain Mains	\$214.39	\$179.22	\$194.27	\$195.37	\$177.63	\$155.36
Repair and Maintain Service	\$116.03	\$122.40	\$121.94	\$118.94	\$114.42	\$100.97
Repair Damage - Mains	\$184.93	\$155.21	\$141.62	\$91.06	\$149.53	\$148.31
Repair Damage - Service	\$98.78	\$90.12	\$94.47	\$91.50	\$91.26	\$86.39
Relocate Service	\$170.61	\$189.64	\$158.28	\$198.69	\$152.11	\$138.44
Regulator Inspection	\$80.62	\$65.99	\$60.03	\$64.80	\$71.33	\$87.45
Regulator Maintenance	\$45.65	\$62.64	\$53.68	\$67.98	\$60.64	\$66.80
Emergency Valve Inspections	\$47.52	\$65.30	\$60.62	\$22.21	\$22.84	\$22.28
Perform Manhole Survey	\$1.19	\$1.86	\$1.43	\$1.29	\$0.54	\$1.28

Exhibit 7 - Example of Unit Cost Report

Summary Statistical Report

Operational Excellence

All Service Centers

From 4/1/00 to 6/30/00

Average Hourly Rate

Service:	\$25.64
Meter Reading:	\$17.47
Distribution:	\$22.80
Hours	

Service

	<u>Volume</u>	<u>Hours</u>	<u>% of Time</u>	<u>Labor Cost</u>	<u>Cost/Unit</u>	<u>Minutes/Unit</u>
Single Reads	36,542	7,631	4.58%	\$183,167.67	\$5.01	00 : 12
Turn Off/Remove	70,598	19,250	11.56%	\$490,602.56	\$6.95	00 : 16
Activate Meter	48,072	28,932	17.38%	\$741,850.37	\$15.43	00 : 36
No Gas-	10,673	6,432	3.86%	\$164,932.02	\$15.45	00 : 36
Investigates: Leaks	17,501	15,438	9.27%	\$395,862.90	\$22.62	00 : 52
Investigates: Other	2,419	1,196	0.72%	\$30,679.12	\$12.68	00 : 29
P.T. Changes	895	748	0.45%	\$19,179.64	\$21.43	00 : 50
Work Order Not Completed	10,450	4,151	2.49%	\$106,427.94	\$10.18	00 : 23
Maintain Mtr/Reg Proactive	39,478	11,468	6.89%	\$283,498.87	\$7.18	00 : 17
Repair Mtr/Reg Reactive	8,649	5,125	3.08%	\$131,401.04	\$15.19	00 : 35
Charge Work - Appliance	4,280	3,337	2.00%	\$85,560.82	\$19.99	00 : 46
Charge Work - Fuel Line	0	0	0.00%	\$0.00	\$0.00	00 : 0
New Meter Sets	13,168	10,728	6.45%	\$275,081.06	\$20.89	00 : 48
Misc. Activities		9,456	5.68%	\$242,466.51		

Exhibit 8 - Example of Summary Unit Cost Report

SCG has started to produce unit cost reporting, particularly for capital work (as will be discussed in the next section). However, while similar unit cost information can be generated (for example using unit cost or hours targets embedded in the company's mobile dispatch system) the company does not in fact use such information for O&M budget development or performance management. In response to a document request the company indicated that work

load volumes and unit costs for O&M work was not “off the shelf” available, indicating this type of unit cost and work volume analysis is not used for performance reporting and budgeting.⁴⁷

While TM1 is the new budget collection system, activity based budgeting capability has not yet been configured in the application. The company recognizes this could be added at a later time.

As a final comment on justifying O&M spending levels, occasionally O&M initiatives are organized into a program. Such programmatic activities should be justified through a business case, similar to what would be expected for capital project and programs. Such project or program related work, whether O&M or capital, should follow the current company requirements for justifying project work, discussed further in the next section.

Recommendations

Recommendation 3.5.1: *RCG/SCG LLC recommends that SCG enhance the O&M budgeting process to incorporate activity based management principles, including the budgeting of work volume and developing target unit costs. Target unit costs should consider unit cost performance across AVANGRID companies, if not across other gas companies where such data are available. Variance reports should present variances in work volumes and in unit cost performance, along with appropriate variance explanation.*

3.6 Capital Budgeting Process

Objective and Scope

This section of the report addresses the SCG capital budgeting processes to understand how the companies develop the budgets, assess or justify the spending levels, and monitor spending relative to the budgeted values. Further, the assessment considers whether the budget values developed adequately support company operations safely, effectively, and efficiently.

Overall Assessment

SCG EMPLOYS CAPITAL BUDGET DEVELOPMENT PROCESSES CONSISTENT WITH THOSE OF MANY UTILITY COMPANIES. OVERSIGHT OF THE CAPITAL BUDGETING PROCESS BY THE CENTER FOR PROJECT EXCELLENCE PROVIDES A HIGHER LEVEL OF SCRUTINY TO CAPITAL BUDGET DEVELOPMENT AND APPROVALS. IMPORTANTLY, SCG HAS EXPERIENCED SIGNIFICANT VARIANCE ON CAPITAL PROJECTS ESTIMATES.

⁴⁷ OPS040 CNG-SCG Final

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A significant percentage of capital spending is composed of two primary programs: New Business/Gas Conversion and Bare Steel and Cast Iron Replacement. Spending since 2012 in these programs has increased significantly, especially for SCG. Budget variances on a program level have been relatively high particularly for SCG, in part due to the difficulty of projecting new business growth as the differences in the cost of gas versus oil have diminished greatly, as shown below, narrowing from a difference of about \$2 per gallon in 2012 and 2013, to \$0.76 in 2015. More critical has been a significant level of variance to budget on a project level. This is especially pronounced for SCG when compared to CNG. Estimating accuracy has clearly been a challenge at the project level. Project execution issues can also contribute to budget variances. These issues are addressed in the System Operations section of the report.

SCG recognizes the problems evident with project estimation and have initiated some steps to improve the process. We agree with the recommendations for improvement provided by a consultant engaged by the companies to evaluate their estimating practices. We also have suggested some additional improvement opportunities.

Finally, we recommend enhancing the use of unit cost analysis to support capital budgeting and performance reporting for the new business and main replacement programs.

Evaluation Criteria

- What is the level of budget detail the Board sees and what are their responsibilities with regard to the budgets?
- What are the budgeting guidelines, practices, and procedures, including “zero-based” and other alternative methods?
- Is budgeting formally linked to strategic initiatives?
- Is there clear and independent oversight of capital budgets all the way up to and including the BOD?
- Is there a formal process for handling emergency spending and integrating results into existing capital budgets?
- What is construction/capital priority setting process?
- How does the capital budgeting process (including project authorization, project appropriation, increase/decrease of authorization/appropriation, capital budget status reporting, validation in advance of appropriation, funding controls, and other elements of the capital budgeting process) function in the Company?
- How does management oversee and control capital budgeting? This includes the methodologies used to control and manage program and project capital costs in the near

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and long term; the annual process for reviewing and determining whether total capital planned expenditures are adequate; cost control systems and processes from both a top down and bottom up perspective; controls to ensure that increases and decreases to the construction budget/expenditures are justified and appropriately approved.

- Is the process reasonable for assessing the “right” level of capital spending?
- Is the budgeting process focused solely on financial controls or does it support operation decision making?
- Are the variance analysis processes meaningful and lead to appropriate corrective actions?
- Are there early warnings in variance reporting as well to lead to appropriate corrective actions?

Conclusions

Conclusion 3.6.1: *RCG/SCG LLC determined that when viewed on a program or project category basis, SCG has shown fairly wide variances in spending relative to capital budgets as it has expanded spending in new business and pipeline replacement programs.*

Analysis

Capital spending trends for SCG are shown in the following Exhibit:⁴⁸

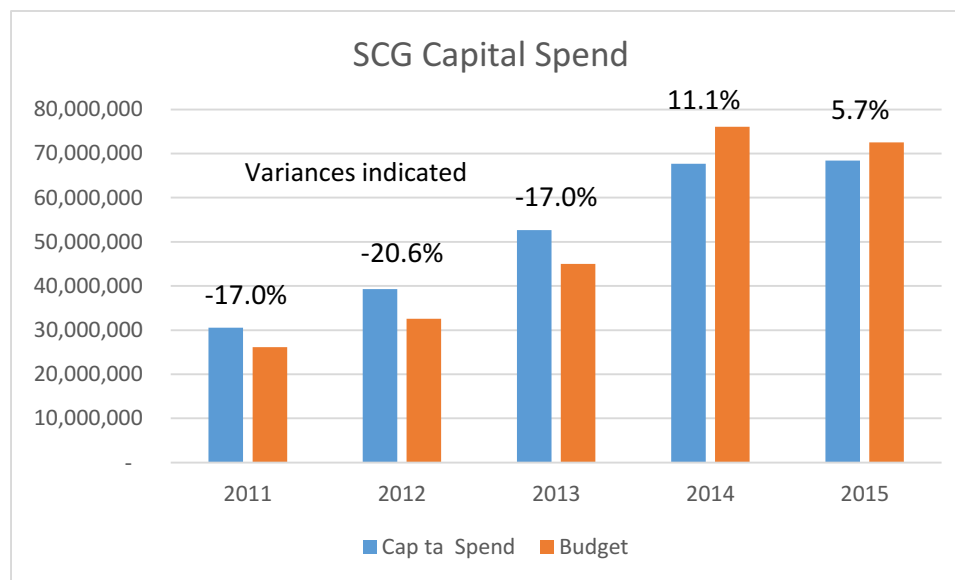


Exhibit 9 - SCG Capital Spending Trends

⁴⁸ Source data SPE007 CNG-SCG Attachments 1 through 6

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As can be seen, capital spending has increased dramatically since 2011. Much of the increase is associated with two primary programs – New Business/Gas Expansion and Cast Iron and Bare Steel Main Replacement. In fact, when Meters and Regulators are included, these components constitute almost 90% of the capital spending as shown below:

	2011	2012	2013	2014	2015
Percent of Capital spent on NB and Replacement Program (including meters and regulators)	89	88.8	89.3	87.3	86.2

Exhibit 10 - Percent Capital Spending on New Business & Main Replacement

On the question of how well SCG capital spending is tied to corporate strategy, the link is apparent as a high percentage of capital spending is concentrated in new business and pipeline main replacement programs. These programs constitute important strategies for SCG and are mandated through agreements with the PURA.

Project variances on a program or project category basis exceeded 10% in most years and were over 20% in 2012.

Component trends for capital spend for SCG are provided in the following Exhibit:

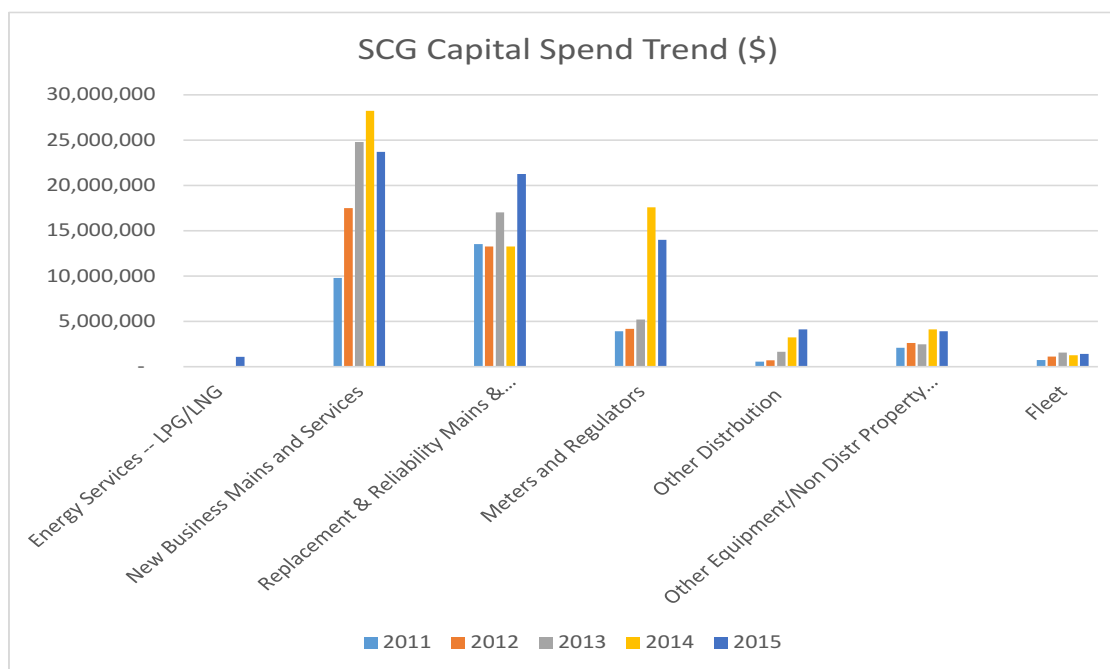


Exhibit 11 - SCG Capital Spending by Major Cost Category

As can be seen on a component basis, most of the increase in spending has been associated with the new business programs and pipeline replacement programs.

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The company provided the following explanations for variances in capital budgets:⁴⁹

- | | |
|----------|--|
| 2013 SCG | Due to a successful marketing effort related to customer fuel switching, an additional \$5 million for growth projects was requested and received. The Gas Companies also accelerated capital investment on replacement programs by \$3 million. |
| 2014 SCG | In response to a reduction in expected capital requirements for growth projects and property management (about \$5.5 million), SCG accelerated the replacement of communication equipment by \$2.5 million and vehicle purchases by \$0.5 million |
| 2015 SCG | Due to the lower than expected capital requirements for growth projects (about \$10 million) and the delay in spending in the AMI project due to the timing of the project completion (about \$3 million), spending was accelerated on infrastructure replacement by \$6.5 million, government relocation work by \$1.0 million, and by \$1.5 million for the Housatonic Gate station project. |

And in another document, explanation for 2012 variances for SCG include, directly quoting from the variance report:⁵⁰

- Greater than anticipated mains due to large unbudgeted NEP: Orange, Woodbridge, Madison, and Easton,
- Greater than anticipated activity on commercial services, especially municipal, and
- Much higher than anticipated sales; storm opportunity for coastal areas will add approximately 60 units for this year. Main extensions projects will add 300+ services.

Much of the variance is related to difficulties in forecasting new business growth, especially as the differences between the price of oil and natural gas has narrowed dramatically since 2012. Often, reductions in new business growth spending are offset by accelerating some of the pipeline replacement program expenditures, which is not an unreasonable practice. Increases in new business activity are not necessarily a bad thing, although it could create resourcing and project management constraints. The more rapid rise in spending for these two primary programs for SCG also provides more opportunities for variance to budget.

However, the next conclusion offers a further consideration of other data sources indicating issues associated with variances at the project level.

⁴⁹ Response to Data Request SPE009 CNG-SCG Final

⁵⁰ Response to Data Request SPE007 CNG-SCG Attachment 2

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Conclusion 3.6.2: RCG/SCG LLC found that SCG has experienced relatively wide variations in capital spend as compared to estimates at the project level. These variations are associated with poor estimation (discussed here) and likely issues associated with work execution (discussed further in the System Operations section of the report).

Analysis

Numerous examples demonstrate challenges SCG faces in estimating project costs and/or delivering projects at the budgeted levels. First, as was suggested by the company, we requested project level variances at the “superior order” level, which essentially compiles all associated work orders for a project. The information provided in OPS039 CNG SCG Attachment 1 for SCG projects between 2013 and 2015 demonstrates the following results:

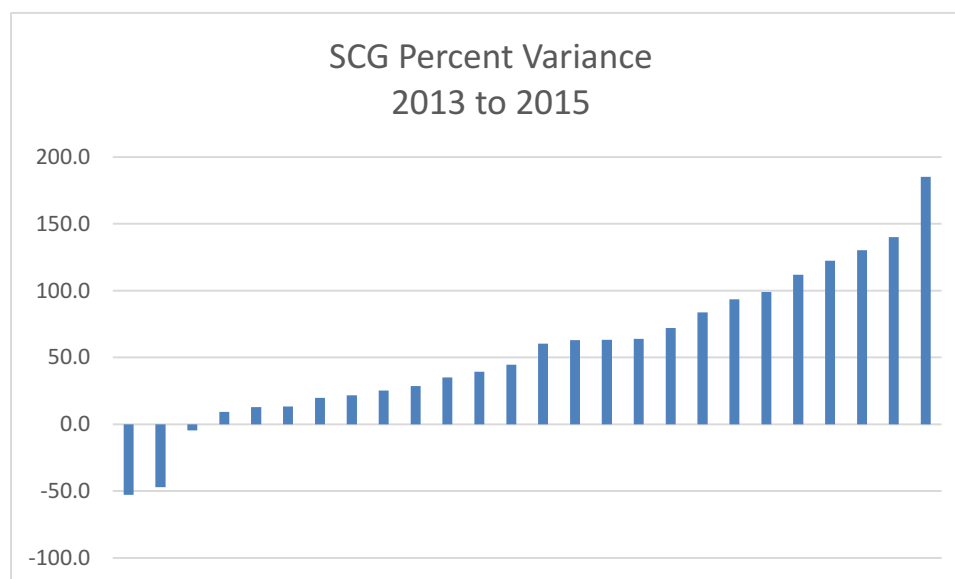


Exhibit 12 - SCG Percent Project Variance

Out of 26 projects only two were completed within +/- 10% percent of the estimated costs.

As another example, we reviewed Key Performance Indicator Reports,⁵¹ comparing actual results to targeted results for numerous metrics. For SCG in 2015 and for the Cast Iron/Bare Steel Replacement Program, the target was to install 11 miles of main for \$11.03 million, for an average cost of \$1.0 million a mile. Actual results for 2015 indicate 13.96 miles of main was installed, but for a cost of \$19.6 million, or an average of \$1.4 million per mile, 40 percent higher than estimated.

⁵¹ Response to Data Request EXE020 CNG-SCG Attachment 1

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SCG recognizes and acknowledges that they have challenges associated with project cost estimating. Their own internal audit reports recognize the same as indicated in a 2014 report.⁵² Finally, as will be discussed in the New Business section of this report, the PURA has recognized the high level of project cost variances by CNG and SCG and has requested the companies provide additional focus on improving estimating practices.

During interviews conducted with the Director of Gas Construction and the Director of Gas Design and Delivery on July 12, 2016 the company was requested to explain why they thought project variances were so large. They suggested a few things were driving the variances including:

- Inadequate handoffs between designers and estimators,
- Inadequate estimating standards (known as compatible units), and
- Inadequate consideration of policing costs and government and landscape restoration costs.

On the last item, evidently each local community has its own rules for policing or flagging requirements during construction. These variations in local rules are not identified as part of the estimating process.

The company indicated they have initiated some practices to improve estimating accuracy. They also indicate that these practices were implemented late in 2014 and early 2015 and the results are not yet apparent. Projects completed in 2015 were likely designed and estimated prior to the process changes. See Section 4.3, System Planning & Engineering, conclusion 4.3.6.

As part of the company's Comprehensive Energy Strategy, incorporating programs to encourage conversions to natural gas, SCG was instructed to engage a consultant to help them evaluate causes and provide recommendations for improving estimating accuracy. Concentric Energy Advisors was engaged to conduct the study, completed late in 2014. This study focused on New Business projects but their recommendations apply to the Main Replacement Program as well. Their recommendations were as follows, quoting directly from their report:⁵³

- *Variability in estimating mains and services costs is largely caused by complications with underground construction that cannot be predicted. Specifically, estimating construction costs to install mains and services is significantly impacted by underground obstacles that cannot be predicted with the information and technology that are available to LDCs, including the Companies. Concentric notes that the Hurdle Rate process would not be improved by adding a probability weighted "underground obstacle" adjustment to all*

⁵² **CONFIDENTIAL** [REDACTED]

⁵³ Response to Data Request GS085 CNG-SCG Attachment 1 Page 32

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project cost estimates to account for potential underground obstructions; the costs of projects that did not encounter obstacles would be overestimated and the costs of projects that did encounter obstacles would continue to be underestimated.

- Town by town differences and inconsistencies in construction permitting and restoration requirements, and traffic detail requirements may contribute to the variability in estimating mains costs. Concentric recommends that the Companies could attempt to identify towns with requirements that consistently add to construction costs; based on that analysis, the Companies could add an appropriate premium to the cost estimates for installing mains in these towns.*
- In addition, Concentric identified several projects in which the actual services costs were extremely low (i.e., less than \$1,000), resulting in fairly large overestimates of services costs (e.g., actual services costs of less than half the cost estimate, and sometimes as low as less than 10% of the cost estimate). The Companies explained that the low residential service costs were sometimes due to the customer providing a trench in which to install the service, and the installation being performed by Company crews, thus reducing the cost. If the customer is going to provide the trench, this should be reflected in the service cost estimate; however, it is understood that often customers decide to provide a trench at the last minute.*
- Concentric's review and analyses of estimated meter costs indicates that meter cost estimates used in the hurdle rate analysis are typically underestimated because they (a) are based on outdated meter prices and (b) do not include labor costs to install the meter at the customer premise. In addition, Company cost estimates for some residential projects with multiple premises did not include meter costs for each premise in the project. Concentric recommends that the Companies should (a) annually update meter prices; (b) consistently include labor costs to install the meters, and (c) modify the project cost input form to include input fields for the number of meters and cost per meter by type of meter, and to require verification of the entries if the number of meters does not equal the number of premises that are included in the project.*
- Similarly, Concentric recommends that the Companies should update mains and service installation costs components on an annual basis to ensure that cost estimates are based on the most current cost information. Concentric understands that the Companies updated costs components in late 2013 based on an analysis of actual costs in 2013 for gas main and service installations, for the first time in several years. In addition, a procedure was developed to perform a review of the estimated and actual costs for jobs at least annually. Based on this review, cost components will be updated annually. Concentric agrees that this process of annually reviewing and updating cost components should improve cost estimates going forward.*

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- *Concentric understands that one of the challenges associated with estimating construction costs is that the Companies' agreements with contractors are of short duration e.g. a year or less (per the Concentric report, however, CNG states that it now operates with contractor agreements that run from three to five years in duration). As a result, the contractually set components of a project may change between the times that the Companies agree to a CIAC with a perspective customer to the time that the construction project is completed. Concentric understands that the Companies' construction group is working closely with the UIL Purchasing Department to negotiate longer term construction contracts with expanded Service Level agreements. This initiative will bring added predictability to construction costs. Concentric agrees that entering into longer term construction contracts should improve cost estimation.*
- *UIL has created a new engineering organization at the corporate level that is responsible for standardizing engineering processes. These standards and associated training should improve cost estimation by removing some of the variation in approaches to planning and executing specific projects by ensuring that project estimates are performed in the same manner across the organization.*
- *Concentric's cost analysis excludes a number of mains and services with incomplete records because the work orders were not "closed out" from a construction perspective, even though the project has been complete for a long time, in several instances, over a year. Concentric understands that these work orders could remain open (a) because some work still remains to be completed (i.e., final restoration) and could take several months due to limits on construction and paving schedules, or (b) because the system has not been updated to reflect the completion of the construction. The Companies should attempt to close these work orders in a timely manner by ensuring the construction is completed and the system has been updated so the Companies' periodic root cause will be based on a more robust database of recent projects.*
- *Similar to the consumption analysis, there were several projects that Concentric excluded from the cost analysis due to IT system issues associated with matching estimated costs with actual costs. Concentric understands that the Companies are working with IT to develop reports to streamline the process of comparing the actual and estimated costs of the different components of a job. Concentric recommends that the Companies continue to develop and enhance its reporting capabilities in these areas.*
- *The Companies should continue to evaluate and improve their cost estimation procedures on an ongoing basis. Resources should be assigned to perform periodic root cause analyses to (a) determine the primary reasons that cost estimates are different from actuals (with equal emphasis on over and underestimates), and (b) to identify process changes that will address the root causes. Concentric understands that UIL has created a new gas construction organization with a Director of Construction, construction and*

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program managers, and cost and scheduling analysts. This organization should be able to help facilitate more detailed cost review analyses and related improvements. Process improvements that have the largest impact on the accuracy of the cost estimates could then be implemented. Concentric notes that the cost of making process improvements must be weighed against the benefits of the improvement. For example, a \$10M system improvement that improves the accuracy of project cost estimates by \$100K annually would not be cost effective. In addition, Concentric notes that it may take a year or more before a full assessment can be conducted of the effects of the Companies' recently implemented process changes that were designed to improve the accuracy of consumption estimates and project cost estimates.

RCG/SCG LLC mostly concurs with the Concentric recommendations, adding the following:

- The company should create a list of local community requirements to better reflect variations in policing, flagging, and restoration requirements and build those factors into the estimates.
- While uncertainty regarding underground work is a reality of the gas distribution business, the company should be able to do a better job of understanding the local conditions and applying appropriate adjustment factors or contingencies for the given area. This is a common practice by many gas distribution companies that operate in service territories with diverse underground conditions.
- A number of utility companies recognize they need to update their estimating standards or "compatible units (CUs)." Because of the large quantity of compatible units in most estimating applications, it is very difficult to evaluate all CUs. Leading companies will employ an estimating standards group, and using data analysis to identify projects or project types that are routinely over or underestimated, select key CUs that need to be updated. Essentially, the team would start on the worst CUs (measured by inaccuracy) and methodically work on revising them. With the "right people" around the table, they can both identify the CUs that need immediate attention and can modify them to better reflect actual costs.
- Project execution issues will be discussed in the System Operations section of the report. However, it is clear that inconsistent management of company crews can result in project costs exceeding estimates. Work crews and their supervisors may not even know the work standards to set expectations for their crews to those standards.
- Further, for work performed by contractors, resultant costs can be impacted by how well SCG provides oversight of contractor work and how tightly change order requests are managed.

- Finally, many companies are challenged in estimating accuracy because designers fail to adequately conduct proper job “walk downs” to fully understand work requirements. Again, these components will be discussed later in the report.

The companies are working on implementing many of these recommendations. In part, greater scrutiny is being applied through construction controls led by the Center of Project Excellence, discussed in the next Conclusion.

As a final comment, there are consequences associated with misestimating projects. Aside from general project control issues (specifically in the case of the pipeline replacement program), systematic project underestimation means that the pipeline replacement program will likely cost more than currently projected and take more years than currently anticipated in the program. For the New Business programs, there are likewise consequences and these are discussed further in the New Business section of this report.

Conclusion 3.6.3: *RCG/SCG LLC found that aside from project level estimating challenges, the overall capital budgeting processes and controls are very good.*

Analysis

The mechanics of assembling the capital budget at SCG are very common to the practices employed by most utility companies. The more important consideration is the level of scrutiny applied to the evaluation of proposed projects and programs.

The Vice President for Engineering and Project Excellence leads a Project Management Organization (PMO) known as the Center for Project Excellence (CPE). The CPE is a UIL organization and serves the gas and electric businesses. While one of the key duties of the group is to manage large capital projects, it is also responsible for managing the overall capital portfolio for each of the business units. They establish the portfolio categories along with the executive team and help manage the workflow of authorization for the consideration of projects within the portfolio. Process features include:⁵⁴

- A reserve is established in the budget if there is a 75% probability that project will be approved. A Project Manager is assigned to develop a project plan. They then submit a Level 1 schedule as well as resource loaded schedule.
- The budget plan is a 10 year plan. A more detailed reforecast is prepared every other year with validations on the “off” years.

⁵⁴ Interview with Vice President Engineering and Project Excellence and Director in that group on July 12, 2016

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- To make it in the budget, the group collects the “wish lists” from across the companies and they evaluate available resources (e.g., workforce capacity) and available funding. Once the dollar limits are set by Finance, a portfolio is assembled where projects are grouped into categories such as safety, customer related capacity expansion (much less prevalent on the electric side with zero load growth), compliance, facility relocation, etc.
- An executive team is assembled including the CEO, CFO, Operating Unit leads, etc., and a presentation of the portfolio is held. The portfolio is segregated into gas and electric and then the group decides what to include in the budget. However, this does not represent authorization to spend.
- Authorizations to spend occur after submittal of project charters. There are various charter templates depending upon type of project.
- Approvals happen based upon grants of authority.
- Project portfolios are maintained in TM1 Cognos. The charter templates include milestone dates, cost baselines, resources, etc.
- The charter is designed to address the consideration of alternatives and describe the need for the project, potential solutions, etc.
- There is somewhat of a gated process as a project owner can ask for engineering dollars – through an engineering charter. An engineering charter cannot exceed 10% of the estimated cost of the entire project.
- The Charter next goes to Project Manager for approval then to the Director, Executive Sponsor, and ultimately to the CPE to review.
- Particularly for large capital projects (anything over \$10M), the projects go through considerable challenges in the review. The Risk Management organization is also a “signatory” on approval of large projects.

As discussed earlier, most SCG capital spending is associated with New Business and Pipeline Replacement programs. Therefore, the process described above mostly applies to a relatively small group of individual projects at SCG.

Further, because the SCG has created the Gas Construction Group, which centralizes the management of New Business and Pipeline Replacement programs, the CPE plays a smaller role in the development of those program budgets. However, recognizing the estimating accuracy challenges for SCG, the CPE has assigned personnel to work with the Gas Construction Group to apply improved project management practices in executing the gas construction projects.

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CPE also manages the collection of project variance information for gas and electric construction. The results are summarized in a monthly CPE Governance UIL CAP Report.⁵⁵ This report provides project level variances to senior management. This report also assesses schedule adherence and earned value to measure the effectiveness of the construction program.

As described in the prior Conclusion and Recommendation, the test of the effectiveness of the process improvement efforts associated with project estimation and project execution, whether implemented by the Gas Construction Group or the CPE, is whether project variances are in fact reduced for SCG.

Conclusion 3.6.4: *RCG/SCG LLC found that there are opportunities to improve the use of unit cost management in gas construction projects to support capital budget development and performance management.*

Analysis

Similar to the conclusions and recommendations associated with “blanket” O&M work, new business and pipeline replacement work should be budgeted by estimating work volumes and pricing the work. Targets should be set for average unit cost for services, new business main, and replacement main (by type of main). In developing annual budgets, the Gas Construction organization works with the Marketing organization to project work volume goals for New Business. Pipeline replacement work volume goals are set within Gas Construction. Unit costs are considered in the development of the annual budgets including the consideration of contractor unit costs. However, routine company variance reports are provided on the overall program *spending* levels vs. budget. While work volumes are also tracked, it would be very easy to report, on a monthly basis, not only variances in work volumes but by taking the calculation to the next step and reporting on variances in spending on a unit cost basis.

In this manner, similar to the description provided in the O&M budgeting process assessment, more meaningful discussions can occur on causes of spending variances and appropriate corrective action can be applied. Importantly, unit cost targets unique to each region should be established. However, for similar types of work in similar regions or work environments, unit cost targets should be consistent. Stated alternatively, the cost to install a new service should be compared across all six Avangrid Networks sister gas companies to set an appropriate unit cost target. Further targets can consider unit cost performance obtained through benchmarking studies with other gas distribution companies.

The Gas Construction Group has begun to issue very good Construction Dashboards. The question is how are these dashboards used? The information below is collected from the

⁵⁵ CONFIDENTIAL [REDACTED]

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December 2015 and June 2016 dashboards.⁵⁶ Data for SCG and CNG are shown because the comparison of results between the two companies is important.

	SCG		CNG	
	Dec-15	Jun-16	Dec-15	Jun-16
Average Foot of Main per Crew per Day	83.79	171.00	93.90	107.00
Average Services per Crew per Day	0.84	1.65	0.72	0.97
Cost per New Main per Foot (Rolling 12 month)	61.91	124.00	49.00	65.00
Cost per New Business Service (Rolling 12 month)	4091.81	4339.00	5488.00	5313.00

Exhibit 13 - Construction Performance Dashboard

There are a number of interesting observations here:

- It is at first evident that the performance statistics for SCG are different in many respects from the results shown for CNG. There may be logical difference due to the characteristics of the geographic regions. However, the performance statistics may also differ due to the use of different management practices or simply different capabilities of supervisors. One way to test this performance is to compare the results to the other sister gas companies within Avangrid Networks.
- Even comparing performance within the same company there are differences, and in some cases, very considerable difference in performance, especially for SCG. Some of the data indicates improvements in productivity, such as the first two metrics. While the CNG data appears feasible if in fact improvement efforts were implemented, the SCG data shows dramatic change, with approximately a 100% improvement in productivity. This information may be valid, but is suspect. At minimum, these dashboards should be accompanied by explanations as part of routine monthly reporting to management.
- In contrast to the apparent improvements in productivity, the cost per New Main per Foot on a rolling twelve month average has increased. The cost per new business service has also risen, at least for SCG.

Therefore, while the dashboard is a very positive step, explanations should be provided to justify the values. It may also indicate the need for better data collection on the “front line,” a very common issue for utility companies.

While the comments above are more relevant for performance management in gas construction, it is also relevant for the capital budgeting process. Unit cost information and work volumes should form the basis for budgeting and variance reporting. SCG is on the right track

⁵⁶ Response to Data Request OPS034 CNG-SCG Attachment 1

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here at least providing visibility to unit costs – which is not currently available for O&M work. The next step is to enhance its use.

Recommendations

Recommendation 3.6.1: *RCG/SCG LLC recommends that SCG continue to provide targeted focus to monitoring its construction estimating accuracy, identifying root causes of variation, improving estimating practices using the various tools identified in this Conclusion, and further monitoring project execution practices to determine whether project cost overruns are impacted by these practices.*

Recommendation 3.6.2: *RCG/SCG LLC recommends that SCG use work volumes and unit cost information to support capital budget development, variance reporting based on work volume variances and unit cost variances, and for performance management. Further, unit cost targets for budgeting should be used consistently for similar work and in similar conditions across Avangrid Networks gas distribution companies – that is, considering best performers in target setting.*

4. SYSTEM OPERATIONS

Objectives and Scope

System Operations includes a review of gas supply, system planning, system design, system operation and maintenance, and system reliability and construction. System Operations spans a significant portion of the natural gas business model from determining the gas requirements all the way to delivering the gas to and satisfying the ultimate customers. In evaluating gas supply and system planning, it is necessary to also look at the requirements forecasting process. We will divide this chapter into the following sections and address each in turn:

- Requirements Forecasting,
- Gas Supply,
- System Planning and Design, and
- System Reliability, Construction, Maintenance, and System Operations.

The last bullet combines all activities related to constructing and maintaining the gas distribution system. There is a separate construction group; however, it functions as a project management and quality assurance group. The majority of their efforts are covered in the engineering section regarding project management.

Overall Assessments

Requirements Forecasting

The requirements forecasting function is collaboratively performed by multiple areas within the UIL business units, SCG and CNG. The Rates and Regulatory department appropriately develops a forecast to meet the requirements of the financial and regulatory functions. RCG/SCG LLC believes a more formal review by rates and regulatory (along with a consensus executive approval by all involved functions) of the CES forecast prepared by sales and marketing, could refine the CES impact on the forecast.

Gas Supply

The performance of Gas Supply is only formally compared to one external measure, and its performance is reasonable. Gas Supply reasonably defines its supply portfolio principles, goals, and objectives to ensure continuity of supply. Gas Supply sets appropriate processes to obtain transportation capacity to meet long term needs. Gas Supply Department has a defined process for developing and obtaining commodity at a reasonable cost. RCG/SCG LLC considers the risk management function for Gas Supply reasonable.

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System Planning and Design

UIL Gas Design and Delivery and SCG gas distribution planning and engineering appear to be well organized with the right resources. RCG/SCG LLC chief concerns are with the standardization of materials and equipment, and the process for estimating work. SCG's engineering function could use a higher percentage of engineers supporting their design and estimating activities.

Reliability, Construction, Maintenance, and Operations

The overall SCG distribution reliability is very good and improving as low pressure areas are converted to pressure systems and the mains replacement program progresses. SCG's distribution construction and maintenance operation is reasonably well managed and extremely responsive to leak calls. While there is no formal work management system, as of this writing, they move crews out of the yard very efficiently, but appear to be less consistent in their field productivity management than CNG.

4.1 Requirements Forecasting

Objectives and Scope

The Requirements Forecasting function included a review of the Company's forecast models; inputs such as economic data sources; the forecast approval process; the methodologies used to validate the forecast, and the use of the forecasts throughout the organization. The review concentrated on the interaction between the elements of forecasting, including model choice, input data, review and approval of the forecast and post forecasting reviews of the model and its results along with key performance indicators, budgets, and staffing.

Overall Assessment

THE REQUIREMENTS FORECASTING FUNCTION IS COLLABORATIVELY PERFORMED BY MULTIPLE AREAS WITHIN THE UIL BUSINESS UNITS, SCG AND CNG. THE RATES AND REGULATORY DEPARTMENT APPROPRIATELY DEVELOPS A FORECAST TO MEET THE REQUIREMENTS OF THE FINANCIAL AND REGULATORY FUNCTIONS. RCG/SCG-LLC BELIEVES A MORE FORMAL REVIEW BY RATES AND REGULATORY (ALONG WITH A CONSENSUS EXECUTIVE APPROVAL BY ALL INVOLVED FUNCTIONS) OF THE CES FORECAST PREPARED BY SALES AND MARKETING, COULD REFINE THE CES IMPACT ON THE FORECAST.

The Rates and Regulatory Department creates and tracks the sales and revenue forecast for the Company. The revenue forecast is used for short , medium and long term financial

planning purposes. The long term forecast (specifically the peak day demand) is an input into the Gas Supply planning process.⁵⁷

The revenue forecast consists of two discrete elements:⁵⁸

1. A forecast of existing customers served under existing tariffs. This forecast is developed with econometric models using economic data inputs and adders as necessary to reflect changes in larger customers' usage as conveyed by the Company's Sales & Marketing representatives.
2. A forecast of customers that are forecast to be connected to the Company's distribution system as a result of efforts by the Company's Sales and Marketing organization under the Connecticut Comprehensive Energy Strategy (CES). This incremental or supplemental forecast consists of two elements:
 - a. New On Main CES customers connected to the Company's existing distribution system.
 - b. New Off Main CES customers connected to an extension or expansion of the Company's distribution system.

Requirements Forecasting is under the direction of the Director, Regulatory and Tariffs, who reports to the Vice President Regulatory Affairs at UIL Holdings.⁵⁹ The forecast focuses on the needs of the financial and regulatory groups and also Gas Supply.⁶⁰ The forecasts are used as an underlying checkpoint, but it is not directly used for operational functions, such as Gas Supply,⁶¹ because those functions require more granular information.

The annual forecast focuses on forecasting revenue. The forecast is compared monthly to actual requirements and the variances are disaggregated over a number of sources.⁶² Although (weather) normalized sales are available, the Company does not track the variance. The pattern of the variance is not unexpected.⁶³ The performance of the forecast is not compared to the performance of a peer group of similar utilities.⁶⁴ Forecasting is adequately staffed to continue this level of performance.

⁵⁷ Response to Data Request GS001

⁵⁸ Interview B. Welch 7/13/16

⁵⁹ Response to Data Request GS072

⁶⁰ Interview B. Welch 7/13/16

⁶¹ Interview C. Goodwin 7/13/16

⁶² Response to Data Request GS080

⁶³ Response to Data Request GS073 (for CNG) and GS074 (for SCG)

⁶⁴ Response to Data Request GS083

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Forecasting does not have a formal mission statement,⁶⁵ but interviews with members of Rates and Regulatory do articulate a clear understanding of its mission.⁶⁶

Formal key performance indicators do not exist for the forecasting function.⁶⁷

Departmental budget versus actual information for the forecasting function was not available but the manning devoted to the function has remained constant and fully staffed since 2010.⁶⁸ Job descriptions for the forecasting function are current.⁶⁹

RCG/SCG LLC's analysis of the Forecasting function is based upon 25 data requests presented to the Company and interviews with two levels of management within, related to, or supporting Forecasting. RCG/SCG LLC also reviewed the Company's biennial Forecast of Natural Gas Demand and Supply (2015 – 2019) along with its predecessors (2013 – 2017) and (2011 – 2015).⁷⁰

Evaluation Criteria

- To what extent were the recommendations from the 2008 audit implemented?
- What are the models, assumptions and key drivers, and other inputs used to forecast local and system wide natural gas requirements?
- What are the inputs, including demand side management (demand response, etc.), energy efficiency, and other initiatives that are factors in the forecasting process?
- Are the organization and staffing of forecasting functions reasonable?
- Does the Company perform customer research?
- Does the Company statistically test and back cast its forecasting models and routinely compare its forecast to actual sales and peak?

Conclusions

Conclusion 4.1.1: *No recommendations in the Company's prior audit apply to the Forecasting Department.*

⁶⁵ Response to Data Request GS019

⁶⁶ Interviews C. Goodwin 7/13/16 and B. Welch 7/13/16

⁶⁷ Response to Data Request GS020

⁶⁸ Response to Data Request GS021 and GS022 and GS076

⁶⁹ Response to Data Request GS077

⁷⁰ Response to Data Request GS079

Analysis

The SCG's prior audit report by NorthStar did not apply any specific recommendations to the Forecasting area.⁷¹

Conclusion 4.1.2: *RCG/SCG LLC determined that the Rates and Regulatory Department uses an appropriate process to develop a forecast to meet the requirements of the financial and regulatory organizations for its present customers. There is a collaborative relationship with the Gas Supply function for the development of the peak day forecast.*

Analysis

The Company's biennial forecast provides a detailed description of the forecast methodology, which builds a forecast from independent class specific econometric models⁷² (residential, multi family, and commercial & industrial) with a consistent structure based on economic forecasts of customers by class and use per customer (UPC) by class. External adjustments are made for large customers' loads, including distributed generation⁷³ and shifts from interruptible to firm service.

Major inputs include effective degree days (EDD), state focused economic data, and energy prices provided by nationally recognized firms.⁷⁴ The relationships between the inputs and dependent variables are developed through regression techniques, including the impact of weather. Normal weather is defined as the most recent 30 years of historical heating degree days at local airports. Weather normalization is based on a month, not a shorter period. Base usage in the months of July, August, and September is subtracted before normalization and then added back.⁷⁵ The regression model and associated statistical testing is performed by an outside vendor subject to reviews based on historical experience.⁷⁶ The effects of energy efficiency on the sales forecast are developed inherently in the regression analysis.⁷⁷ The peak day models do not pick up historical trends and an adjustment is made outside the model to reflect the effects of conservation.⁷⁸

⁷¹ Response to Data Request GS126

⁷² Response to Data Request GS004

⁷³ Response to Data Request GS009

⁷⁴ Interview B. Welch 7/13/16

⁷⁵ Response to Data Request GS017

⁷⁶ Interview B. Welch 7/13/16 and Response to Data Request GS082

⁷⁷ Response to Data Request GS008

⁷⁸ Response to Data Request GS008

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The Company also produces (in a similar manner) annual forecasts (used internally) that report sales by rate schedule.⁷⁹ The review and the approval process for forecasts include Gas Supply, Regulatory, and Sales and Marketing.⁸⁰

The Company's modeling methodology is consistent with reasonable utility practice. The scope and detail of the Company's biennial forecast is excellent.

Conclusion 4.1.3: *RCG/SCG LLC reviewed the Company's methodology to forecast the expected effects of the Comprehensive Energy Strategy (CES) within Sections 10.2 and 10.3 of this report. However, the linkage between Sales and Marketing and Rates and Regulatory should be strengthened to draw on the forecasters' strengths and insights.*

Analysis

Connecticut has developed the CES to aid and encourage increased penetration of natural gas with expected energy cost saving and environmental benefits. The CES process operates within a regulatory arrangement that in effect bifurcates the Company's revenue streams before and after the CES. CES residential customers are primarily heating customers.⁸¹

The CES forecast is added to the Company's existing customer base to prepare the overall forecast.⁸² RCG/SCG LLC reviewed this process with the Rates and Regulatory⁸³ and the Sales and Marketing⁸⁴ to explore how the bifurcated forecast is coordinated.

The CES forecast prepared by Sales and Marketing includes estimates (for both residential and commercial customers) of on main conversions and new service, off main new construction and new service, multi family new service, and firm key accounts new service. Sales and Marketing's estimates have evolved over three forecasts⁸⁵ and have shifted due to the changing ratio of the cost of heating oil to natural gas.⁸⁶

Estimates provided by Sales and Marketing are based on the conservative assumption that a CES residential customer will only be installing gas heating and water heating loads and does not assume ancillary loads such as ranges, dryers, and spas. The load estimate is based on the age and square footage of the home and is derived from the Connecticut Program Savings Document (PSD), which is expected to lead a conservative load estimate. For commercial

⁷⁹ Response to Data Request GS078

⁸⁰ Response to Data Request GS012

⁸¹ Interview R. Diotalevi 7/15/16

⁸² Response to Data Request GS084

⁸³ Interview C. Goodwin 7/13/16

⁸⁴ Interview R. Diotalevi 7/15/16

⁸⁵ Response to Data request GS088

⁸⁶ Interviews R. Diotalevi 7/15/16 and J. Lano 7/13/16

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customers, the load estimate is based on the oil consumption being displaced or usage derived from existing commercial customers with related North American Industrial Classification System codes.⁸⁷

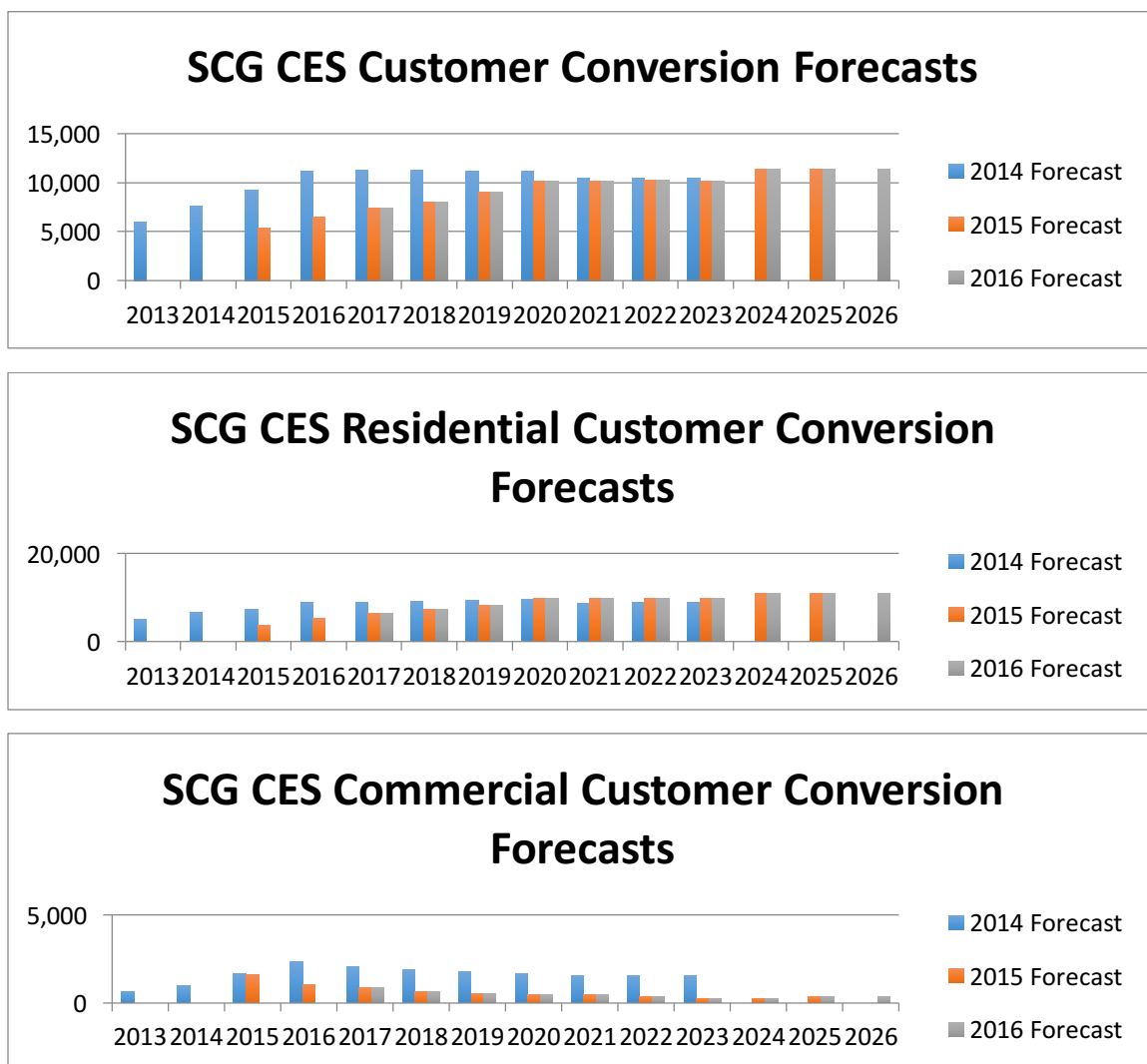


Exhibit 14 - SCG CES Customer Conversion Forecasts

As the data above demonstrates, the Company's estimate of conversions has been lowered and extended out to a later date and now residential conversions are expected to be 5,300/6,550 in 2017 and increase thereafter.

⁸⁷ Interview R. Diotalevi 7/15/16 and Response to Data Request GS007

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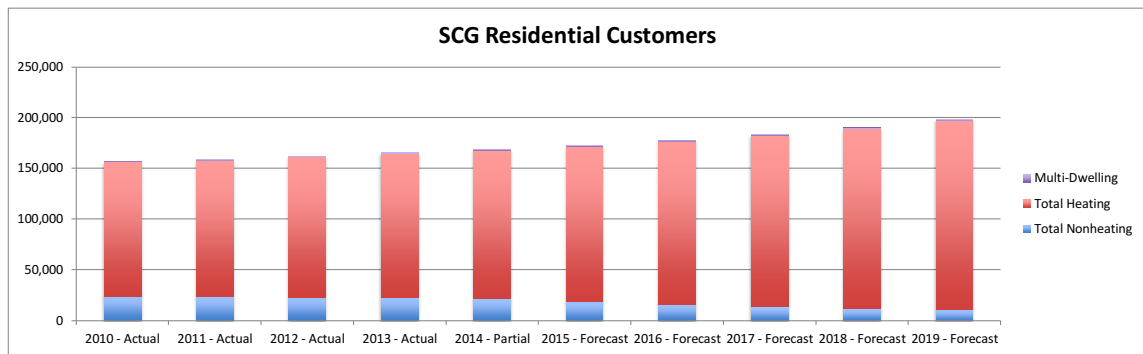


Exhibit 15 - SCG Residential Customer by Type

The above data show residential customers in 2016 are expected to be over 155,000/172,000. Thus the CES impact for the residential forecast is approximately 3.4%/3.8%, a substantial impact with similar results in later years.

While the CES specifies a tracking process for rate regulation of new customers, the Company's longer-term forecast of expansion has impacts across the Company as the sales and demand forecast drives the Company's supply needs.

Over time, it is possible that there will be an overlap of present low-use customers in the two forecasts. Further, as CES customers become long-term customers, the estimate produced by Sales and Marketing may not include the changes in usage that affect all customers over time (conservation and/or new uses).

Conclusion 4.1.4: *RCG/SCG-LLC is concerned that there is no formal, integrated approval process for the forecast, which includes significant inputs from both Rates and Regulatory (existing) and Sales and Marketing (CES).*

Analysis

The existing customer forecasts are reviewed within the Rates and Regulatory organization.⁸⁸ Gas Supply works collaboratively with Rates and Regulatory during the development of the forecast.⁸⁹

The CES forecast has a separate approval process that does not involve Rates and Regulatory directly.⁹⁰

Conclusion 4.1.5: *RCG/SCG-LLC determined that Rates and Regulatory reviews forecast accuracy (forecast to weather-normalized sales), and RCG/SCG-LLC reviewed the pattern of variance and*

⁸⁸ Interview C. Goodwin 7/13/16

⁸⁹ Response to Data Request GS001

⁹⁰ Interview R. Diotalevi 7/15/16

considers that the forecast is reasonable based on existing constraints and meets the needs of the Company's financial and regulatory organizations.

Analysis

RCG/SCG LLC examined the variance reporting provided by the Forecasting Department. RCG/SCG LLC requested and reviewed the variance reports for various months and found that detailed variance analyses are presented on a monthly basis.⁹¹ RCG/SCG LLC compared the forecast to normalized sales⁹² and based on our review RCG/SCG LLC considers the Company's forecasting performance to be reasonable.

Conclusion 4.1.6: *RCG/SCG LLC has determined that the function of forecasting is executed similarly at both CNG and SCG except as needed to meet some minor disparate regulatory situations.*

Analysis

RCG/SCG LLC examined how Rates and Regulatory performs the forecasting function and related efforts. Based on interviews with employees⁹³ and examination of reports and other documents, the forecasts for the two companies are similar. At this time only CNG has revenue decoupling authorized by PURA and this translates into a minor but not significant difference.

Recommendations

Recommendation 4.1.1: *RCG/SCG LLC recommends that, because of its expertise and existing responsibility for the existing customer forecast, the Company should assign Rates and Regulatory the responsibility to review the CES forecast prepared by Sales and Marketing. Additionally, the combined forecast should be reviewed at the executive level before it is formally issued. This change will ensure the input of Sales and Marketing is tightly coordinated with the existing customer forecast and the resulting forecast meets the needs of the Company.*

4.2 Gas Supply

Objectives and Scope

The review of Gas Supply evaluated the Company's commodity, transportation and storage planning and procurement process; the shorter term management of those assets; the interaction between Gas Supply and organizations such as Gas Control, Forecasting and Sales &

⁹¹ Response to Data Request GS018, GS073, GS078 and GS080

⁹² Response to Data Request GS073 and GS074

⁹³ Interviews C. Goodwin 7/13/16, B. Welch 7/13/16 and D. Hannibal 7/15/16

Marketing; the management of interruptible load; risk management; and controls. Gas Supply's mission, key performance indicators, budgets, and staffing were explored and evaluated.

Overall Assessment

THE GAS SUPPLY FUNCTION APPROPRIATELY MANAGES COMMODITY, PIPELINE TRANSPORTATION AND STORAGE TO MEET BOTH LONG-TERM NEEDS AND SHORT-TERM OPERATIONS. RCG/SCG-LLC BELIEVES THE COMPANY NEEDS TO FOCUS ON SUCCESSION PLANNING AND DOCUMENTATION OF ITS PROCESSES DUE TO THE RISKS INHERENT IN A SMALL ORGANIZATION PERFORMING A CRITICAL FUNCTION.

Gas Supply obtains and manages commodity, pipeline transportation, and storage capacity. Gas Supply supports and/or interacts with the operating, financial and regulatory groups of the Company. The Department has a clear mission, which is well understood and focuses on the needs of customers. The long term planning and procurement of commodity and transportation are managed to meet both existing and emerging needs, such as those resulting from Connecticut's Comprehensive Energy Strategy (CES). There is a robust short term gas supply management process.

The Gas Supply function is led by the Senior Director – Energy Supply, who reports directly to the President.⁹⁴

The performance of Gas Supply is only formally compared to one external measure, and its performance is reasonable. As a result of a longstanding decision based upon a disparate regulatory allocation of risk versus reward, the Company does not undertake action (hedging) to reduce price volatility. The Company's risk management process as related to Gas Supply is reasonable. The overall Gas Supply function is adequately staffed to continue this level of performance.

Evaluation Criteria

RCG/SCG LLC Gas Supply criteria includes:

- To what extent were the recommendations from the 2008 audit implemented?
- Are the supply portfolio principles, goals, and objectives for mass market default customers reasonable and appropriate to ensure continuity of supply?
- Are the risk management strategies and practices appropriate for a gas operation of this size?

⁹⁴ Interview J. Rudiak 7/14/16 and Response to Data Request GS072

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- What are the supply procurement strategies, policies, processes, and methods?
- Are the financial and physical hedging practices reasonable and appropriate?
- Does the Company use performance benchmarking with other utilities as part of its supply strategy?
- What are the Company's portfolio performance goals?
- Are portfolio oversight and controls appropriate?
- How are demand management/response, energy efficiency, and migration of retail customers to competitive suppliers integrated into both the portfolio and procurement processes?
- How are the management of local assets (such as storage, LNG/SCG, and propane/air) planned?
- How will emerging supplies in the Marcellus Region impact supply planning?
- Review the Company's management and reporting structures, staffing, accountability, and experience to determine if they are consistent with the goals and objectives of the procurement process.
- Examine whether the Company has adequately considered the pace of the economic recovery on wholesale prices and the electric/gas supply process.

Conclusions

Conclusion 4.2.1: *RCG/SCG LLC has determined that the Gas Supply Department has met the requirements of its recommendations from the prior SCG audit.*

Analysis

SCG's prior audit report by NorthStar applied two recommendations to Gas Supply.

V 1 Enter into future Alliance contracts only if there are clear benefits to ratepayers and SCG relative to the fees paid and revenue shared.

No outside contractors have been used for gas supply procurement since 2010 except for FERC legal counsel and participation in the Alberta Northeast LDC consortium.⁹⁵ The Company performed a joint review (including an independent consultant) with other Iberdrola natural gas LDC in January 2010 based on a joint

⁹⁵ Response to Data Request GS036

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RFP (July 2009) and determined not to enter into an alliance arrangement based on costs and expected benefits.⁹⁶

V 2 Develop a revised format in support of the PGA that clearly distinguishes the actual price of gas from the manual adjustment to manage the DCG balance.

The Company's PGA calculation and report have been reviewed and the format does distinguish the actual price from the manual adjustment to manage the balance.⁹⁷

Conclusion 4.2.2: *RCG/SCG LLC has determined that the Gas Supply Department has reasonably defined supply portfolio principles, goals, and objectives to ensure continuity of supply.*

Analysis

The mission of Gas Supply is consistently described as “Provide best cost, fully reliable service to customers under all weather conditions over all time horizons to foster growth and customer satisfaction, increasing the competitiveness of natural gas at the retail level vis à vis competing forms of energy.”⁹⁸ This mission is clearly understood by all employees of the department. Gas Supply has performance indicators as part of the Company's 2015 Balanced Scorecard process that include long term (strategic) and short term (operational) items.⁹⁹

Gas Supply has a daily 8:10 AM meeting designed to set the schedule for the present and following day(s) and at this meeting a number of short term information sources covering commodity, storage and transportation are reviewed.¹⁰⁰ The Company has defined a wide range of information sources to perform its functions.¹⁰¹ The scope and actions needed to manage commodity, storage and transportation is defined and comprehensive.¹⁰² Instant messaging (IM) is used to confirm transactions and make a formal recording of instructions throughout the day, although IM is not available for review other than for transactions.¹⁰³

For the longer term the Company responds to a forecast that is driven primarily by the impact of Connecticut's CES to determine longer term capacity needs. The Company recognizes that its location near the end of pipelines that have had limited expansion requires an active

⁹⁶ Response to Data Request GS128

⁹⁷ Interview D. Hannibal and Response to Data Request GS106 and GS128

⁹⁸ Interviews J. Rudiak 7/14/16, C. Gaudet 7/14/16 and L. Hill 7/14/16 & Response to Data Request GS048

⁹⁹ Response to Data Request GS049

¹⁰⁰ RCG/SCG attendance at 8:10 AM meeting 7/14/16 and Response to Data Request GS104

¹⁰¹ Response to Data Request GS028 and GS104

¹⁰² Response to Data Request GS031

¹⁰³ Interview L. Hill 7/14/16 and Response to Data Request GS109

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presence in the capacity marketplace. The situation is also challenged by the recent use of natural gas for electrical generation. The Company has taken an active (and leading) presence in the marketplace and negotiated contracts in 2013 and that capacity has had varying completion status. One project is expected in service as planned for November, 2016; a second project is delayed due to jurisdictional litigation; and a third project was cancelled along with the Company's contract for that capacity. PURA and the Company have explored the impact on the CES due to the decline in oil prices. The next several years should see a gas regulatory focus on the updated CES review and strategies for mitigation of increasing fixed capacity costs.¹⁰⁴ The Company has taken an active (and leading) role in regional, national, and international efforts to shape the Connecticut capacity situation.¹⁰⁵

Gas Supply monitors an extensive number of information sources to oversee the environment related to long term issues.¹⁰⁶

PURA has extensively reviewed the Company's five year forecast of natural gas demand and supply beginning with a filing by the Company on October 1 of even years. The latest forecast filing review was completed on February 3, 2016.¹⁰⁷ The winter of 2014/2015 included February 2015 the second coldest month on record (some of the coldest temperatures in 100 years). Although this period did not set a record for a single peak day (which remains January 15, 2004, the coldest day in the last 30 years), the Company's system was tested by issues on pipelines supplying Connecticut, including compressor station capacity reductions, operational flow orders, and interruptible secondary out of path restrictions at numerous points.

The Company's Peak Day Demand and Capacity were specifically reviewed and were forecast as shown below.

SCG Peak Day Demand and Capacity Forecast					
Heating Season	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Peak Day Demand	297,294	305,436	318,113	330,983	343,290
Peak Day Supplies	316,648	326,648	359,648	374,648	362,948
Peak Day Surplus	19,354	21,212	41,535	43,665	19,658
% Surplus	6.50%	6.90%	13.10%	13.20%	5.70%

Exhibit 16 – SCG Peak Day Demand & Capacity

PURA also reviewed the Company's algorithmic models used to estimate consumption. These models use temperature projections, wind, cloud cover, the prior day's weather conditions

¹⁰⁴ Response to Data Request GS025

¹⁰⁵ Response to Data Request GS026 and GS103

¹⁰⁶ Interviews J. Rudiak 7/14/16 and C. Gaudet 7/14/16

¹⁰⁷ Response to Data Request GS059 Attachment 2

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and other variables (such as day of the week and holidays) to forecast peak consumption. PURA has judged the Company's model as accurate.¹⁰⁸

15-Feb-15			
Effective Heating Degree Days (EHDD)			
Forecast	Actual	Difference	
69	67	-2	
Sendout MMBTUs			
Forecast	Actual	Difference	% Difference
303,000	283,818	-19,182	-6.30%

Exhibit 17 - SCG Peak Day EHDD & Sendout¹⁰⁹

The Company's peak day modeling is based on Effective Heating Degree Days (EHDD) and is subject to some variance.¹¹⁰ The Company indicates that it uses various sources to compensate for the variance in the models.¹¹¹

Conclusion 4.2.3: *RCG/SCG LLC has determined that the Gas Supply Department uses appropriate processes to obtain transportation capacity to meet long term needs.*

Analysis

The Company's geographic location coupled with the historical limitations of pipeline capacity in New England complicates procurement of long term pipeline capacity. The costs for new capacity can be substantially higher than for pipelines constructed decades ago.¹¹²

The Company recognizes that not all opportunities for new capacity will eventually be built on time and that expansion is subject to commitments by other parties, utilities, and regulators.¹¹³

Need for capacity is established through a formal planning process including modeling and input from other departments (including input from Sales and Marketing, Rates and Regulatory and other areas) and a range of alternatives is considered.¹¹⁴

The approval process for capacity contracts (extensions, renewals, or new) is specified based on both annual cost and duration and requires at a minimum the approval of the President

¹⁰⁸ Response to Data Request GS059 Attachment 2

¹⁰⁹ Response to Data Request GS 059 Attachment 2

¹¹⁰ Response to Data Request GS059

¹¹¹ Response to Data Request GS120

¹¹² Response to Data Request GS025

¹¹³ Interviews Pranaitis 7/14/16 and J. Rudiak 7/14/16

¹¹⁴ Response to Data Request GS032 and GS103

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and may require approvals by at least two officers (CEO, CFO, COO, or President) consistent with the UIL Grants of Authority.¹¹⁵

The Company reviewed a number of opportunities and responded to a number of pipeline “open season” opportunities for potential capacity expansion projects. In some cases, the Company had already procured capacity on the pipeline prior to the open season. In other situations, after analysis and negotiations the Company determined the offered capacity was less favorable than alternatives.¹¹⁶

The Company led negotiations for capacity for the regional LDC group for the AIM project, which is under construction and expected in service in late 2016 and similarly for the Tennessee Gas Pipeline’s Connecticut expansion. Capacity extensions (often supported by a right of first refusal) are negotiated with pipelines and compared to other alternatives. In most instances the Company has negotiated a right of first refusal to extend the initial term of the capacity and a most favored nation clause compared to pricing that may be offered in subsequent expansions.¹¹⁷ These terms are favorable to the Company and its customers.

Potential mitigation alternatives are being explored as a mitigation strategy is being developed.¹¹⁸

Conclusion 4.2.4: *RCG/SCG LLC has determined that the Gas Supply Department has defined process for managing its transportation capacity.*

Analysis

Under Connecticut’s Supplier of Last Resort (SOLR) requirement, the Company is obligated to procure transportation capacity for all firm customers. Should a customer decide to obtain transportation and commodity from a retail supplier, the Company is then obligated to dispose of the resulting excess capacity in a manner that still will provide capacity if the retail supplier should subsequently default. This requirement can impact day ahead and intraday planning.¹¹⁹

The Company uses a multiple regression model for determining peak day requirements and then determines its best cost supply plan using the SENDOUT model.¹²⁰ A supply strategy

¹¹⁵ Response to Data Request GS032 Attachment 1

¹¹⁶ Interviews Pranaitis 7/14/16 and J. Rudiak 7/14/16 and Response to Data Request GS046 and GS103

¹¹⁷ Response to Data Request GS032 Attachment 1 and GS103

¹¹⁸ Response to Data Request GS097

¹¹⁹ Interview M. Pranaitis 7/14/16 and Response to Data Request GS032 Attachment 2

¹²⁰ Interviews C. Gaudet 7/14/16 and J. Rudiak 8/16/16 and Response to Data Request GS093 and GS079

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has been defined including sufficient capacity for 100% of firm customer requirements and SOLR requirements to be met by firm pipeline capacity and peak shaving.¹²¹

To provide diversity, the Company has a number of transportation contracts with varying Maximum Daily Quantities and expiration dates with a number of pipelines.¹²² A purchase point analysis has been performed and various alternatives considered.¹²³

The SOLR policy provides increased reliability for Connecticut that allows transportation customers to convert to firm service without a new cost impact on existing customers and generates non firm margins. The Company has not recently rigorously analyzed the costs and benefits of the SOLR policy in light of increasing costs for new capacity.¹²⁴

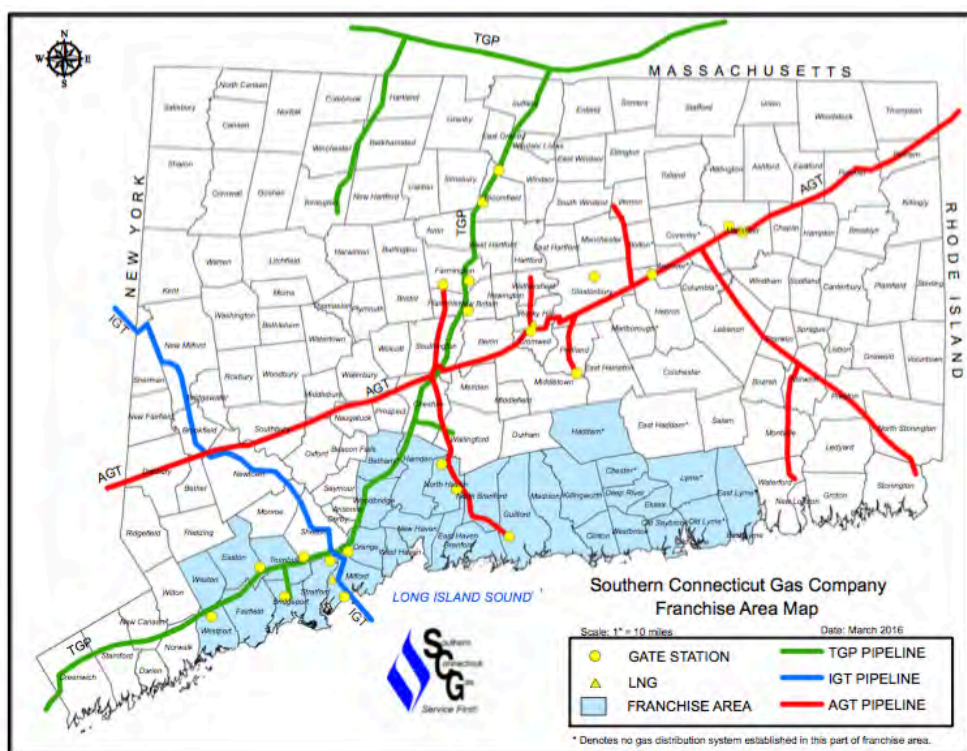


Exhibit 18 - SCG's Access to Transmission Pipelines

The Company has access to multiple pipelines and city gates to deliver its supplies as needed.

¹²¹ Response to Data Request GS032 Attachment 2

¹²² Response to Data Request GS042

¹²³ Response to Data Request GS103

¹²⁴ Response to Data Request GS118

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The Company has issued curtailment orders to its interruptible service customers based on extreme cold weather, margins, and recently pipeline emergencies.¹²⁵ Interruptible (non firm) customers can be used to manage capacity requirements. The process includes consultation with Gas Control.¹²⁶ Operational Flow Orders (OFO) and curtailments are tracked, including reasons and EHDD.¹²⁷

The focus of the capacity release program is to obtain the highest price for the capacity in a transparent manner, while complying with a range of requirements. Asset management agreements are structured to allow for recall to meet peak needs, which provides flexibility. There is a defined approval process for capacity release and system sales.¹²⁸

Gas Supply, Gas Control, Rates and Regulatory, and Sales and Marketing¹²⁹ participate in the decision to curtail interruptible customers. This decision is influenced by the economics of the individual contracts. Although the tariff defines interruptible service, there are no written procedures defining the interruptible process.¹³⁰ The Company does not track the total volume curtailed/interrupted for each event.¹³¹

The Company has not been assessed any pipeline penalties.¹³²

Conclusion 4.2.5: *RCG/SCG LLC has determined that the Gas Supply Department has a defined process for developing and obtaining commodity at a reasonable cost.*

Analysis

The Company procures its commodity supply from large supply regions which are areas of high liquidity and numerous suppliers,¹³³ purchased at market prices under seasonal, monthly or mid term contracts with some spot market purchases. The Company maintains firm transportation contracts to support these purchases. The Company focuses on gas producers rather than marketers for its supplies. Gas is sourced from the Gulf of Mexico, Canada, and the Marcellus area to develop supply diversity through an RFP process, primarily for an individual winter season, and includes in some cases a reservation charge in order to gain offsetting take or release and delivery flexibility. The RFP is not prescriptive and allows suppliers to suggest

¹²⁵ Response to Data Request GS044

¹²⁶ Interview M. Pranaitis 8/-/16

¹²⁷ Response to Data Request GS104

¹²⁸ Interview M. Pranaitis 7/14/16 and Response to Data Request GS024

¹²⁹ Response to Data Request GS112

¹³⁰ Interview M. Pranaitis 8/16/16

¹³¹ Response to Data Request GS102

¹³² Response to Data Request GS047

¹³³ Interview L. Hill 7/14/16 and Response to Data Request GS103

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alternatives.¹³⁴ There is a “pre month” analysis performed on a continuing basis to assess the volumes needed. Supplies are generally acquired on a fixed basis to the NYMEX monthly settlement prices, Inside FERC Gas Market Report, and/or Gas Daily.¹³⁵ The Company makes off system sales transactions or short term capacity release sales subject to reliability criteria to generate credits to firm customers within the PGA ([REDACTED] [REDACTED]).¹³⁶

The Company uses long term contracts for underground storage located in MI, WV, PA, NY, and Ontario to purchase gas in the summer for later withdrawal during high demand periods. It has performed detailed analyses to review storage costs and capabilities.¹³⁷ To provide additional peak response the Company also has access to an LNG facility located in its service territory.¹³⁸

The 8:10 AM meeting is held each working day to determine the commodity and capacity needs and develop a plan to purchase (or release) commodity and transportation if appropriate. Meeting notes document the decisions made and are transmitted to Gas Supply and Gas Control. The notes include spot purchases, pipeline take instructions, nominations (including for the weekend from the Friday meeting), weather data, historical prices and volumes, and pipeline conditions and restrictions (such as operational flow orders, imbalance warnings, and capacity constraints) and ISO NE/ISO NY status (electrical generation and demand).¹³⁹ This plan includes the use of storage and LNG as required. Storage is evaluated against a number of criteria that include prices, storage volumes, timing, weather, duration to end of winter, and other factors.¹⁴⁰

The Company’s LNG peaking facility is typically dispatched after all pipeline resources are used, but it is generally not used to serve non firm demand, although specific exceptions have been identified and the marginal revenue must exceed replacement cost.¹⁴¹

The Company has detailed approval requirements for commodity that depend on the value and term of the commitments. The standard form NAESB contract is used subject to needed additions and legal review.¹⁴²

¹³⁴ Response to Data Request GS089

¹³⁵ Interview J. Rudiak 7/14/16 and Response to Data Request GS024 and GS032 Attachment 2 and GS103

¹³⁶ Interview L. Hill 7/14/16 and Response to Data Request GS0024, GS032 Attachment 2 and GS096

¹³⁷ Response to Data Request GS103

¹³⁸ Response to Data Request GS002

¹³⁹ Response to Data Request GS024

¹⁴⁰ Response to Data Request GS032 Attachment 2

¹⁴¹ Response to Data Request GS032 Attachment 2

¹⁴² Interview M. Pranaitis 7/14/16 and Response to Data Request GS032

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Gas Supply compares its costs using the PGA to the other unaffiliated Connecticut gas LDC and also to Massachusetts LDC.¹⁴³ All gas costs are passed through to customers at cost through the Purchased Gas Adjustment (PGA) mechanism which is calculated and overseen within the Rates and Regulatory area by the designated Manager Pricing and Analysis.¹⁴⁴

In response to a longstanding Connecticut regulatory decision (in 1994)¹⁴⁵ on the disparate allocation of risks and rewards of using the futures market, the Company has not entered into hedges for firm customers.¹⁴⁶ However the Company's practice of depending on portfolio of commodity at peak of one third storage, one third LNG, and one third flowing gas¹⁴⁷ tends to moderate commodity costs on peak days.

Conclusion 4.2.6: *RCG/SCG LLC considers the risk management function for Gas Supply reasonable with the exception of the location of credit approval. While there is some concern that the negotiation and approval of contracts resides within the purview of the Senior Director of Energy Supply, the volume of reporting, independent calculation, and review by Accounts Payable and specifically the PGA process is reassuring when coupled with the volume of Internal Auditing process activity and PURA's lack of adverse findings.*

Analysis

The Company has detailed procedures to manage the risk of gas supply contracts. These procedures include transaction authority, confirmation of transactions, gas supply contract review, and counterparty credit approvals.¹⁴⁸ In 2012 the Company performed a comprehensive Risk Review Final Assessment. This assessment details several changes and they have been implemented.¹⁴⁹

The negotiation of purchases and sales is performed only by specific employees within Gas Supply reporting to and including the Manager of Gas Supply who reports to the Senior Director of Energy Supply.¹⁵⁰ Analysts that report directly to the Senior Director of Energy Supply confirm the invoices for purchase and sales made under the Manager of Gas Supply,¹⁵¹ offering limited independent review within the Gas Supply Department.

¹⁴³ Interview M. Pranaitis 7/14/16 and Response to Data Request GS050 and GS040

¹⁴⁴ Response to Data Request GS032 and Interview D. Hannibal 7/15/16

¹⁴⁵ Response to Data Requests GS101 and GS147

¹⁴⁶ Response to Data Request GS037

¹⁴⁷ Interview J. Rudiak 7/14/16

¹⁴⁸ Response to Data Request GS032 Attachments 1 and 2

¹⁴⁹ Response to Data Request GS027

¹⁵⁰ Interviews Pranaitis 7/14/16 and J. Rudiak 7/14/16 and Response to Data Request GS054

¹⁵¹ Interviews C. Gaudet and J. Rudiak 7/14/16 and Response to Data Request GS032 Attachment 2

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The Senior Director of Energy Supply approves authorizations for payments in compliance with the defined Grants of Authority.¹⁵² A forecast of cash requirements is provided to Treasury, which handle payments and receipts.¹⁵³ Treasury indicates that the timing and information flow is acceptable and recommends no changes.¹⁵⁴

The North American Energy Standards Board (NAESB) Base Contract for the Short Term Purchase and Sale of Natural Gas is generally used with special provisions as needed. The process to establish a contract is defined.¹⁵⁵

Credit approval and monitoring are performed by Gas Supply¹⁵⁶ and credit status is reported within the department bi weekly. There are specific credit standards linking dollar exposure and the counterparty's credit ratings. Deviations for rated counterparties can be approved by the Senior Director Energy Supply, while non rated counterparties require approval by the Senior Director Energy Supply and UIL Treasury.¹⁵⁷

The Company does not engage in hedging.¹⁵⁸

Significant amounts of Gas Supply's information are contained on spreadsheets. The information on these spreadsheets is also contained on delivery sheets and IM. The spreadsheets are password protected and many are read only. Corporate IT is responsible for backing up the Gas Supply's local information storage.¹⁵⁹

Invoices for purchases and sale information are sent to both Accounts Payable and the PGA function in Rates and Regulatory. Accounts Payable performs its functions independently. The Manager of Pricing and Analysis in Rates and Regulatory performs the gas cost accounting including the month end journal entries, the PGA development, and various reporting.¹⁶⁰

The Company's external auditors have not performed a formal audit of Gas Supply within the last five years.¹⁶¹

¹⁵² Interview Rudiak 7/14/16 and Response to Data Request GS032 Attachment 2

¹⁵³ Interviews C. Gaudet 7/14/16 & D. Bernardi 7/15/16 & Response to Data Request GS032 Attachment 2

¹⁵⁴ Interview D. Bernardi 7/15/16

¹⁵⁵ Interview M. Pranaitis and Response to Data Request GS032 Attachment 2

¹⁵⁶ Interviews C. Gaudet and L. Hill 7/14/16

¹⁵⁷ Response to Data Request GS032 Attachment 2

¹⁵⁸ Interview J. Rudiak 7/14/16 & Response to Data Request GS037

¹⁵⁹ Interview M. Pranaitis 7/14/16

¹⁶⁰ Interview D. Hannibal 7/15/16

¹⁶¹ Response to Data Request GS057

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Internal Auditing has not performed a formal audit of Gas Supply since 2011 although an audit of gas storage and inventory was performed in 2016. There were no significant recommendations.¹⁶²

Internal Auditing does perform wide ranging process audits of Gas Supply twice per year reviewing completeness and accuracy; volumes and invoices; under/over delivery volumes at city gates versus scheduled; the reconciliation performed by the Manager of Pricing and Analysis (for the PGA); and restricted access to pipeline information. Management is asked to review controls twice each year by Internal Auditing.¹⁶³

Internal Auditing performed a formal audit of the PGA in 2013 and found some areas for improvement (within the spreadsheet based model) that did not impact the filed rates. Rates and Regulatory now sends the draft regulatory filing to Gas Supply for review.¹⁶⁴

PURA reviews the PGA twice per year using an extensive process down to the invoice level, covering not only the cost of gas but also ancillary services revenues, non firm gas costs, non firm margins (NFM), transportation service charges (TSC), and amortized deferred balances and interest credited or charged. No errors have been found or significant changes required in the PGA process.¹⁶⁵

The credit approval process for Gas Supply should be consolidated with other credit functions in the larger corporate entity because there is no separation of duties for this function and it may be more efficiently performed by the larger corporate entity.

Conclusion 4.2.7: *RCG/SCG LLC found that Gas Supply does not have specific, documented emergency plans for contingencies*

Analysis

Gas Supply does not have written contingency plans for supply interruptions (such as a recent force majeure pipeline failure in Pennsylvania) but depended on its institutional knowledge to react quickly. There was a second force majeure event in Pennsylvania that did not affect the Company but did affect non firm service.¹⁶⁶ There was a drill in 2015 that was part of a UIL scenario that had a significant impact on gas and included various injects to test the participants (ten different Company departments/areas).¹⁶⁷ As of August 9, 2016, a drill has not

¹⁶² Interview S. Belfonti 7/13/16 & Response to Data Request IA005

¹⁶³ Interview S. Belfonti 7/13/16

¹⁶⁴ CONFIDENTIAL [REDACTED]

¹⁶⁵ Interview D. Hannibal 7/15/16 and Response to Data Request GS059 Attachment 1

¹⁶⁶ Interview Pranaitis 7/14/16 and Response to Data Request GS113

¹⁶⁷ Response to Data Request GS122

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been scheduled for 2016.¹⁶⁸ Gas Supply rotates three on call employees during evenings and weekends to ensure coverage of unusual events.¹⁶⁹

While the risks related to Gas Supply have been explored and defined,¹⁷⁰ Gas Supply does not have written emergency or contingency plans.¹⁷¹ Written emergency plans allow the utility to develop and confirm its reaction before the pressure of the event and provide checklists of needed actions to ensure that all are accomplished even under the stress of the event.

Conclusion 4.2.8: *RCG/SCG LLC found, based on the above, that it considers the Company's actions towards reducing LAUFG reasonable but suggests that the Company should review its methodology to confirm it is up to date, paying specific attention to unbilled volumes.*

Analysis

Gas can be "lost" in a number of physical ways but LAUFG cannot be measured directly. Gas can be lost during storage due to leakage; during pipeline transportation, due to leakage, use for compression fuel, and use as a pressure source to other valves and control equipment; during distribution construction activities, such filling and purging of new lines and removal of old lines; during distribution operations such as setting meters, piping, and joint leakage; and use as a pressure source to other valves and control equipment; and theft of service.

The Lost and Unaccounted for Gas (LAUFG) function is spread across a number of areas of the Company and is subject to PURA reporting requirements. LAUFG is under the responsibility of the Director Gas Design and Delivery, who reports directly to the President of CNG/SCG.¹⁷² The Company defines LAUFG as Total Distribution Supply less Customer Usage less Known Adjustments. The Company considers four major components to LAUFG: Leakage, Measurement, Accounting, and Theft.¹⁷³ The Company's LAUFG methodology is based on report dated June 1, 2006.¹⁷⁴

LAUFG should be tracked and the methodology reviewed to ensure that the Company's operations are not increasing the discharge of natural gas to the atmosphere (physical losses) and metering and other management processes are being properly managed (metering and theft).

¹⁶⁸ Interview J. Rudiak 7/14/16 and Response to Data Request GS121

¹⁶⁹ Interviews M. Pranaitis 7/14/16 and L. Hill 7/14/16

¹⁷⁰ Response to Data Request GS027

¹⁷¹ Response to Data Request GS123

¹⁷² Response to Data Request GS072

¹⁷³ Response to Data Request GS060

¹⁷⁴ Response to Data Request GS061 Attachment 1 and Interview A. Barnes 8/26/16

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Because LAUFG cannot always be measured directly (examples such as theft and small unknown leaks) it is estimated by netting the measurement (metering) of gas entering the system at city gates less sales to customers. While this formula appears to be straightforward, each element of LAUFG is subject to tolerances and errors (meters can be plus or minus the actual reading and still be within acceptable commercial or regulatory limits).

LAUFG is also important as losses are applied to transportation customers to ensure that gas delivered for their account also provides for expected distribution losses. Physically LAUFG cannot become negative and transportation customers should not benefit from that calculated value due to a methodology that generates a negative value.

PURA has an active process to review LAUFG filing with the latest Docket occurring in 2016.¹⁷⁵ PURA is required by statute to investigate LAUFG if it exceeds 3% in any calendar year.¹⁷⁶ The Company reports that its LAUF % by calendar year is as follows:¹⁷⁷

% LAUFG by Calendar Year		
Year	CNG	SCG
2010	1.47%	1.90%
2011	0.67%	0.74%
2012	0.93%	0.52%
2013	0.01%	0.11%
2014	1.69%	0.13%
2015	1.33%	0.28%

Exhibit 19 – Percent LAUFG by Calendar Year

LAUF is reported annually to the federal Department of Transportation based on a year ending June 30.¹⁷⁸

Management of leaks, which is a component of LAUFG, is discussed in Section 4.4, Conclusion 4.4.2 of this report.

The Company indicates that it has taken a number of steps to reduce LAUFG including various leak management enhancements, improved purging procedures, identification and planned elimination of pneumatic purge devices, field efforts in collections and the “Soft Close”

¹⁷⁵ Response to Data Requests GS061 Attachment 2 and GS148

¹⁷⁶ Response to Data Request GS061 Attachment 2

¹⁷⁷ Response to Data Request GS062 Attachment 1

¹⁷⁸ Response to Data Request GS149

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program.¹⁷⁹ The Company has developed a process to reuse gas used in high pressure testing rather than releasing it to the atmosphere.¹⁸⁰

The Company reports LAUF with multiple ending dates and varying impacts of unbilled sales. RCG/SCG has provided a recommendation for this issue.

Conclusion 4.2.9: *RCG/SCG LLC has determined that the Purchased Gas Adjustment (PGA) process is reasonable.*

Analysis

The intent of the PGA is to recover substantially all of the gas costs within the period from September 1 to August 31¹⁸¹ and does not include any profit or return for the Company on those gas costs.¹⁸²

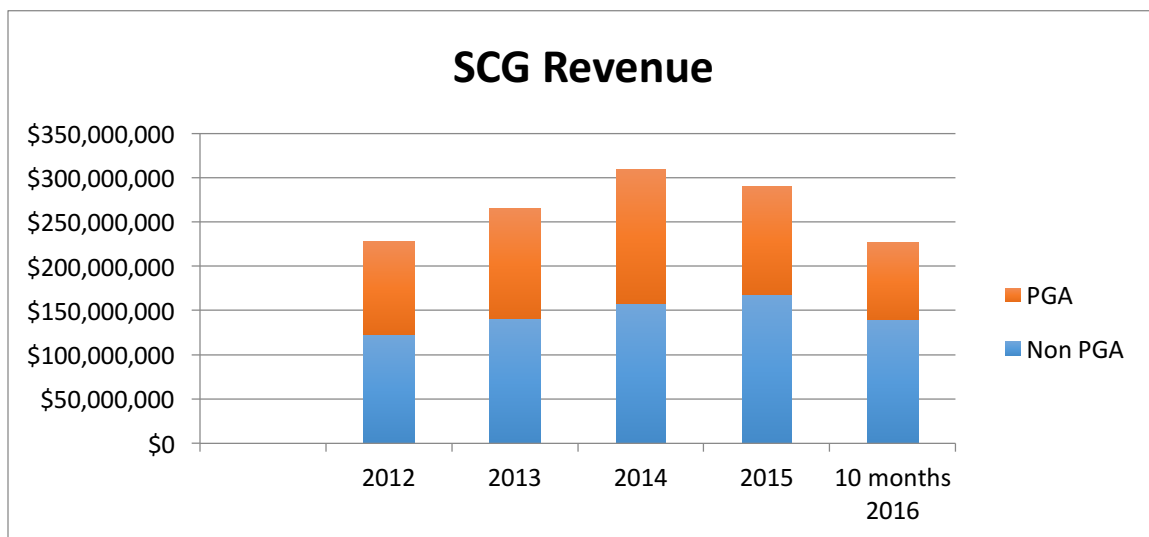


Exhibit 20 - PGA is a Significant Portion of Total Customer Revenues¹⁸³

As shown above, PGA costs are a substantial portion of total customer revenues and vary with the cost of gas.

The Company has a detailed PGA process performed in the Rates and Regulatory area and separate from the Gas Supply area. This process uses the individual invoices and other

¹⁷⁹ Response to Data Request GS063

¹⁸⁰ Response to Data Request GS151

¹⁸¹ Interview D. Hannibal 8/16/16

¹⁸² Response to Data Request GS032 and Interview D. Hannibal 7/15/16

¹⁸³ Response to Data Request GS107

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information to develop and track all of the Company's gas costs and any sales of commodity and capacity.¹⁸⁴

The PGA model (spreadsheet based) uses the NYMEX pricing (and monthly settlement pricing updates) as a key input. With the advent of lower cost gas from the Marcellus region, the Company had to develop changes to the model to reduce variances. The Company considers the resulting end of year (August 31) balances small in comparison to overall annual PGA costs.¹⁸⁵ This process is challenging to accomplish due to the smaller volume of sales during the summer period.

Due to the varying sales volumes and gas costs there may be monthly under or over balances for which interest is accrued or charged at a PURA specified rate of return.¹⁸⁶ The monthly PGA rate is determined collaboratively by the Senior Director of Energy Supply, the Director Rates and Forecasting, and the Manager Pricing and Analysis, without any further Company approvals.¹⁸⁷

PURA also reviews the monthly PGA rate before it is implemented and semi annually in a formal process and no significant errors have been found or changes required in the PGA process, which includes gas supply costs.¹⁸⁸

The Company compares its PGA rates to the other non affiliated Connecticut LDC.¹⁸⁹ The following Exhibit charts the differences between the Company and Yankee Gas (negative number is better performance).

¹⁸⁴ Interviews C. Gaudet 7/14/16 and D. Hannibal 7/15/16

¹⁸⁵ Interview D. Hannibal 8/16/16 and Response to Data Request GS106

¹⁸⁶ Interview D. Hannibal 7/15/16

¹⁸⁷ Interview D. Hannibal 7/15/16

¹⁸⁸ Response to Data Request GS059 Attachment 1

¹⁸⁹ Response to Data Request GS040

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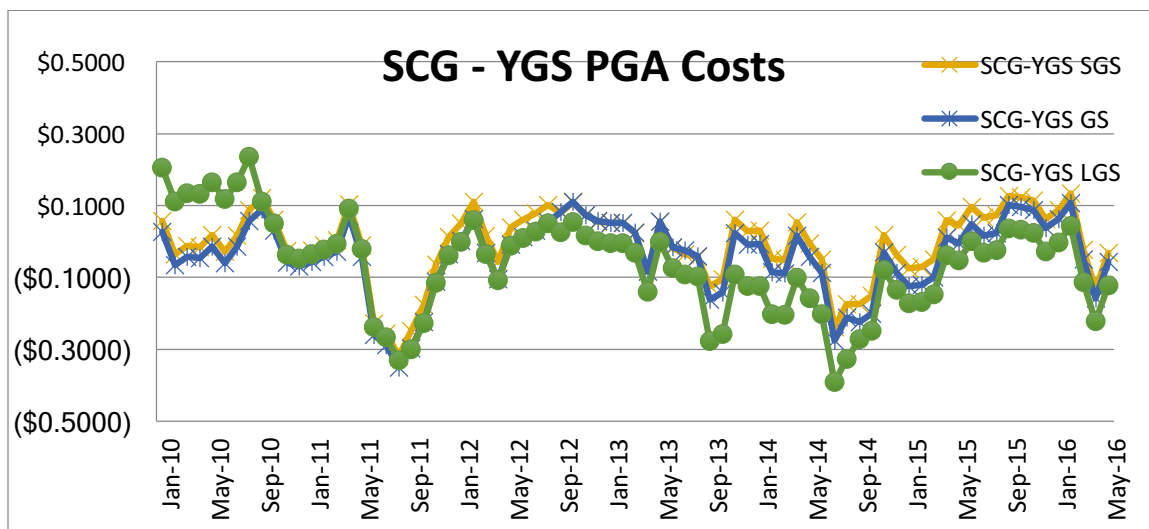
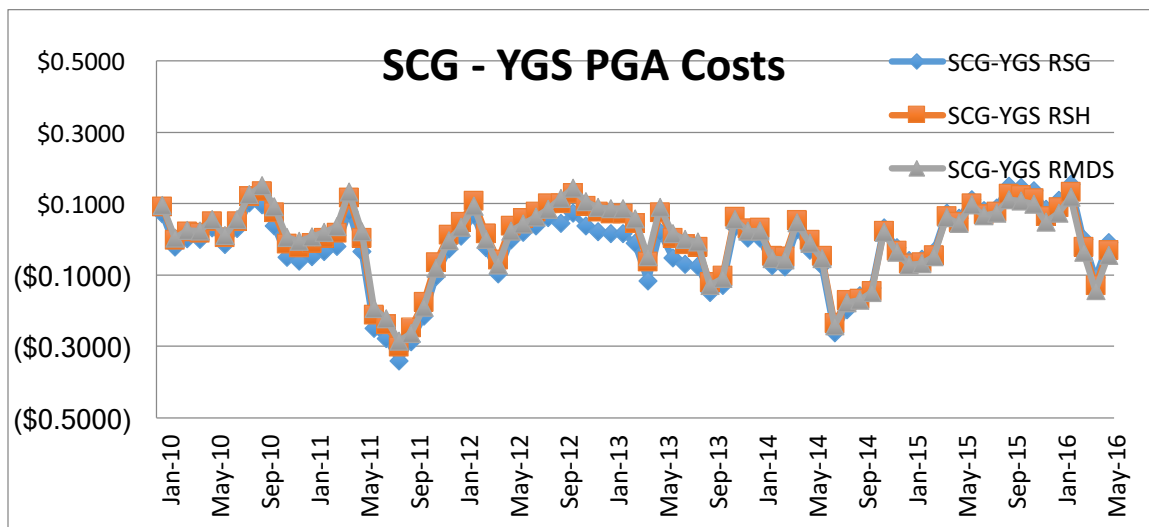


Exhibit 21 – SCG/YGS PGA Cost Differences

Conclusion 4.2.10: RCG/SCG-LLC has concluded that Gas Supply is relying excessively on experience and knowledge rather than documenting important processes and procedures.

Analysis

In a number of important areas Gas Supply depends on the knowledge and experience of its employees to perform important processes and procedures. There have been no indications that this reliance on knowledge has impacted costs or operations; however the Gas Supply organization is modest in size and, like all organizations, has the potential for untimely or unplanned turnover.

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In a similar vein, significant work is done on spreadsheets, which although backed up by IT are under the control and knowledge of a small number of employees.¹⁹⁰ The spreadsheets may have different formats.¹⁹¹ A request for copies of a significant RFP and the evaluation matrix resulted in a pair of spreadsheets.¹⁹² Delivery sheets are maintained as a spreadsheet.¹⁹³ The weekly credit report is maintained as a spreadsheet.¹⁹⁴

The decision to declare an interruption for interruptible customers is made in consultation with Gas Supply, Gas Control, and Regulatory with input from Marketing and is determined by weather, pipeline situation, and costs. Although the tariff defines interruptible service, there are no written procedures for the interruptible process.¹⁹⁵

During a recent force majeure event the Company reacted but no contingency plan was mentioned as preparation,¹⁹⁶ SENDOUT modeling was “not needed due to low loads.”¹⁹⁷ Instead there appears the concept “These contingencies are common knowledge to the gas supply leadership and group” which has replaced the development of written contingency or emergency plans, procedures, or any related information for Gas Supply other than the Company’s Emergency Plan.¹⁹⁸

The SENDOUT model is used for capacity planning and three employees can operate the model and its operation takes “lots of experience.”¹⁹⁹ The output of the model has limited explanation included in its report format.²⁰⁰

The spreadsheet used for the monthly pipeline cash out allocation calculations does not include explanatory information to allow its easy review.²⁰¹ The Company depends on a 2004 order and subsequent PGA orders to support its cash out with its affiliate, which is needed because of the joint balancing arrangement with its pipelines.²⁰² The monthly cash out process itself is reasonable.

¹⁹⁰ Interview M. Pranaitis 7/14/16

¹⁹¹ Interview C. Gaudet 7/14/16

¹⁹² Response to Data Request GS089

¹⁹³ Response to Data Request GS116

¹⁹⁴ Response to Data Request GS098

¹⁹⁵ Interview M. Pranaitis 8/16/16 and Response to Data Request GS112

¹⁹⁶ Response to Data Request GS113

¹⁹⁷ Interview J. Rudiak 8/16/16

¹⁹⁸ Response to Data Request GS123

¹⁹⁹ Interview J. Rudiak 8/16/16

²⁰⁰ Response to Data Request GS093

²⁰¹ Response to Data Requests GS100 and GS130

²⁰² Response to Data Request GS131

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Although there are defined procedures for Off System Sales, “knowledge is necessary” for this function.²⁰³ However, another data response did not refer to these procedures at all.²⁰⁴ In response to a data request to provide a copy of short term acquisition & system sales of natural gas policies and procedures, a document dated May 2009 (although the pages each are marked January 2000), which refers to position titles no longer used, was provided. A document of this age has limited value.²⁰⁵

Instant Messaging is reported to be used by Gas Supply personnel for various communications,²⁰⁶ but historical copies are not retained other than when a transaction is consummated to buy or sell.²⁰⁷ Further, the data response highlighted the Company’s use of “highly experienced” personnel.²⁰⁸

Training is done informally (on the job).²⁰⁹ There is some cross training for backup, but some concern about “gray hair” as a major question for the Company.²¹⁰ An employee expressed a desire for rotation within the Company as a learning experience.²¹¹ As noted above skills tracking and succession planning have not been performed since 2013.

RCG/SCG LLC has provided a recommendation for this issue.

Conclusion 4.2.11: *RCG/SCG LLC has determined that opportunities exist to more effectively use the planning assets and experience in Gas Supply.*

²⁰³ Interview J. Rudiak 8/16/16

²⁰⁴ Response to Data Request GS111

²⁰⁵ Response to Data Request GS129

²⁰⁶ Interview L. Hill 7/14/16

²⁰⁷ Response to Data Request GS109

²⁰⁸ Response to Data Request GS109

²⁰⁹ Interview L. Hill 7/14/16

²¹⁰ Interview J. Rudiak 7/14/16

²¹¹ Interview C. Gaudet 7/14/16

Analysis

As discussed above, Gas Supply is responsible for a significant portion of the total expenses of the Company. Among these expenses are commodity, storage, transportation, and LNG activities. While the processes and procedures for obtaining and managing these resources are well defined, the planning process for this area has opportunities for improvement including efficiency and effectiveness.

The Company recognizes that new transportation and storage capacity will come at a higher cost than the present embedded resources.²¹² These resources are “lumpy” and will be in service at a date controlled by the resource provider (pipeline) rather than precisely meeting the Company’s needs.²¹³ The Company is exploring methods to mitigate these costs.²¹⁴

The regulatory policy that requires the Company to be the Supplier of Last Resort (SOLR) for all customers may have potential costs and benefits to firm customers, but the Company has not rigorously analyzed the costs/benefits of that requirement.²¹⁵

Gas Supply employs the SENDOUT model for some of its analysis. The model was updated in 2015²¹⁶ but the Company does not use outside consulting support on a regular basis to optimize its use of the model.²¹⁷

The Company does not use the model to analyze capacity release,²¹⁸ resource mix optimization,²¹⁹ or scheduling.²²⁰ The Company asserts that the model is a seasonal, mid term, and long term planning model and does not contribute useful information, but the Company did not indicate how it models these functions. The Company is planning to experiment with the resource mix optimization feature in the future.²²¹

²¹² Response to Data Requests GS025 and GS136

²¹³ Response to Data Request GS025

²¹⁴ Response to Data Requests GS097 and GS142

²¹⁵ Response to Data Request GS118

²¹⁶ Response to Data Request GS133

²¹⁷ Response to Data Request GS134

²¹⁸ Response to Data Request GS135

²¹⁹ Response to Data Request GS136

²²⁰ Response to Data Request GS141

²²¹ Response to Data Request GS136

The Company does not use formal models for analysis provided to other parties for issues such as the comparison of LNG to pipeline capacity,²²² purchase point,²²³ underground storage,²²⁴ and pathing analysis.²²⁵

The Company does not regularly use scenario analysis for weather (although it does model normal and design weather)²²⁶ and considers an analysis based on normal weather is equivalent to scenarios of abnormal conditions of varying degrees (both ways).²²⁷ Other analyses consider load factor at a single point (with a complementary value offset) rather than using a range of variables or developed scenarios.²²⁸ These simplifying assumptions are inappropriate for planning studies. If variable ranges or scenarios were considered potential decision points, and the related inflections could be identified.

While the use of different methods of analysis or not using a specific model's full capabilities does not invalidate prior analyses made, the responses call into question whether a more formalized method of analysis including areas such as future rates, SOLR, and/or reliability might inform the Company and its regulators about the evolving aspects of various policies and/or their costs. With the recent Massachusetts decision to not support its electric utilities' support of gas pipeline capacity, the cost picture may have shifted. A potential cost shift may call into question the magnitude and term of Connecticut's CES program and lead to a different estimate of the cost and value of new customers in the future.

A well developed planning methodology can include robust scenarios that provide the costs and bounds for various decisions, including trigger points that can highlight when a strategy needs to be reconsidered. The use of consistent modeling tools can reduce the time and cost to evaluate emerging issues and day to day decision making. Consistent modeling tools can save time restructuring analyses by using prior data inputs or resource mixes.

RCG/SCG LLC has provided a recommendation for this issue.

Conclusion 4.2.12: *RCG/SCG LLC has determined that the Gas Supply process is executed similarly at both CNG and SCG except as needed to meet the different pipeline access situations between the companies.*

²²² Response to Data Request GS143

²²³ Response to Data Request GS144

²²⁴ Response to Data Request GS145

²²⁵ Response to Data Request GS146

²²⁶ Response to Data Request GS137

²²⁷ Response to Data Request GS143

²²⁸ Response to Data Request GS146

Analysis

SCG has separate connections to three different pipelines (Tennessee Gas Pipeline, Iroquois Pipeline Transmission, and Algonquin Gas Transmission) based on its geographic locations (City Gates).²²⁹ Gas Supply seeks to develop separate efficient portfolios for SCG to match the load curve as needed.²³⁰ Interviews with Gas Supply employees and the examination of processes and procedures confirmed that the gas supply process is executed similarly at each company.²³¹ Losses for transportation and sales customers are established differently between the Companies, but using a consistent methodology. At CNG losses are recalculated after a rate case, while SCG makes an annual filing.²³²

SCG and CNG have a joint operational balancing agreement with the Tennessee and Algonquin pipelines, which provides greater flexibility than two separate agreements. Pipeline cash out is allocated on a pro rata basis between SCG and CNG.²³³

Recommendations

Recommendation 4.2.1: *RCG/SCG LLC recommends Gas Supply update its critical skills review, succession planning, and training plans on a regular basis due to small size of the Gas Supply group and the specific expertise required for day to day operations and dealing with the regulatory environment.*

Recommendation 4.2.2: *RCG/SCG LLC recommends Gas Supply execute a rigorous, detailed process to determine which processes and procedures should be documented and which related information should be tracked. Gas Supply is responsible for a significant portion of the Company's costs and areas such as off system sales and capacity release, but the interruptible process and emergency planning are either not documented or out of date. These processes have significant potential impacts on customers.*

Recommendation 4.2.3: *RCG/SCG LLC recommends Gas Supply execute a rigorous, detailed process to determine the capabilities of its various models, how inputs (including variances and scenarios) are structured, whether forward looking studies should be performed, how the results are catalogued and retained, and consideration of whether the functions of some models can be performed within other existing model(s). Gas Supply should consider engaging an internal or external consultant to perform this review, which would also consider training recommendations. Gas Supply relies on the experience and knowledge and expertise of its small staff to perform this*

²²⁹ Response to Data Request GS041

²³⁰ Response to Data Request GS032 Attachment 2

²³¹ Interviews M. Pranaitis 7/14/16, C. Gaudet 7/14/16 and J. Rudiak 7/14/16

²³² Interviews M. Pranaitis 8/16/16 and D. Hannibal 7/15/16

²³³ Interview J. Rudiak 7/14/16 and Response to Data Requests GS032 Attachment 2 and GS100

work, which may place the Company at risk due to employee turnover or other unplanned situations.

Recommendation 4.2.4: *RCG/SCG LLC recommends the Company update its LAUF methodology and determine the appropriate time period to estimate and report LAUF with due regard to the variability of unbilled sales.*

4.3 Planning and Engineering

Objectives and Scope

System Planning and Engineering functions are responsible for designing a gas distribution system that ensures existing customers receive an adequate supply of natural gas, during peak heating days while providing adequate capacity for future customers. Maintaining adequate volume and pressure is critical in a gas distribution system to prevent serious problems at the customer's premise. For example, loss of pilot lights in older gas equipment and very pressure sensitive newer model furnaces, during a low pressure event, could lead to gas leaks inside the home or business caused by faulty or outdated customer equipment, or in newer equipment unnecessary service calls caused by intermittent operation. Essentially these engineering functions will:

- Plan the company's capital construction program which includes the replacement of aging infrastructure, particularly, cast iron and bare steel mains;
- Ensures adequate gas supply to existing and new customers,
- Reduces lost gas (through leaks), and
- Minimizes the need for excessive corrective maintenance actions;
- Minimize overlapping spending caused by uncoordinated capital and maintenance efforts;
- Support the development of a formal asset management strategy and plan;
- Develop the main replacement schedule;
- Identify services tied to the mains;
- Maintain and evaluate the distribution system planning model (Stoner) results;
- Identify pressure upgrades to alleviate issues on low pressure systems;
- Ensure compliance work (both inspection and preventative maintenance schedules) are properly included in all scheduled construction and maintenance activities;
- Approve equipment (pipes, meter bar, meters, regulators, etc.) for use on the distribution system;

- Determine design and construction standards for the various pressures used on the distribution system;
- Define methods of construction;
- Design and locate regulator stations;
- Enhance SCADA design and operations;
- Develop designs and estimates for specific work orders; and
- Develop the asset management plan.

Overall Assessment

UIL GAS DESIGN AND DELIVERY AND SCG GAS DISTRIBUTION PLANNING AND ENGINEERING APPEAR TO BE WELL ORGANIZED WITH THE RIGHT RESOURCES. RCG/SCG-LLC'S CHIEF CONCERNS ARE WITH THE STANDARDIZATION OF MATERIALS AND EQUIPMENT, AND THE PROCESS FOR ESTIMATING WORK. SCG'S ENGINEERING FUNCTION COULD USE A HIGHER PERCENTAGE OF ENGINEERS SUPPORTING THEIR DESIGN AND ESTIMATING ACTIVITIES.

System planning and engineering is the cornerstone of the utility's effort to ensure adequate, safe, and reliable natural gas delivery. It must be consistent with the Company's strategic plan and will affect customer satisfaction. The system planning efforts drive a utility's capital budgeting and influence the O&M budgeting.

The Gas Design and Delivery organization is responsible for all of the system planning and engineering of the gas distribution systems for both UIL Connecticut gas companies, including CNG's Greenwich distribution system. The corporate function maintains the Stoner planning model with critical input from the operating companies as to problem areas and growth opportunities. Now under AVANGRID, this may change to include all AVANGRID gas networks sometime in the future.²³⁴ But for now and this report, we will focus on the Connecticut gas operating companies. At the UIL level of the AVANGRID, Inc. the corporate engineering and planning group reports to the Director of Gas Design and Delivery. The following Exhibit shows this organization.²³⁵

²³⁴ AVANGRID, Inc. has six operating gas companies: The Southern Connecticut Gas Company and Connecticut Natural Gas Company in Connecticut; New York State Electric and Gas Corporation and Rochester Gas and Electric Company in New York; Berkshire Gas Company in Massachusetts; and Maine Natural Gas Company which was founded in 1998.

²³⁵ Interview with Barnes on July 13, 2016.

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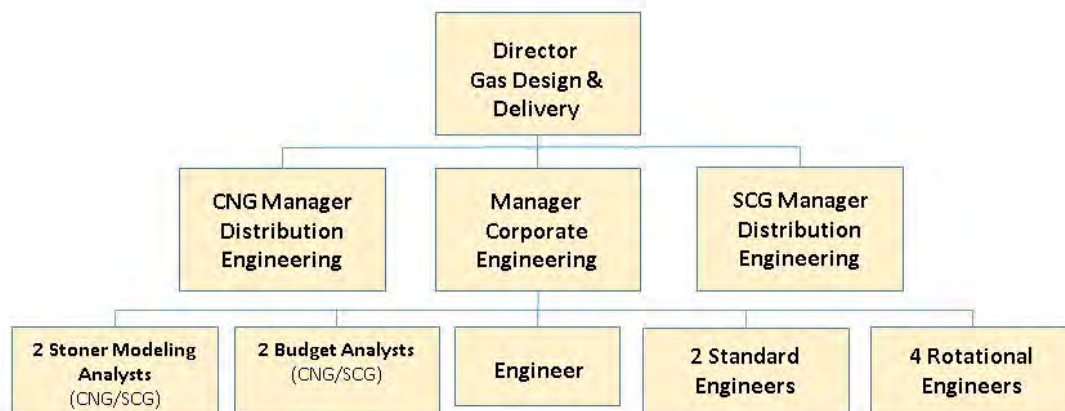


Exhibit 22 - Corporate Gas Design & Delivery

As shown in the Exhibit both SCG and CNG Gas Design & Delivery functions report into the Director and are an extension of the corporate function. Essentially all the large projects – area upgrades to pressure systems, main replacement, and system expansion – are designed and estimated at either the corporate or company level. In addition, standards are being developed at the corporate with input from across the gas systems in the UIL portfolio. There is an initiative at the AVANGRID level to standardize across the AVANGRID gas holdings that would cover several states.²³⁶

For the purposes of this review we will evaluate this corporate operation along with the individual company's function.

Evaluation Criteria

RCG/SCG LLC proposed the following evaluation criteria as the principal areas of investigation and the foundation for this study area's chapter in the final report:

- To what extent did the Company implement the 2010 audit recommendations?
- Are design operating pressures maintained across a range of temperatures and demand requirements?
- Are design estimates reasonable?
- Are standards consistent between SCG and CNG?
- How are distribution problem areas included in the system planning process?
- Are planning results adequately back casted for accuracy and model manipulation?

²³⁶ This would coordinate standards and work practices where appropriate, across AVANGRID's six natural gas distribution operating companies in Connecticut, Massachusetts, New York, and Maine.

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- Is there consideration of other load and infrastructure factors, such as advanced metering and energy efficiency initiatives, in the planning process?
- Are there formal processes for identifying, developing, and justifying the need for major projects (e.g., gas mains, regulator stations, LNG upgrades, etc.)?
- Are there a formal process and criteria for making decisions regarding replace versus repair, including how the overall construction program planning process is affected?
- Are there planning processes for: (a) reliability versus new business tradeoffs, and (b) regional versus central planning dynamics?
- To what extent are benefit/cost analyses and risk analyses considered in the decision making process; and are the specific types of benefit/cost and risk analysis methodologies assessed?
- What tools and models are used to project distribution line replacement? How are the results verified?
- Does the Company plan to increase gas storage over the next five years? What drives storage decisions?
- Is the infrastructure engineering function appropriately staffed and aligned to support system planning, construction, and field operations?
- Are Standards consistent between CNG and SCG?
- Are there adequate geographic data to assist in design projects accurately?
- What is engineering's role in asset management?

Conclusions

Conclusion 4.3.1: *RCG/SCG LLC found that SCG management has begun implementing the recommendations for Gas System Planning and Engineering listed in the 2010 Management Audit, but needs to accelerate the implementation of these recommendations. See RCG/SCG LLC recommendations following this section.*

Analysis

Management has satisfactorily implemented the 2010 Management Audit recommendations.

IV 3: Consider implementing a modern GIS and integrating it with CAD, GPS, and GIS. The business case for this project should consider the initial and recurring cost and benefits. The costs of this program may be mitigated if it is part of an IBERDROLA, IBERDROLA USA Enterprises, Inc., or Connecticut wide program.

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While SCG uses generally appropriate information technology and system tools, it lacks a modern geographic information system (GIS) and its Computer Aided Dispatch and Global Positioning Systems are not integrated.

None regarding full attribute GIS: Obtaining necessary land base and converting the existing engineering and facility records to a full attribute GIS system is a multi million dollar undertaking. SCG does not see the gained value as worth the cost. The existing Lifecycle system adequately addresses electronic deployment of records to users.

RCG/SCG LLC found that SCG is in the very early stages of addressing GIS; an RFP is due out by year's end and full implementation is scheduled for 2019. Their sister company, CNG, has both GIS and Mobile Data Dispatch operating already.

IV 4: Convert all asset management records into electronic form if SCG does not implement a full attribute GIS.

System operations have good asset management records but some are not in electronic form, reducing the value of the records for asset management purposes. A better approach would be to have a modern asset management system with all assets identified individually with contemporaneous characterization and performance information by asset identification number.

Since 2005, in the SAP WMS system, SCG has created an electronic equipment record for mains/services from that point and going forward. No further action is required, as all future assets will be electronically recorded. The Company has elected to not backfill records prior to 2005. The UIL enterprise wide SAP project has been interrupted by the advent of the PURA consultant's 2011 storm response findings/recommendations. As a result, UIL and its subsidiaries are currently reviewing those findings/recommendations and will be conducting a needs assessment. Upon conclusion of that assessment, this recommendation will be revisited.

SCG is in the process of investigating and planning a GIS project. Status: Ongoing

RCG/SCG LLC found that the SCG is the early stages of addressing this recommendation. The GIS initiative will bring SCG into the 21st century. We would add that there needs to be a field for capturing soil conditions for future work and municipal requirements.

IV 5: Focus capital project management on individual project budget and schedule performance.

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System operations manages its capital expenditures to the total amount per year rather than to individual project budget and schedule variances on completing specific programmed work.

Smaller well defined projects will continue to be planned and tracked as suggested. The CAPEX budget planning process will be broken down and tracked by its larger cost components (e.g. replacement, system enhancement, new business) in the 2011 budget. SCG Plans to develop and use a more refined project management system for tracking cost estimates for construction, and schedules for large projects at the \$750,000 threshold and above. For example, projects have been identified for a detailed actual vs. budget analysis: 1. Sikorsky cogeneration; 2. Gladeview new business extension, Old Saybrook; 3. Bridgeport 600#/60# station; 4. McKinley Ave area replacement project, Bpt. Status: Complete

RCG/SCG LLC found that the SCG has met the letter of the recommendation, but the intent of the recommendation as not been fully achieved and the current performance on estimating reflects this fact. See the section 3.6 Capital Budgeting Process.

Conclusion 4.3.2: RCG/SCG LLC found that SCG's engineering function is staffed with more associates and lacks a reasonable engineering complement due to unfilled engineer vacancies.

Analysis

The Exhibit below shows SCG's Gas Engineering organization. The Manager is part of the UIL Corporate Gas Design and Delivery function.

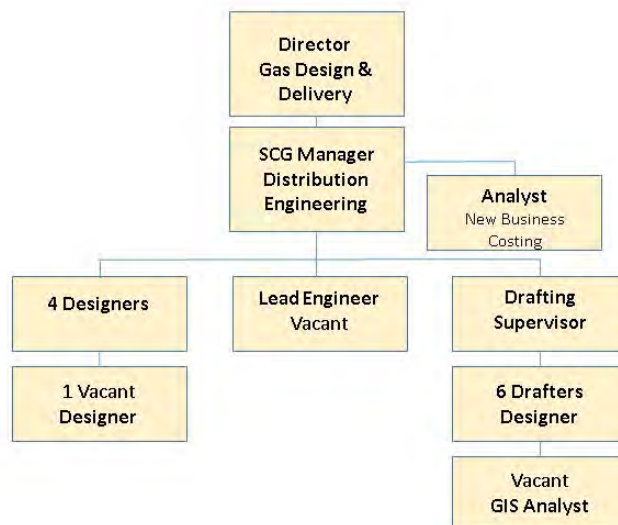


Exhibit 23 - SCG Engineering Function

RCG/SCG LLC recognizes that many electric and gas utilities have moved from using engineers to using associate degree Technicians to design residential and some small commercial services. This is recognition that much of this type of work for this class of customer is very basic and standardized design. SCG Engineering is currently staffed by Analysts and Associate Analysts. The Lead Engineering function should have two engineers, but the positions are vacant. The current staffing complement includes associates with varied training and disciplines:

- 1 long time field individual,
- 1 degreed geography individual,
- 2 CAD trained individuals,
- 1 Finance degreed individual,
- 5 drafter/CAD individuals, and
- 1 Long time UIL individual.

When UIL took over the gas companies, they required SCG to change its Associate requirements specification to include individual having a BS or BA degree. As part of this change, UIL sent the long time UIL person to support the group.²³⁷

This group develops designs for system improvements and new customer connections. According to the manager, the planners don't do the estimates.²³⁸

Conclusion 4.3.3: *RCG/SCG LLC found that both SCG and CNG with UIL prepare system forecasts for peak degree day heating using the Stoner Model to evaluate the integrity of the gas distribution systems.*

Analysis

Engineering has been using the Stoner (DNV GLN) gas distribution model for years and believes it accurately portrays their gas distribution systems.²³⁹ The Stoner model is maintained by Corporate Gas Design and Delivery with input from the individual gas companies.

The Stoner application tests the effects of forecast demand over a peak period on various nodes across the SCG and CNG systems. The model's "nodes" correspond to key locations such as city gate stations, regulators, key mains, key customer off take points, and lateral end points.

²³⁷ Interview with Gerety 092216

²³⁸ Interview Gerety 072016

²³⁹ The Stoner model was/is very prevalent in the natural gas distribution sector. It was part of Advantica until being acquired by GL in 2007. In 2013, GL merged with DNV to create DNV GL. DNV GL is based in Norway and offers sophisticated natural gas, oil, and water pipeline system modeling applications to utilities and other companies around the world.

The model enables engineering staff to test various scenarios of varying load and conditions to ensure that the overall system is able to contend with almost every conceivable load scenario.

The model allows the engineers to prepare their rolling ten year forecast. The model is verified using peak heating day data from the Company's SCADA system. The SCADA system is very advanced in that it monitors and records data from:

- All gate stations with full monitoring (pressure, flow, temperature) and control,
- Regulator stations monitor the flow in/out,
- Monitoring pressure at the end of laterals,
- LNG plants monitoring and control, and
- Major customer consumption.

Corporate engineering collects peak day and peak hour information for all the critical points and compares them to the Stoner Model's output. The goal is to have them match.²⁴⁰ When the estimates generated by the Stoner model parallel actual data measured on the system, it is providing reliable results to guide remediation and system expansion projects. The annual forecast process begins in July and all engineering units from the individual gas operating companies under the AVANGRID umbrella participate.

Conclusion 4.3.4: *RCG/SCG LLC found that both SCG and CNG with UIL incorporate distribution problem areas in the system planning process.*

Analysis

There are two major areas of concern that are factored into the annual gas distribution planning effort. The first area is leaks and the second area is low pressure areas. In Section 4.4.2 we discussed the leak survey program for UIL Gas Networks. The principal criteria for elevating a section of main higher in the replacement program are three leaks per 800 feet and/or water intrusion.²⁴¹ This is similar to the criteria Eversource Energy applies to its decisions. Engineering maintains records on leak locations. CNG has an advantage over SCG as it is already using GIS for its distribution network. SCG uses digital mapping without the additional benefits of GIS.

Conclusion 4.3.5: *RCG/SCG LLC found that SCG still has a number of areas where they operate low pressure (approximately seven inches of water column.) SCG has addressed several of the most troublesome areas, but there still exists about 820 miles of facilities operating at low*

²⁴⁰ Interviews with Barnes 05/11/16, July 13, 2016, and 07/20/16

²⁴¹ Water intrusion tends to be more of a concern in SCG's territory along Long Island Sound where water tables are generally higher, salt concentrations (which accelerate the corrosion of cast iron and bare steel mains) are greater, and there were several low-pressure mains which can allow water penetration.

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pressure. Management is addressing these areas through their cast iron/ bare steel replacement program which has not been addressed in the existing rates.

Analysis

Maintaining operating pressures across a range of temperatures and demand requirements starts with Planning and Engineering's Stoner model, peak hour forecast model, which models the distribution system and determines, as one of its outputs, the peak load forecast for the coldest day/hour of the year. The Gas Supply section of this report explains how SCG and CNG forecast peak load using forecast customer counts, expected usage per customer, and postulated design day weather conditions. This analysis indicates any pipe constraints that need to be upgraded. It's important to remember that much of the SCG'S distribution system is operating with about 60% of the available customers²⁴² already tied to the system. This means that SCG needs to focus its attention on those areas where the pipe capacity is potentially nearing its limits and additional customers are coming on to the system through organic growth or through the gas conversion program sanctioned by the State of Connecticut. Organic growth for the purposes of this review includes new customers coming online without any significant input to their decision process from SCG. This would also include customers replacing existing water heating and heating equipment due to equipment failure or desire to use less energy (energy efficiency) regardless of original fuel used. Non organic growth would require SCG intervention to influence the customer decision via education, incentives, and marketing efforts.

SCG has been upgrading many of low pressure areas in recent years. However, SCG still has approximately 820 miles of low pressure facilities, that SCG will replace as part of the cast iron and bare steel replacement program. Due to the growth brought about by the CES program and the organic growth occurring along the coast, Engineering is in the process of converting entire areas to a pound system.²⁴³ Branford, Stratford, and Fairfield are prime examples of this, where the properties are being bought, existing homes demolished, and rebuilt as larger, high end homes.²⁴⁴

SCG Engineering is replacing old cast iron systems with plastic up to 60 pounds and where possible steel for the high pressure systems over 60 pounds and up to 150 pounds. Inherent in this policy is the need to replace most of the existing cast iron mains and where required their associated services, which is being done under the accelerated mains replacement program. In

²⁴² This means that SCG has achieved about 60% market penetration of customers that are on its existing mains. The pace at which a natural gas distribution company can obtain additional "fill in" load on its existing mains is a function of connection costs, regulatory incentives, timing, and the cost differential between fuel oil and natural gas.

²⁴³ Interview Barnes 051016

²⁴⁴ Interview with Barnes on 051016.

addition, this policy generally requires that metering be moved outside and a regulator included in the installation to reduce the pressure for customer use. This is no small undertaking and will take up to 35 years to fully implement. Unlike CNG, SCG needs to get their accelerated mains replacement program funded and approved by PURA. This will happen in the 2017 rate case, but for now SCG management has elected to move ahead with their program because of the urgency to improve service and eliminate leaks. In addition, to full main replacement, SCG also is:

- Using plastic pipe for mains and services, but industry standards limits the pressure to 99 pounds on most plastic pipe. Insertion solutions are used sparingly on some services and mains, but the replacement program is mostly new pipe installed right next to the old. The SCG has set a target for doing these large area replacements and abandoning the old main in place in the same year. This is a significant undertaking, as it requires all the services associated with the old main to be replaced and in most cases moving the meter outside to meet high pressure code requirements.
- SCG uses its Milford LNG plant to inject gas during peak requirements or during transmission outages such as the one caused by a transmission pipeline rupture in Pennsylvania last year.²⁴⁵ They did receive notice to standby for gasification and injection, but the June loads were not severe so there was no injection. There is a program to upgrade the core plant processes, more on this later in this chapter.

From the physical delivery system perspective, SCG has a Supervisory Control and Data Acquisition (SCADA) system that monitors system gas pressures and flows from transmission to distribution at take points (gate stations), regulators, mains, and lateral endpoints. These additional downstream sensing units provide more granular level data even if the pressure is all that is monitored. Gas Control manages this activity. The system does not communicate over the Internet, therefore the servers and workstations that operate SCADA are dedicated to SCADA so the system is not connected to Internet, thereby reducing its vulnerability to cyber attacks.

Both the SCG and CNG SCADA systems operate out of the same location. Each has its own operator monitoring the system on a 24/7 basis. There is a common supervisor for both systems. They use the same SCADA platform.

Conclusion 4.3.6: *RCG/SCG LLC concluded that both SCG and CNG need to improve their estimating practices to minimize the final dollar value of projects falling outside the plus/minus 10% range and increase the number of projects estimated correctly. SCG estimating is less accurate than CNG's estimates*

²⁴⁵ On June 9, a 24-inch natural gas pipeline ruptured in [Lycoming County, Pennsylvania](#).

Analysis

Section 3.6 Capital Budgeting Process provides a thorough analysis of the capital budget variances and the results are problematic.

Capital project estimating is done through Compatible Units, used by the engineers in the design of projects. Compatible Units in SAP exist for constructing the project in SAP. But the estimating is done using SAP's Pay IDs. When SCG goes out for contractor bids and the bids are then accepted, the individual "Compatible Unit's costs, provided by all the accepted bidders, are averaged together to get what is then referred to as a Pay ID in SAP and becomes the Compatible Cost Unit used by SAP to estimate the project. This methodology as applied at SCG and CNG has a number of inherent flaws which can lead to project overruns as discussed in the Section 3.6 Capital Budgeting Process.

- When a higher priced contractor is chosen for the work, the estimate will be off by the difference between the average cost per unit and per unit rates in the signed contractor contract. Therefore, before the first length of pipe is purchased and the contractor arrives at the site, actual project costs will exceed estimates.
- SAP as configured at SCG and CNG does not contain all the critical extra Pay IDs that most capital work requires, but are available in a more general fashion. These can include:
 - Local police detail for traffic control. In some communities, the company must use overtime police;
 - Other flaggers;
 - Varying pavement or landscaping restoration requirements of the local municipality;
 - Obstacle or ledge removal; and
 - Non typical surfaces such as brick or cobble stone pavement, etc.

Complicating the above, is the fact that for SCG the resulting estimate is based on a composite, or cross section for a specific pipe size and ground composition. CNG, on the other hand, uses a finer breakdown by work elements; hence CNG achieves better estimates, although still on the high side.

The engineer/designer needs to understand the limitations imposed by SAP as well as the special requirements of the municipality and the uniqueness of the work site. Large projects and even some complex service installations will require site visits to note any surface issues which will impact the final cost of the project. Most utilities will have the designer and a field supervisor

walk the proposed work site to uncover these special conditions. In some cases, the field supervisor will have local knowledge of the type of subsurface conditions one can expect.²⁴⁶

Thorough pre construction site walk downs along with a firm understanding of the municipal requirements for flagging and restoration can help the designer adjust the SAP estimate to better reflect the ultimate cost of the work.

Conclusion 4.3.7: *RCG/SCG LLC concluded that another reason for overruns is the difficulty with soil conditions and contractor oversight on change orders or additions to work scope.*

Analysis

Once large projects are awarded to a contractor, construction management assigns a project manager who tracks the project and manages the effort. Essentially, these individuals are responsible for quality control and project progress in near real time. Construction management is supposed to capture all change orders caused by unforeseen obstacles, unexpected soil changes, or unique restoration requirements.

Project managers or construction supervisors are required to visit each work site daily to verify progress, the number of contractor personnel onsite, and the quality of the work being performed. In addition, the contractor should inform the company construction supervisor of emerging issues and be prepared to show evidence of the issue impacting the work progression and cost. From our observations and discussions with all parties this appears to happen, although the latter information may or may not occur during a particular issue. In such cases, it would be picked up the next day but possibly without the benefit of a company inspection of the issue. In discussions with one Engineering Manager, he felt that his people were not receiving feedback on these issues, so cost could not be adjusted proactively.²⁴⁷

Conclusion 4.3.8: *RCG/SCG LLC concluded SCG are not taking full advantage of UIL's well conceived Project Management Manual.*

Analysis

UIL provided SCG and CNG its Project Management (PM) manual. After reviewing the manual, we found it to be well conceived, template and process driven. Instead of adopting the UIL PM process in its entirety, the companies selected those elements that fit their needs. While

²⁴⁶ RCG/SCG-LLC was told in several interviews that the geology and substrates of the CNG and SCG service territories are complex featuring the effect of successive glacial onslaughts depositing considerable, but recent till amid much older surrounding bedrock.

²⁴⁷ Interview with Gerety 092216

this approach is in the right direction, it does not allow SCG to achieve the full benefits of the UIL process.²⁴⁸

Conclusion 4.3.9: *RCG/SCG LLC concluded that SCG, through the Gas Construction function, was not consistently assigning early in the plan–design–build process a project manager who can shepherd a project through the review process and provide critical oversight during design and construction.*

Analysis

Currently, management doesn't assign a project manager until the build or construction phase of the work.²⁴⁹ At that point a project is fully finalized and construction begins. We have found that assigning a project manager early in the concept phase allows for better control over project scope and budgets. Certain utilities assign a project manager early in the project and invariably achieve much closer actual to budget performance. A better process would be:

- Assigning a project manager to all projects of a certain dollar level at the planning stage;
- Having the project manager on larger projects manage the project book, participate in challenge sessions by peers and executives, work with the project engineer to steer the project through planning, design, and construction, track the spend to budget, proactively work to control costs, manage project close out, and document lessons learned; and
- Reporting results to executive management on the progress and budget.

This level of proactive management helps the companies manage capital spend closely, maximizing the planned number of projects completed in each capital budget cycle.

Conclusion 4.3.10: *RCG/SCG LLC concluded SCG LNG operations and capital betterment program are reasonable and well thought out for the size of each company.*

Analysis

Both SCG and CNG are served by LNG storage plants, one in Milford and the other in Rocky Hill, respectively. CNG's Rocky Hill plant is completing a comprehensive modernization of its liquefaction, vaporization, and boil off recovery processes. SCG's Milford plant is waiting FERC approval for upgrading its vaporization process, which will somewhat parallel the process installed at Rock Hill. The joint project effort is very well conceived, as the two vaporization

²⁴⁸ Interview with Therrien, 051016

²⁴⁹ Interviews with Therrien 051016 and Barnes 082616

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systems will use identical equipment, thus allowing mechanics/technicians to work at either plant and reduce the number of critical parts and equipment maintained in inventory.

The plants had to vaporize and dispatch gas into the distribution systems 22 times during the very cold 2014 15 winter.²⁵⁰ Both SCG and CNG use a peak day planning temperature in the Stoner model of 65° and 68° degree day peak, respectively, and both design degree days were exceeded during that winter. During the 2015 2016 winter, which was much warmer, there were less than 12 injections in smaller quantities. In addition, both plants were put on notice to inject, as a result of the transmission pipeline rupture in Pennsylvania last year.²⁵¹ The plants can be used to manage the cost of gas as well. Given this usage level, there doesn't appear to be an immediate or near term need for additional capacity.

Boil off is managed well. The boil off gas on a monthly basis has ranged from 13,967 MCF to 25,862 MCF for the Milford plant. These ranges were based on five year review of monthly boil off statistics.²⁵² Boil off is affected by outdoor temperatures and the level of tank filled. SCG captures the boil off and compresses it to feed in their distribution system at the requisite pressure.

Currently, Gas Supply has negotiated a favorable LNG contract that allows both plants to maintain their design LNG capacity without using the liquefaction process. According to the company the cost just to get the liquefaction process ready to run can exceed \$200,000.²⁵³ However, in the future when the existing contract expires, bringing SCG's Milford LNG plant's liquefaction process up to the Rocky Hill plant's level could positively influence any future favorable LNG contracts.

The use of the plants has been what would be expected. The following Exhibit shows the number of months when there has been vaporization.

Company	2010	2011	2012	2013	2014	2015	2016 (Partial)
SCG	NA	3	2	2	5	4	2
CNG	0	0	1	2	4	3	2

Exhibit 24 - Number of Months per Year Vaporization Was Used²⁵⁴

²⁵⁰ According to the Hartford Courant on February 28, 2015, Connecticut endured the coldest February ever recorded. The average temperature was about 16 degrees Fahrenheit, relative to an average February temperature of 28 degrees. See: <http://www.courant.com/data-desk/hc-february-breaks-cold-record-in-connecticut-20150228-htmlstory.html>.

²⁵¹ Interview Kopjanski 0716

²⁵² CONFIDENTIAL [REDACTED]

²⁵³ Interview Kopjanski 0716

²⁵⁴ CONFIDENTIAL [REDACTED]

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The winter months are when the LNG facilities are normally used. The heating season for 2014 and 2015 show a high use of the LNG facilities for vaporization. However, neither company experienced a real challenge to the design capacity of the storage facility.

Conclusion 4.3.11: *RCG/SCG LLC concluded that both SCG and CNG need to standardize across the companies all material, equipment, and procedures for designing and building their distribution systems.*

Analysis

Both SCG and CNG have been together for 16 years through several different ownership models. Engineering and Gas Construction and Maintenance have had the same leadership for most of the same time. The one exception is the creation of a Construction Function to provide project management and quality assurance to outside contractors. Yet standardization of materials, equipment, and procedures has never been fully achieved. Some of the major equipment such as pipe has been standardized. Many of the methods or procedures have been standardized through the use of plastic pipe. But there remain a number of equipment specifications and methods that are not standardized. For example, in SCG all regulator stations are color coded by pressure level, but not in CNG. The following Exhibit shows the color coding.



Exhibit 25 - Color-coding for Regulator stations

The lack of common standards across the two companies leads to:

- Difficulties sharing materials across both companies due in part to lack of common stock numbering,
- Lack of common stock numbering leads to independent ordering which precludes some quantity level price breaks,
- In the event of an emergency, crews from either company can't request common parts since stock numbering is inconsistent, and

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- It would be more complex for regulator crews to support each other due to the physical appearance differences and potentially part numbers.

Under AVANGRID, there are a number of initiatives to standardize all material and designs where appropriate. One could argue that waiting on full standardization for SCG and CNG was reasonable, as they now have to do so across more gas operating companies. However, both SCG and CNG have not been able to accomplish this for several years, so why would it occur now? There needs to be management formality and reporting responsibility to achieve these strategic results.

Recommendations

Recommendation 4.3.1: *RCG/SCG LLC recommends that SCG continue the implementation of its 2010 management audit recommendations and where appropriate update those to address the concerns identified during this audit.*

Recommendation 4.3.2: *RCG/SCG LLC recommends that SCG revisit the cost of contractor dig ins and ensure that they include all the costs associated with their crew's efforts to restore the system and not adversely impact the cost of planned maintenance or capital work the crews were performing. SCG should consider some form of disincentive to promote contractor's awareness of facilities in and around their work sites.*

Recommendation 4.3.3: *RCG/SCG LLC recommends that SCG follow the direction of UIL and add additional degreed engineering personnel.*

Recommendation 4.3.4: *RCG/SCG LLC recommends that SCG continue its vigilant watch for low pressure areas on their respective distribution systems.*

Recommendation 4.3.5: *RCG/SCG LLC recommends that AVANGRID UIL Gas Engineering redesign both the SAP Pay IDs and engineering design tools to better reflect the true cost of construction projects.*

Recommendation 4.3.6: *RCG/SCG LLC recommends that both CNG and SCG participate in non AVANGRID benchmarking studies every three years.*

Recommendation 4.3.7: *RCG/SCG LLC recommends that SCG and CNG develop a common methodology to capture the respective territories' unique soil conditions at a sub regional level and require direct input for municipal induced cost elements before approving design estimates.*

Recommendation 4.3.8: *RCG/SCG LLC recommends that SCG adopt and adapt the entire UIL Project Planning Manual and Project Management Office approach for all large projects.*

Recommendation 4.3.9: *RCG/SCG LLC recommends both SCG and CNG through Corporate Gas Design and Delivery assign a Project Manager to large projects at the beginning of planning phase. Further, as part of the project approval process, institute two levels of management*

challenge to ensure alternate solutions have been considered and all costs are properly represented.

Recommendation 4.3.10: *RCG/SCG LLC recommends SCG become more proactive with getting the necessary approval for up grading the Milford LNG facility.*

Recommendation 4.3.11: *RCG/SCG LLC recommends that SCG and CNG both, through Corporate Gas Design and Delivery, assign a Project Manager to large projects at the beginning of planning phase. Further, as part of the project approval process, institute two levels of management challenge to ensure alternate solutions have been considered and all costs are properly represented.*

Recommendation 4.3.12: *RCG/SCG LLC recommends the engineering and construction work to complete the standardization between CNG and SCG within the next two years.*

Recommendation 4.3.13: *RCG/SCG LLC recommends SCG require direct input for municipal induced cost elements before approving design estimates.*

4.4 Reliability, Construction, Maintenance, and Operations

Objectives and Scope

The Distribution Construction and Maintenance (DCM) function ensures that customers receive adequate supply of natural gas, timely service, and meter installs; that leaks are addressed in an appropriate manner and consistent with DOT²⁵⁵ standards for the type of leak identified; and gas appliance repair. Maintaining adequate volume and pressure is critical in a gas distribution system to prevent serious problems at the customer's premise and rapid response to gas odor calls is of paramount importance. The work includes main repair and replacement (including small capital jobs as time permits), new service installations, compliance work (both inspection and preventative maintenance), installing and repairing meter sets, leak calls and repairs, meter reading, regulator installation and maintenance, mark outs, etc. This includes essentially any work on the distribution system except large capital projects that are assigned to approved contractors.

The mechanics are fully trained in all areas of gas distribution operation and maintenance. The operations department:

²⁵⁵ The U.S. Department of Transportation Pipeline and Hazardous Material Safety Administration (PHMSA) is the entity that develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6 million mile pipeline transportation system.

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- Supports the implementation of an asset management plan,
- Manages maintenance expense spending,
- Coordinates with supply chain services to ensure the right materials and equipment are at the job site at the right time to minimize both delays and labor costs,
- Allows management to identify the appropriate staffing levels for maintaining the system, and
- Optimizes the use between in house and contracted resources.

In addition to the above, the Customer Service Technicians also are fully licensed to install and repair HVAC and other gas appliances. These repairs are done under contract with the customer or on a per hour basis.²⁵⁶ They are the front line for leak investigation and repairs at the premise, while DCM crews are the front line for street leaks repairs. This arrangement is serving both companies very well.

For the purposes of this management audit, major construction by contractors will be combined with the Construction and Maintenance, and Planning and Engineering sections, as the majority of it revolves around project management. SCG has opted to outsource the majority of large construction to a number of approved contractors with five year negotiated rates and escalators. This policy and practice allows Company street crews to be pulled off jobs to address leak reports and allows SCG to meet or exceed its response time targets. Further, this minimizes the elongation of large constructions due to leak response interruptions.

Overall Assessment

THE OVERALL SCG DISTRIBUTION RELIABILITY IS VERY GOOD AND IMPROVING AS LOW-PRESSURE AREAS ARE CONVERTED TO PRESSURE SYSTEMS AND THE MAINS REPLACEMENT PROGRAM PROGRESSES. SCG'S DISTRIBUTION CONSTRUCTION AND MAINTENANCE OPERATION IS REASONABLY WELL MANAGED AND EXTREMELY RESPONSIVE TO LEAK CALLS. WHILE THERE IS NO FORMAL WORK MANAGEMENT SYSTEM, AS OF THIS WRITING, THEY MOVE CREWS OUT OF THE YARD VERY EFFICIENTLY, BUT APPEAR TO BE LESS CONSISTENT IN THEIR FIELD PRODUCTIVITY MANAGEMENT THAN CNG.

RCG/SCG LLC believes that the organization is moving in the right direction, but we did notice a several opportunities to correct a number of emerging issues.

Distribution Construction & Maintenance has not had a significant organizational change as shared services functions have in the recent AVANGRID, Inc. purchase. Both SCG and CNG have

SCG's and CNG's²⁵⁶ customer gas appliance repair operation is described in the Affiliate Transaction and Cost Allocation of the report. All margin derived from providing appliance repair service is used as an offset to overall revenue requirements.

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been under the same corporate umbrella for over 16 years²⁵⁷ and field operations have not been integrated together below the manager level; they remain as two separate operating entities. At the Senior Director level, the two organizations are merged under this individual and there are common operating policies. Each operating company has a different union representing the craft employees, further complicating management of all Connecticut gas operations.

One significant negotiated difference is the crew lunch policy:

- SCG has a negotiated “Lunch on–the Fly” which is designed to allow crews to keep working but as individuals have the opportunity, they eat their lunch at the job site, while
- CNG has a negotiated 30 minute lunch.

The overall arrangement of having two separate operating companies is very different from the Eversource Energy approach, which was to create “One Gas Company” for all of Eversource.²⁵⁸

Below the Senior Director level are managers for distribution street construction and maintenance, production & gas control, meter shop and fittings, and customer service functions:

- Production & Gas Control,
- Planning & Scheduling,
- Dispatch, Leak Survey, Odor Response, and Damage Prevention,
- Meter services (emergency response, ERT, install, replacement),
- Maintain the SCG meters, who is transitioning to AMI (Two way metering system), while CNG uses AMR (Drive by one way system),²⁵⁹
- Construction (in house and contractors; new main extension, and main replacement),
- Regulator maintenance,
- Maintenance,

²⁵⁷ Energy East Corporation (former NYSE: NEG) announced in a SEC Form 8-K on February 8, 2000 that it had completed its acquisition of Connecticut Energy Corporation (former NYSE: CNE). Connecticut Energy was the parent of Connecticut Natural Gas (CNG). Energy East obtained final approval from state utility regulators on December 16, 2000 to acquire the Connecticut Energy Corp., the parent of The Southern Connecticut Gas Company. In turn, Energy East Corporation was acquired by Iberdrola S.A. of Spain on September 17, 2008. In May 2010, UIL Holdings Corporation agreed to purchase Southern Connecticut Gas and Connecticut Natural Gas from Iberdrola. Accordingly, the two Connecticut natural gas distribution companies have been under common ownership for over 16 years.

²⁵⁹ SCG could use the AMI system to shut down service, when the shut-off valve becomes reliable and integrates with the AMI meter. SCG will continue to manually restore or turn on service out of an abundance of safety concerns.

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- Appliance repair, and
- LNG operations.

The Gas Operations organization is shown on the following page.

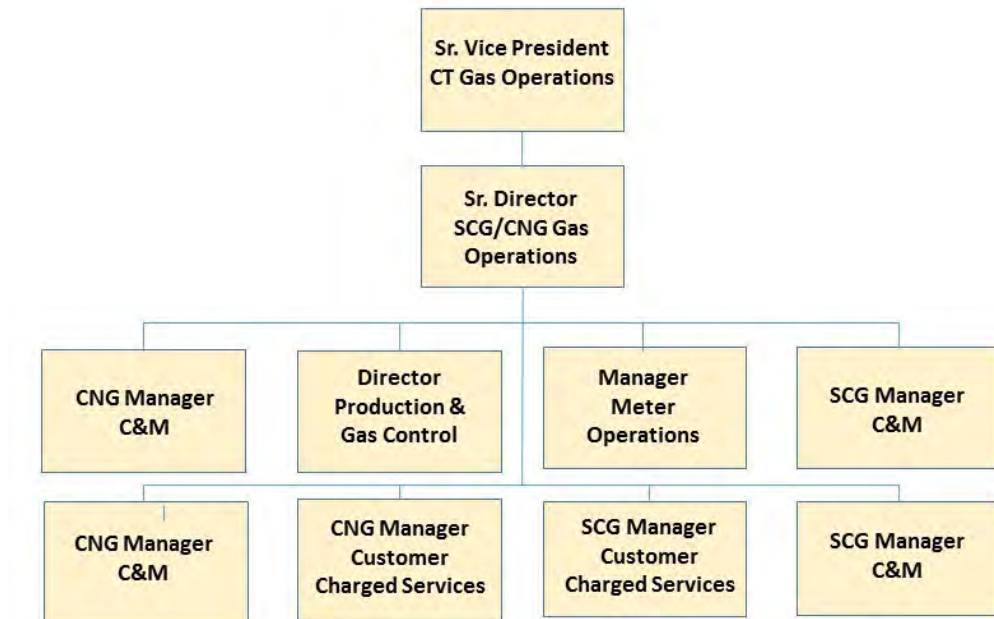


Exhibit 26 - AVANGRID CT Gas Operations Organization

The Senior Director of Gas Operations is extremely qualified for this role having worked in both SCG and CNG. At Eversource the single goal is to have a common platform for all policies, procedures, processes, materials, equipment, and work methods insofar as these are permissible by local regulation and existing union contracts.²⁶⁰ While that is a long term goal in AVANGRID, the DCM is not there yet.

Based on the organization chart above, the two common functions between SCG and CNG are Meter Operations and Production Gas Control. Interestingly, CNG uses a drive by AMR metering system, a one way communications system. Meanwhile, SCG is installing AMI or a two way communications metering system. This will provide SCG with the potential for remotely turning off services, when the required valve technology catches up. In no case would the AMI system be used for service turn on for gas safety reasons. It would also support future Real Time pricing solutions and fine tuning the gas modeling software.

²⁶⁰ Existing collective bargaining units are not necessarily a long-run impediment to additional standardization across a company such as AVANGRID, Inc. with multiple operating companies and different unions representing each one.

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SCG's service territory can best be described as a coastal corridor covering much of the Connecticut coastline which presents its own special issues with salt water intrusion in its remaining low pressure distribution systems areas. The Exhibit²⁶¹ below shows SCG contiguous territory from Westport to East Lyme.

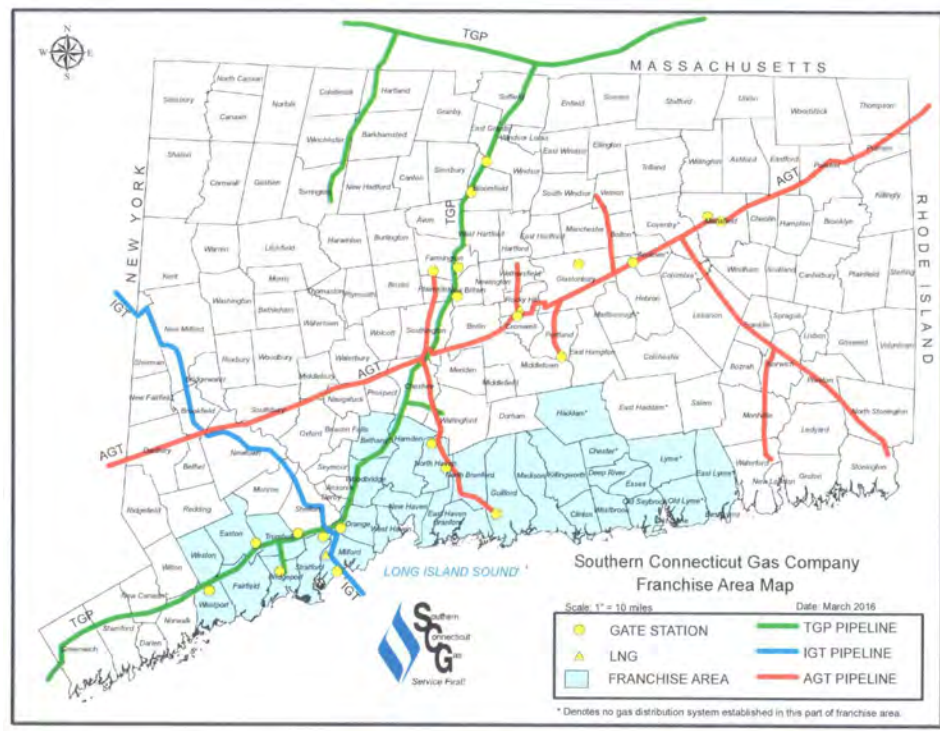


Exhibit 27 – SCG Current Territory

Evaluation Criteria

RCG/SCG LLC proposed the following evaluation criteria as the principal areas of investigation and the foundation for this study area's chapter in the final report:

- To what extent did the Company implement the 2010 audit recommendations?
- Is there a reasonable balance between in house and contracted resources?
- Are design operating pressures maintained across a range of temperatures and demand requirements?
- What percentage of maintenance work is performed on budget and on schedule?
- What are the primary reasons for overruns?
- What is the maintenance safety record? What is the number of lost time accidents?

²⁶¹ Response to Data Request OPS019 Attachment 2

Conclusions

Conclusion 4.4.1: *RCG/SCG LLC found that SCG management has implemented some of the recommendations for System Operations and Maintenance listed in the 2010 Management Audit. However, there is still fair amount of work to be done in work management and performance monitoring.*

Analysis

Management has satisfactorily implemented the 2010 Management Audit recommendations.

IV 1 Implement work management programs in all system operations work groups with four or more employees that spend over half their time on repetitive tasks. Conventional project management techniques should be used for all material non repetitive work.

None of the other system operations work groups have comprehensive work management systems with work time standards for tasks and reporting of utilization and productivity. While the managers and supervisors are generally experienced and know subjectively approximately how long individual jobs should take, there is no objective measurement and reporting. This lack of work management hinders accurate work scheduling and the management of utilization and productivity for cost control and workforce planning. The lack of work management also prevents SCG from performing basic asset management analysis such as the ratio of planned maintenance to corrective maintenance by individual asset type. It also does not allow trend analysis of corrective maintenance expense by asset type to be made.

UIL is implementing the Gas Companies' SAP Work Management System and plans to update the system in 2012 (SAP3). The UIL enterprise wide SAP project has been interrupted by the advent of the PURA consultant's 2011 storm response findings/recommendations. As a result, UIL and its subsidiaries are currently reviewing those findings/recommendations and will be conducting a needs assessment. Upon conclusion of that assessment, changes to SCG's work management system will be reconsidered based on the results. UIL is implementing the Gas Companies' SAP Work Management System and plans to update the system in 2012 (SAP3). UIL has undertaken an Operational Excellence Initiative that was rolled out at the Foundation level in October 2015, with an additional rollout in March of 2016. This will be followed with an enhanced rollout planned for September 2016 that will provide field force automation to all of gas operations.

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RCG/SCG LLC found that SCG/UII has implemented this recommendation. However, the schedule for the Operations Excellence, requiring SAP implementation, has moved out to sometime in the fourth quarter of 2016. At the time of this writing there is to viable work management program installed.

IV 2 Enhance the performance management program.

System operations performance management's program is not comprehensive and lacks certain key elements.

SCG is utilizing the UII Balanced Scorecard system for top down enterprise wide goal setting for nonunion employees. This Balanced Scorecard system provides a stronger relationship between employee compensation and the Key Performance Indicators (KPIs). SCG has also begun to use the UII Primavera Project Planner system for certain projects. This Primavera includes GANNT charts for charting planed and actual progress for these projects.

RCG/SCG LLC found that the SCG/UII has implemented the recommendation, but the Scorecards are quickly lost in the daily routine of managers and supervisors. They are not top of mind.

Conclusion 4.4.2: *RCG/SCG LLC concluded that the centralization and use of a focused contractor allows Leak Management to produce consistent results. However, contractor dig ins are all too frequent.*

Analysis

Leak Management has been a success for SCG as it consistently and proactively identifies Grade 1, 2, and 3 leaks across its system. The Exhibit below shows SCG's leak history, repairs, and percent leaks found through survey. SCG doesn't capture Grade 3 leaks as well as CNG does, hence there is no data for this category.²⁶² The remaining leaks are caused by contractor dig ins, equipment failure, or other causes.

SCG Survey Leak Repairs	2011	2012	2013	2014	2015
Main Leak Repairs Grade 1	48	73	58	46	97
Main Leak Repairs Grade 2	276	260	189	133	134
Sub Total Main Leak Repairs	324	333	247	179	231

²⁶² SCG Grade 3 leak repair data not readily available

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Service Leak Repairs Grade 1	116	108	111	91	112
Service Leak Repairs Grade 2	314	265	230	176	139
Sub Total Service Leak Repairs	430	373	341	367	251
Total Leak Repairs Found by Survey	754	706	588	446	482
All Leak Repairs	1353	1319	1266	1047	1067
Percent Found by Survey	56%	54%	46%	43%	45%

Exhibit 28 - Total SCG leaks repaired and percent discovered by survey²⁶³

	2011	2012	2013	2014	2015
All CNG Leak Repairs	414	366	352	349	556
All SCG Leak Repairs	754	706	588	446	482

Exhibit 29 - CNG/SCG Grade 1 & 2 leaks compared and percent discovered by survey

The above Exhibit shows that CNG has consistently had less total leaks than its sister company, SCG, except for 2015. Remember SCG isn't tracking Grade 3 leaks.

	2011	2012	2013	2014	2015
CNG Percent Found by Survey	54%	50%	42%	44%	61%
SCG Percent Found by Survey	56%	54%	46%	43%	45%

Exhibit 30 - CNG/SCG Percent discovered by survey

The previous Exhibit shows reasonably consistent survey results for SCG and CNG but CNG for 2015 has 36% more survey discovered leaks than SCG.

Both SCG and CNG have adopted significant programs to eliminate both bare steel and cast iron main that is still in service within 20 years.²⁶⁴ Since these main replacement programs focus first on the sections exhibiting the worst pipe condition, both SCG's and CNG's leak incidences should decline steadily over time. Further, SCG will not have their main replacement program approved by PURA until the 2017 rate case is filed and approved.

Currently, both SCG and CNG use a single, highly responsive contractor, whose employees are trained leak surveyors. Supporting this effort is a robust plan for surveying the systems. Specifically, the plan includes the following four surveys:

²⁶³ Response to Data Request OPS048

²⁶⁴ Interviews with Barnes 071116 and Therrien 051016.

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- **Walking survey** – of both residential and commercial perimeter checks – intended to complete a third of the gas service lines annually,
- **Mobile survey** – 100% of the distribution mains annually,
- **Winter patrol** – this is a fast mobile survey of all cast iron and bare steel pipes, and
- **Business district survey** – performed annually.²⁶⁵

RCG/SCG LLC found this very consistent to Eversource Energy's Connecticut leak survey plan. Both SCG and Eversource make use of the same leak survey contractor. The early winter patrol is very important, as the distribution system is starting to be stressed with increased demand for gas.

The natural gas industry classifies leaks according to severity and potential impact. A Grade 1 gas leak represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until conditions are no longer hazardous. A Grade 2 leak is non hazardous to persons or property at the time of detection but still requires a scheduled repair because it presents a probable future hazard. Grade 2 leaks must be repaired within a set length of time. If they become hazardous, they are upgraded to Grade 1 and should be immediately repaired. A Grade 3 leak is non hazardous at the time of detection and can reasonably be expected to remain non hazardous. These leaks are monitored to ensure that they do not get worse.²⁶⁶

Both SCG and CNG spend a significant amount of time annually repairing leaks as the data in the Exhibit below show.²⁶⁷

²⁶⁵ Interview with the Leak Survey Manager 072016

²⁶⁶ California Public Utilities Commission Safety and Enforcement Division Staff Report Survey of Natural Gas Leakage Abatement Best Practices, March 17, 2015.

²⁶⁷ Response to Data Request RC003

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CNG				SCG		CNG to SCG Main Repairs	CNG to SCG Service Repairs
Grade 1 Leak Repairs							
Year	Mains	Services		Mains	Services		
2011	56	189		144	365	39%	52%
2012	40	186		128	445	31%	42%
2013	72	239		141	514	51%	46%
2014	68	229		131	384	52%	60%
2015	91	249		193	390	47%	64%
Grade 2 Leak Repairs							
Year	Mains	Services		Mains	Services		
2011	333	202		400	444	83%	45%
2012	279	236		354	392	79%	60%
2013	292	240		256	355	114%	68%
2014	259	238		240	292	108%	82%
2015	385	236		234	250	165%	94%
Grade 3 Leak Repairs							
Year	Mains	Services		Total			
2011	25	3		83		34%	
2012	20	8		82		34%	
2013	13	13		125		21%	
2014	9	2		222		5%	
2015	116	60		242		73%	

Exhibit 31 - Number of Leaks Repaired

Inspecting the above Exhibit shows that SCG tends to have double the Grade 1 leaks of CNG. SCG seems to repair less Grades 2 and 3 leaks. This is due in part to the composite of different pipe types currently deployed in each company's service territory. The Exhibit below shows the composition of pipe types installed.

Ever since the San Bruno, California, gas pipeline explosion in 2010, most natural gas utilities have been more aggressive in conducting leak surveys and repairing noted deficiencies. The trend in Grade 1 leak repairs on mains gone up as seen in the graph below.

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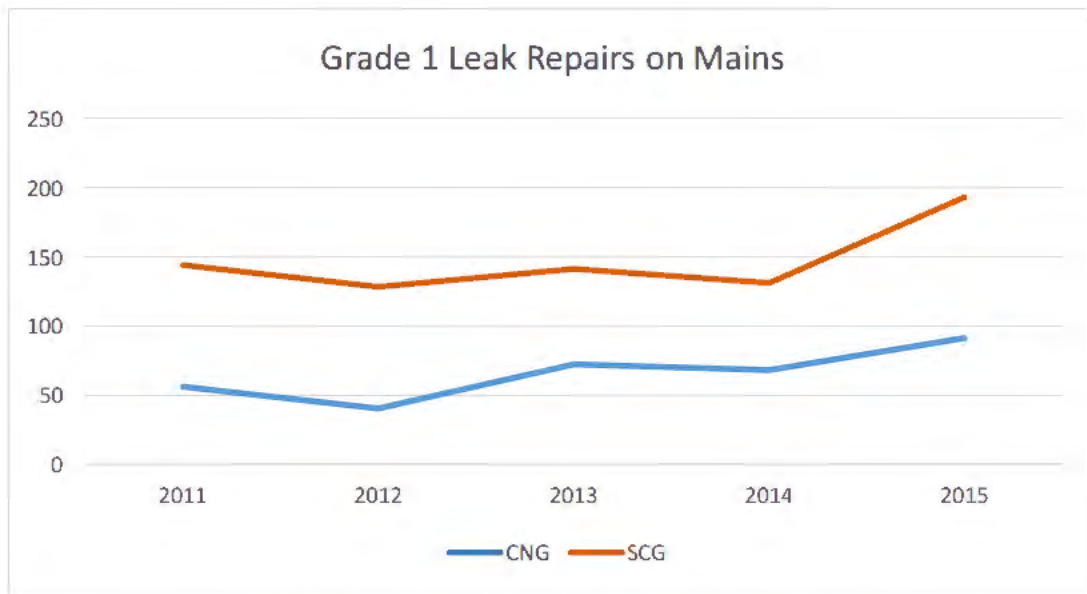


Exhibit 32 - Trend of Grade 1 Leak Repairs on Main

The Exhibit below shows the trend in Grade 1 leak repairs to service lines. SCG's incidence of service line leak repairs are much higher than CNG's, despite the similarity in size between the two companies.

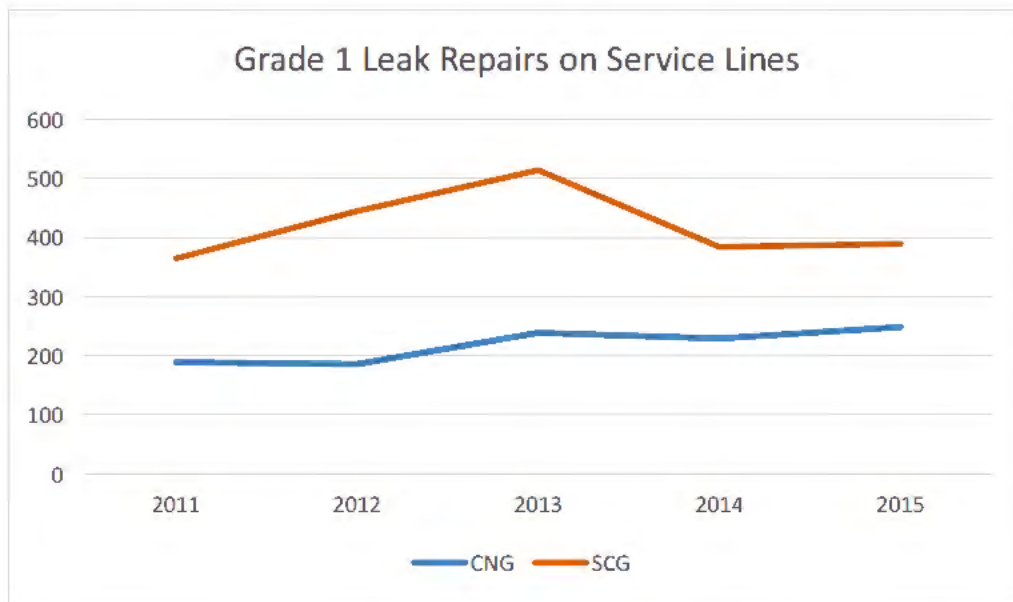


Exhibit 33 - Trend of Grade 1 Leak Repairs on Service Lines

Inspecting the above Exhibit shows that SCG tends to have double the Grade 1 service leaks as CNG. This is due in great part to the composite of different pipe types currently deployed in each company's service territory. The Exhibit below shows the variation pipe types deployed.

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	STEEL wo/ CP		STEEL w/CP		Plastic	Cast/Wrought Iron	Ductile Iron	Total
	Bare	Coated	Bare	Coated				
CNG	13	6	0	946	821	329	3	2118
SCG	82	9	0	643	1006	646	7	2393

Exhibit 34 – 2015 Miles of Gas Main by Composition²⁶⁸

CNG has only 15.8% of the bare steel pipe, 50.9% of the cast iron pipe, and 42.8% of the ductile iron that SCG has, significantly reducing its exposure to potential leaks. The complication in the leak repair analysis is dig ins. While observing CNG crews on a supervisor ride along, we witnessed two high pressure service dig ins within an hour of each other. In both cases the lines were properly marked out, mark outs visible, but the contractors working these non gas jobs still managed to hit and damage the services. Both these instances are not uncommon, which indicates the need for stronger disincentives for contractor dig ins. We did not get to view any on SCG's distribution system. The following Exhibit shows the 2012 number of dig ins per mile of combined mains and services for several regional gas utilities.²⁶⁹ Both SCG and CNG are higher than their counterparts at Eversource by about 38%.

Company	Incidents of 3 rd Party Damages/Mile of Mains and Services
Connecticut Natural Gas	0.025
Southern Connecticut Gas	0.025
Yankee Gas (Eversource)	0.019
NSTAR (Eversource MA)	0.017

Exhibit 35 - Incidents of 3rd Party damage per mile of Mains & Services

Currently, excavation contractors are liable for only the repair costs, which don't appear to persuade them to exercise more caution. Contractors need to have their on site supervisors paying closer attention to the position of the mark outs during the digging effort and letting the equipment operator know when there is a gas pipe near the dig site.

Another issue is the true cost of repair. As we have been told, once a crew leaves a regular work site and is dispatched to a dig in/gas interruption, the clock starts on the new work order. The clock continues until the repairs are complete and the restoration is finished, including landscaping and road surface repair. That then drives what the contractor will be required to pay

²⁶⁸ Response to Data Request OPS021

²⁶⁹ Response to Data Request GEN018 CNG-SCG Attachment 1- From the 2013 PSE&G Benchmarking survey (only year available)

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for causing the damage. However, the SCG crew returns to the original planned work site and continues with the original planned work. In this process, the crew, if it is a three person crew, is now charging the following additional time components to the original work order times three plus any vehicle and equipment charges:

- One extra job site setup including, tailgate discussion, safety brief and sign off, safety setup (traffic and crew),
- Additional local police traffic control costs,
- One extra job site breakdown after the work is complete,
- At least one extra travel time for to/from work worksite, and
- Supervision time.

On small service replacements or new installations, these added costs can lead to cost overruns and missed estimates. A single emergency response forces the original estimate to be exceeded through no fault of the designing engineer or the crew itself. These costs should be attributed to the contractor since they caused the emergency situation.

Conclusion 4.4.3 *RCG/SCG LLC concluded the corrosion management is reasonable for SCG.*

Analysis

As the end of 2015 SCG had 88% of its metallic mains under cathodic protection, while CNG had 98% protected. According to management at the UIL level, Management determined that SCG has over 81 miles of bare steel that are scheduled for replacement, so the Company will not install the additional cathodic protection. CNG has only 13 miles of bare steel in the same circumstance, with the same outcome.²⁷⁰

For both SCG and CNG, UIL have a consistent definition for maintaining galvanic protection on mains and services. The program is divided into two parts: one for distribution mains greater than 100 feet, the other for services and distribution mains less than 100 feet.

- Metallic main segments greater than 100 feet – are generally cathodically protected. With annual inspections where the interval between inspections does not exceed 15 months to assure that the level of cathodic protection meets Part 192²⁷¹ cathodic protection requirements.

²⁷⁰ Response to Data Request OPS022

²⁷¹ 49 CFR Part 192, Appendix D to Part 192 - Criteria for Cathodic Protection and Determination of Measurements.

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- Metallic services and main segments less than 100 feet – that are cathodically protected will be inspected at intervals not exceeding 10 years in time. Each year a different 10% that is representative of the entire system is to be inspected, thereby providing for inspection of all such sections over a 10 year cycle.²⁷²

In contrast, Yankee Gas (Eversource Energy) has over 94% of its mains under cathodic protection.²⁷³

Conclusion 4.4.4: *RCG/SCG LLC concluded that field crew Planning and Scheduling activity is a manual process with no formal expectations for time to perform the work. The morning flow is very streamlined and conducted under the watchful eye of management.*

Analysis

There is no formal SCG DCM planning and scheduling (P&S) function as we have seen in leading practice utilities. Work orders are sent to the DCM management, either the manager or a senior supervisor, who assigns them to the supervisors. The first line supervisors receive them and then assign them to individual crews. The work order contains almost all the necessary information for the crews to perform the work.

The supervisors get the work orders in advance and pre check the work site and mark the street and locations for main location well in advance of the job. This process is less formal than the one we observed at Eversource Energy.

Scheduling is dynamic, as it is in other utilities, and the DCM manager along with the supervisors make necessary daily adjustments to the crew complement based on available personnel. All utilities must daily deal with personal injuries, vacations, and sick leave impacts on the availability of field personnel.

The management team gives the work orders to Stores for them to pull the required material the day before the actual start of the work. In a very brief meeting with the manager and field supervisors, the crews receive their daily work order(s), and then disperse, and each crew member goes about readying the crew to roll out quickly. One crew member goes to the materials issue desk to retrieve the pre staged materials for the specific job. There are no long crew lines, as seen in many other utilities. The remainder bulk material, clean sand, and gravel are gathered by the equipment operator assigned to the crew. This operator drives a dump truck.

RCG/SCG LLC conducted several field observations of the supervisory pre job checkout and the issuance of work orders and found the process to work well. In general, the crews

²⁷² Response to Data Request OPS023

²⁷³ PURA Management Audit of Yankee Gas Services, published in the first Quarter of 2015

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understand what is expected of them in the morning huddle and move out quickly in 20 minutes or less. The one exception is Friday when safety meetings are held. We were told the only exceptions to this behavior are inclement weather or a serious utility accident elsewhere; management will order an immediate stand down by the crews to review the safety incident with them and discuss its prevention.

Crew vehicles, which are the Utility style truck design (less common in gas utilities that tend to favor the Bread Wagon Style), are parked in the general parking lots and are moved to the dock just prior to their time to move out of the yard. The dock frontage is small and narrow.



Exhibit 36 - SCG Utility Truck



Exhibit 37 - SCG Service Center Dock

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Staggered start times contribute to this fast rollout time. This was introduced to support broader leak response coverage.²⁷⁴ Management set up a staggered rollout schedule to ensure 24 hour coverage along with additional seasonal shifts to cover seven days a week, 52 weeks a year. The workweek is divided into a Monday Friday shift, Sunday Thursday shift and a Tuesday Saturday shift. For day coverage, the shifts are setup as follows:²⁷⁵

SCG Meter Operations Shifts		
1 st Shift	2 nd Shift	3 rd Shift
6AM to 2PM		12AM to 8AM
7AM to 3PM	3 PM to 11PM	11PM to 7AM
8AM to 4PM	4PM to 12AM	
10AM to 6PM		

Exhibit 38 - Meter Operations Split Shifts

Additionally, the split starts also prevent crews from queuing up at stores and on the docks allowing more fluid crew movement out of the service center. SCG's service center was not originally designed for utility operations, so the staggered shift arrangement is essential since there is not adequate dock space for all the utility trucks.

Conclusion 4.4.5: *RCG/SCG LLC concluded that SCG crew short cycle work orders are inconsistent with those of other utility companies; orders don't include man hour estimates to complete projects.*

Analysis

During our field observations, we had several opportunities to view work orders as they were issued to the company crews. We would expect these to be short cycle work orders which can be completed in less than a day's work. In no case, did we see an estimated man hours requirement for the work. RCG/SCG LLC is concerned that without this time expectation included on the work orders, crews set their own expectations. We acknowledge that an effective supervisor can convey an expectation, but this is not best practice. Generally, crews are expected to complete the new service work that day, and time permitting, investigate and clear leak complaints or perform some other work. From our experience, this practice is highly unusual given modern work management technology and tools, since it doesn't allow for setting a

²⁷⁴ Staggered start times for field crews is a best practice. It affords better day-long emergency response coverage and also reduces or eliminates early morning congestion in the maintenance yard.

²⁷⁵ Response to Data Request OPS009

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reasonable crew expectation for hours consumed performing the work. We understand the under the SAP OEI release three, that this may be addressed sometime in late 2016.²⁷⁶

Conclusion 4.4.6: *RCG/SCG LLC concluded that SCG supervisory management of crews while in the field needs to be enhanced to ensure work orders are completed in safe and efficient manner. Further, agreed upon lunch breaks are followed in the field personnel.*

Analysis

Typically, SCG appears to use a three person crew, consisting of a Lead, Mechanic, and Equipment Operator. While CNG uses either a two or three person crew to install services. Larger projects may require additional resources that are determined by supervision. In any case, the crew Lead has to be certified to perform fusing and other critical functions. The mechanic, often an apprentice grade, can work on the fusing under the direct supervision of the licensed Lead. From our observations, the crew lead generally does the work around the main including ensuring the backfill is carefully placed in the hole and the marking tape is positioned correctly.²⁷⁷ We have been told that PURA Pipeline Safety personnel will show up at work sites, either company or contractor, and verify that the individuals performing the work are certified to do the work or are under the direct supervision of the licensed crew member.²⁷⁸

When an emergency occurs, the closest crew at a natural work break point is pulled off and told to respond to the emergency. The crew breaks down the work site and makes it safe for the public. In the meantime, the Dispatcher opens an emergency work order. The crew charges travel time to the emergency and stays on that work order until the work is completed or is relieved. Supervision also moves to the scene.

There is a formal form (Emergency Event Log) used to track all reported leaks and restoration efforts. The SCG management and crew individuals responsible for the work are captured on the form as well. Critical non company personnel's names are captured on this form as well; DPUC notification and attendance at site, Fire, Police, and media. Witnesses' names and addresses are captured as well.²⁷⁹

²⁷⁶ Need to cite the interview or field visit where this information was conveyed if possible.

²⁷⁷ RCG/SCG-LLC field observations

²⁷⁸ The PURA Gas Pipeline Safety Unit "uses a combination of field inspections of new construction, and operation and maintenance of pipeline facilities and plants, as well as reviews of company plans, procedures and records, to ensure compliance with applicable safety requirements. Statistical information and risk assessments are used to focus the program. Inspections are performed by qualified engineers with specific training in the field of pipeline safety. The Gas Pipeline Safety Unit performs approximately 500 field inspections per year." See: <http://www.ct.gov/pura/cwp/view.asp?a=3363&q=414220> for additional detail.

²⁷⁹ Response to Data Request OPS018, CNG-SCG Supplement Attachment 1

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We witnessed several SCG DCM crews working in the field. The first three person crew was installing a new service very efficiently. The normal sequence of work during a new service installation follows this general workflow:

- Dig the service line trench to the house and open the street to the main,
- Install the riser and meter bar on the house,
- Prepare the service line trench and install the service pipe and connect to riser,
- Clean and mount the tap to the plastic main,
- Fuse tap to main and record times on main, including cool down period,
- Cool down period,
- Attach service and pressure test,
- Confirm that pressure test is acceptable, finish tap work, and carefully backfill with clean sand,
- Install marker tape, backfill, and compact, and
- If in street, install foundation gravel and patch.

During the tap to main fusion cool down period, the crew was taking their lunch which is consistent with the “lunch–on the fly” rule.²⁸⁰ The above crew worked it correctly by taking their lunch during the cool down period.

In another service installation we observed, the crew showed up with five people and two dump trucks. Normal complement is three employees with a utility truck and a dump truck with backhoe in tow. When we arrived on the job, the service pipe had been installed to the edge of the street and the main exposed. The Lead was in the hole preparing to install the tap to the main. The fusion went as planned and one dump truck was loaded with spoils. During the cool down everyone stood around in the shade. Once the cool down was done the remaining steps were performed to the compacting of the soil. The Lead then announced they would head back to take lunch and get the gravel and patch needed to complete the job. The following management issues were identified.

- The dump truck with the spoils could have returned to the service center to drop off the spoils and get the gravel.
- With such a large crew they could have done the tap earlier in the process and then completed the install of the service line in the trench, while tap fusion was cooling, or

²⁸⁰ Best practice in field crew operations is for crew members to take lunch breaks when 1) only one crew member is required for a specific task or 2) an inherent delay such as a post-fusion cool down period.

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they could have taken their lunch as stipulated in the union agreement for lunch on the fly.

- As soon as the clean fill was added to the main hole, the second dump truck could have return to the service center to get the patch materials, while the first dump truck returned with the gravel.

In any event the approach to executing the job was inefficient and required additional trips and time for the entire crew. In addition, the five person crew was oversized by two employees. This series of issues would cause a significant overrun of the work order estimate by at minimum a factor of two. Had there been a proactive supervisor on the job, watching the activity, the result could have been different.

Section 3.6 Capital Budgeting Process of the report presents our analysis of actual costs to estimated costs for a sample of SCG's capital projects. In conducting this analysis, we noted that SCG routinely underestimates the cost of its capital projects. Overstaffing on certain jobs may be one of the root causes.

Conclusion 4.4.7: *RCG/SCG LLC concluded that the SCG Service Center is well situated to minimize crew windshield time for the territory covered. This may change with the gas expansion program and may require new locations, satellite locations, or at a minimum redeployment of crews.*

Analysis

SCG's service center is located right off of Interstate 95 in Orange, Connecticut, with easy access on and off.²⁸¹ However, as SCG moves into the unserved towns during the ten year expansion program, additional service centers or small satellite centers could be required to allow SCG to continue meeting its leak response targets and position crews closer to future work areas.

Conclusion 4.4.8: *RCG/SCG LLC concluded that SCG is outsourcing most construction work and a number of other functions that could impact its system's knowledge base. SCG doesn't have GIS, so asset information needs to be maintained on their digital maps.*

Analysis

SCG is doing what many other utilities are doing to control costs, maintain a stable number of field personnel, and ensure leak response metrics meet or exceed the targets: they

²⁸¹ This affords SCG excellent access to an Interstate in a yard that is situated between its two largest served cities – Bridgeport and New Haven.

are outsourcing the majority of construction work. However, SCG is outsourcing in several other areas. This includes areas already reviewed:

- Leak Surveyors²⁸² (covered in the previous section),
- Major rebuild of regulator and gate stations, and
- Main and service replacements and extensions.

Based on its review of leak surveyors, discussed earlier, RCG/SCG LLC has little concern with this group of contractors, as they are providing consistent service across SCG's service territory.

SCG needs to ensure for its contracted main and service work that the contractors also provide accurate information on the subsoil conditions, noting on all drawings any impediments to the trenching found during construction. This information is also essential to explain cost variances and adjustments to the original agreed upon cost.

The contractors work to SCG standards and prepare as built prints. This institutional knowledge should reside in the digital mapping system. This should apply to company personnel work as well. RCG/SCG LLC is a strong proponent of GIS as a core Asset Management system, but that requires a certain level of scrutiny to ensure the right information is being captured and stored in the system and is easily assessable to future SCG crews. SCG currently is evaluating the CNG GIS for use on its system. This seems like an unnecessary step, since the GIS will be the same as expressed in AVANGRID's management strategy to standardize on systems.²⁸³

SCG is still not using a GIS application, even though its sister utility (CNG) has had one in place since early 2000. Since SCG has been adding new customers as part of its oil to gas conversion program and its ramped up cast iron and bare steel replacement program, it is missing an opportunity to capture these projects in a GIS system now. CNG's system could be used to support such an effort, provided the background base maps were available.^{284,285} There are

²⁸² Interview with Gregg Therrien on July 13, 2016. Both CNG and SCG use Sargis Associates, Inc. of Cromwell, CT to perform construction inspections.

²⁸³ Companies that have grown by acquisition such as AVANGRID, Inc. face complex information technology (IT) integration challenges. However, most such utilities strive to adopt best practices that include using standardized and common IT applications across their different operating companies wherever practical. This helps create economies of scale that translate eventually to lower costs for ratepayers.

²⁸⁴ Interview with Barnes on July 13, 2016.

²⁸⁵ CNG's GIS application could be used to support SCG's main extension and replacement programs. This would improve its Gas Distribution Integrity Management Program (DIMP) because the exact location of its facilities – and associated facility information attributes such as vendor, production run, etc. – would all be captured in readily accessible digital form.

certain collective bargaining unit impediments to effecting this change, but these are not insurmountable.²⁸⁶

Recommendations

Recommendation 4.4.1: *RCG/SCG LLC recommends that SCG formalize the Planning and Scheduling of Gas Construction and Maintenance to permit better control over the crew work day. Create a formal one week look ahead for work orders.*

Recommendation 4.4.2: *RCG/SCG LLC recommends that SCG immediately adopt placing the estimated man hours on all work orders to help set expectations for both crews and management performance and to minimize cost overruns resulting from inappropriate crew configurations. Supervisors will manage to these hour estimates.*

Recommendation 4.4.3: *RCG/SCG LLC recommends SCG devote more time in the field to managing crew performance on assigned planned projects.*

Recommendation 4.4.4: *RCG/SCG LLC recommends that SCG and CNG develop a common strategy and methodology for annually re evaluating service center satellite locations in light of the aggressive expansion program. Focus of the methodology should be on minimizing both crew windshield and leak response times.*

Recommendation 4.4.5: *RCG/SCG LLC recommends that CNG and SCG develop a common methodology for capturing specifics of soil conditions and obstacles found by both contractors and company crews. In addition, both companies should capture municipal requirements traffic control and post dig in street and landscaping restoration. We understand that CNG is using GIS and SCG is using digital mapping, but the form of the information should be the same regardless of the mapping storage medium.*

²⁸⁶ Collective bargaining unit agreements typically recognize the unit's sole right to perform certain scopes of work. This is known as "exclusivity." However, management is always able to exercise its prerogative to change work practices, introduce new applications, effect efficiency, etc. In this case, SCG's existing designers and mapping personnel could be trained on CNG's system. As long as no incumbent employee was affected in terms of pay or work conditions, these types of changes can generally be accomplished by a willing management team.

5. Financial Operations

Objective & Scope

Within SCG, as with any corporate entity, financial operations play a critical role for management's allocation of capital resources, control of and allocation of costs, working capital and cash management and collecting, analyzing and reporting financial information, complying with capital structure requirements, and managing sources of funding. Given the new ownership structure, the accounting function will have the added responsibility of regarding international reporting and disclosure issues and its differing reporting requirements.

SCG has a fiduciary responsibility to minimize its expenses, control all costs, and maximize its profitability while at the same time operating safely, providing a critical customer service, supporting corporate strategies, and complying with regulatory requirements. In that context and SCG's role as a regulated utility we reviewed and evaluated all Financial Operations for SCG and included in our review SCG's:

- Finance Organization,
- Treasury, Corporate Finance, and Capital Structure,
- Accounting, and
- Tax.

Financial operations have been reviewed relative to current practices and procedures, financial and budgetary policies, controls, and the appropriateness of the methodology. The effectiveness of Corporate Finance with appropriate controls, reasonable performance and management oversight and its support on management has also been reviewed. All general functions of corporate finance including cash management and treasury should demonstrate both competence and prudent controls and reasonable results. Corporate cash flow, capital structure, risk management, and liquidity must be managed appropriately to ensure a reasonable debt rating and benefit the company in the long and short run by virtue of a consistent and competent treasury function.

Further, the accounting must be appropriate with GAAS standards adhered to, adequate controls, benchmarked, efficient and effective processes and systems yielding a balance sheet and other schedules that reflect reasonableness and control. In addition given the Utility's ownership by a Spanish company Iberdrola SA, accounting must now be cognizant of the substantive differences between the Generally Accepted Auditing Standards and the International Standards on Auditing (International Federation of Accountants or IFAC) and the type and form of its additional reporting requirements.

The Tax area was also reviewed for efficiency and effectiveness of its activities, current practices and procedures, and to determine if their applied methodology was reasonable.

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The Cost Control functions used at SCG has been assessed to ensure reasonableness and efficiency and the cost allocation process has also been assessed. In addition, we reviewed the SCG receivable collection process and its application. In addition, we reviewed how SCG applies CIAC to its customers.

The O&M and Capital Budget Processes, Internal Audit, and the Parent impact on financials and potential synergies are covered in the executive management section of this management audit report.

Evaluation Criteria

RCG/SCG LLC applied the following evaluation criteria to the SCG Financial Operations review.

- Given earlier external and internal audits, has management adequately addressed the key issues and recommendations that were provided?
- Are the financial systems, policies, controls, and performance reporting reasonable and to the support what is required and the needs of executive management? Do the timeliness and the scope of the reporting support management priority?
- Does the treasury function use appropriate staffing, systems, and processes to ensure good cash management practices, liquidity, risk avoidance, and effective results reporting?
- Do the accounting functions have systems, processes, staffing, and procedures that are rigorously followed to yield accurate financial statements, supportive of an appropriate capital structure, proper cost control and tax reporting, and reasonable ratio results determinations and reporting?
- Does the Company adequately protect its assets, control its expenditures, and provide reports that reflect actual results via reasonable systems and financial standards and policies?
- Are the systems and procedures used to provide accurate customer billing and receivables and collections well developed and applied reasonably and adequately used?
- Does the overall financial management function provide a competent, effective, and efficient approach to meet the fiduciary responsibilities of a regulated utility and its executive management?
- Does the parent company add extra and inappropriate financial burdens on the Company and have a negative impact of the performance of the regulated utility?

Supplemental Evaluation Criteria

The evaluation criteria for assessing capital structure and financial strength were developed and applied and include the following.

- Does the company exhibit and maintain a reasonable capital structure?
- Does the capital structure comport with those maintained by other regulated utilities with similar risk considerations?
- Do the company's balance sheet and financial strength support its forecasted capital program which anticipates higher capital spending on both new business and cast iron and bare steel main replacement?
- Is reasonable access to additional capital maintained?
- Does the company take advantage of reasonable amounts of short term debt to reduce its overall cost of capital?
- How do the major credit rating agencies like Standard & Poor's, Fitch Ratings, and Moody's Investor Service rate the company's credit quality?

5.1 Finance Organization

Overall Assessment

SCG'S FINANCIAL SUPPORT COMES FROM THE UIL HOLDINGS SHARED SERVICE ORGANIZATION UNDER THE VICE PRESIDENT AND CONTROLLER. WHILE THE SUPPORT AND THE PERSONNEL INVOLVED ARE GOOD, THE CURRENT ORGANIZATION IS STILL IN TRANSITION FOLLOWING THE DECEMBER 2015 ACQUISITION OF UIL HOLDINGS INCLUDING CNG AND NEEDS TO BE FINALIZED AND COMMUNICATED.

The response to their prior audit recommendations has been adequately addressed. In addition, the financial personnel have participated in numerous training programs to stay current and annual performance management program for their leadership talent and all non union employees appears to be well designed, used, and useful. While succession planning is done at the executive levels, aging of their workforce could be mitigated by the use of a mentoring program to capitalize of the high experience levels currently available. In addition steps should be taken to hire talent to fill the authorized staffing shortfall that exists after confirming their need given their new organization.

Conclusions

Conclusion 5.1.1: *RCG/SCG LLC believes that SCG has a reasonable system to track the external audit recommendations contained in the NorthStar Consulting June 2010 final report related to the financial functions and has adequately addressed these recommendations where appropriate and still applicable. In addition, the Internal Audit recommendations are tracked, managed, and responded to appropriately.*

Analysis

The NorthStar Consulting firm's management audit final report was completed in June 2010. For the financial areas, three recommendations focused on Affiliated Relationships & Transactions, which will be covered with that area of our report. Only two other recommendations, covered here, were addressing Financial Operations.²⁸⁷

SCG only agreed with two recommendations, and implemented them in a reasonable fashion.

The recommendation "Require that internal audits conducted of SCG operations and functions be performed by a team of internal auditors (two or more individuals), comprised of at least one individual from outside the SCG/CNG legacy companies, to assure perspective and that a variety of skills and expertise are applied to the assessment of SCG's operations."

SCG discussed with the UIL Internal Audit group and since 2011 audits that are scheduled have been performed by several different UIL internal audit department auditors.

RCG/SCG LLC concurs with both the recommendation and the SCG response.

However, according to our interviews, there is currently no Internal Audits covering the Controller function within Shared Services.

The second recommendation "Conduct a broad and comprehensive risk assessment profile of SCG operations, including operational, procurement and supply, regulatory, and customer service factors, along with more traditional accounting and insurance issues, and then develop and implement a specific plan to mitigate and monitor the highest risk areas within the company."

SCG agreed to conduct comprehensive risk profile assessment and worked with UIL to conduct an initial risk profile as recommended.

²⁸⁷ Response to Data Request GEN012 Attachment 2

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The UIL Internal Audit Department now performs annual risk assessments of its subsidiaries to ascertain and potentially address the high risk areas of responsibility within the company.

Again RCG/SCG LLC agrees with both the recommendation and SCG's action addressing this recommendation.

Conclusion 5.1.2: *RCG/SCG LLC believes that SCG is served well by the Shared Services Controller's financial operations organization; however, given the transition to its new post merger organization, specific areas of responsibility and ownership for functional components need to be finalized from the top of the organization and communicated throughout the company.*

Analysis

Richard Nicholas is the Chief Financial Officer of all of AVANGRID. Steve Favuzza is Controller & Treasurer of UIL Holdings serving essentially as UIL Holdings financial leader. Mr. Favuzza has four direct reports including an Assistant Controller (James Earley) who covers the Connecticut gas companies, SCG, and its sister company CNG. Other direct reports to Mr. Favuzza in UIL Shared Services were mentioned in interviews²⁸⁸ to include functions of Tax (Property and Income Tax), Budgeting & Forecasting, General Accounting and External Financial Reporting. The UIL Director of Treasury reports to H. Coon, Vice President and Treasurer of the Avangrid Service Company.

The UIL Holdings Shared Services activities and responsibilities for SCG includes transaction processing, financial reporting, budgeting, accounts payable, accounting, rate case testimony, capital structure management, and compliance management. Their responsibility does not include customer billing/accounts receivable/collections (covered by SCG Customer Service) and payroll (covered by Human Resources). The exhibit below provides the current organization chart for the UIL Vice President & Controller. Occasionally the current title of an individual is inconsistent with their current role.²⁸⁹ This UIL function reports to the AVANGRID Controller as shown below and not to Avangrid Networks.

²⁸⁸ Interview with S Favuzza 5/11/16.

²⁸⁹ The Director of Treasury in UIL Holding had a title Dir of Corporate Finance; A Danner and J Caffary are also incorrectly titled.

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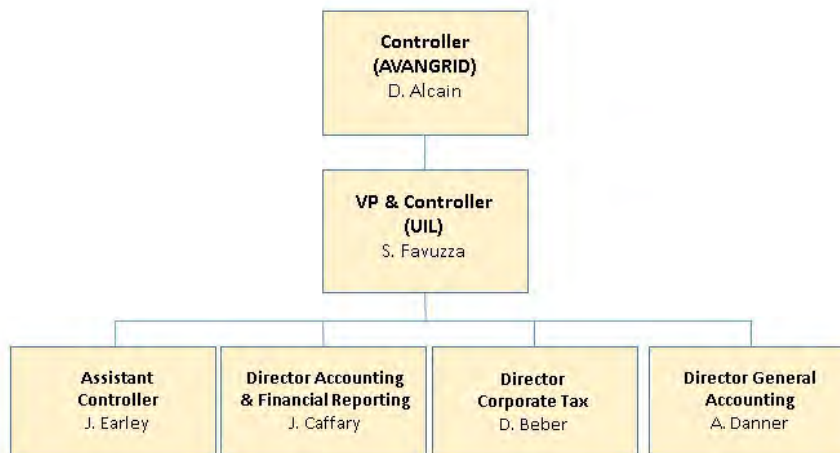


Exhibit 39 - Shared Services Controller's Organization within UIL Holdings

While shown above with a title of Director Accounting & Financial Reporting, J Caffary is actually responsible for Transactions: Accounts Payables, Fixed Assets, and Administrative Systems. While not shown in the above organization but interfacing with it, D Bernardi carries the title of Director of Corporate Finance yet at the start of our interview I was told that she was actually the Director of Treasury. In addition, A Danner, shown in the Chart as General Accounting, is actually responsible for General Accounting & Financial Reporting.²⁹⁰

- In addition, Steve Favuzza's reporting relationship also is not clear with one document showing him as reporting to the AVANGRID Corporate CFO Richard Nicholas²⁹¹ and another showing his as reporting to the AVANGRID Controller D. Alcain.²⁹²
- While understandable during the earlier transition period, such as the first two months, these title anomalies remain during this ninth month as this audit section is written.

Further a significant amount of current work by Steve Favuzza has been focused on Purchase Price Accounting or PP Allocation: (PPA). This is an application of goodwill accounting whereby an acquirer when purchasing a company allocates the purchase price into various assets and liabilities acquired from the transaction. PPA is typically conducted in accordance with the Financial Accounting Standards Board's ("FASB"). The overall process of conducting the appraisal, reporting the FV of the assets and liabilities, and the allocation of the net identifiable assets from the old balance sheet price to the FV, including the determination of the goodwill in the transaction, is referred to as the PPA process.

²⁹⁰ Based on Interviews with both individuals.

²⁹¹ Response to Data Request FIN001

²⁹² Response to Data Request GEN019

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In addition, the UIL Holdings Shared Services financial leadership has a role to play regarding ensuring that the Ring Fence agreements are adhered to and that a number of commitments made to PURA with regard to the Merger with Iberdrola are adhered to. This agreement with PURA was developed to make sure that there was no comingling of funds with other components of UIL (and beyond) to protect the Connecticut utilities from the rest of the organization. It is designed to protect the financial condition of UIL and the UIL Utilities over the long term from potential changes in the financial circumstances of AVANGRID, Iberdrola, or their other affiliates.

The Assistant Controller (“the Gas Guy”) has full time responsibility to cover the Connecticut gas utilities. Working with others in his Shared Service organization, his efforts cover Accounting, O&M and Capital Budgeting, Forecasting, and Rates & Regulatory solely for CNG and SCG. He essentially supports and is the gatekeeper for all Gas financial informational needs. He also handles the month end closings, reporting, and Compliance filings.

As one would expect, the new AVANGRID organization has some advantages and some potential challenges.

- Currently there 50 positions is the Shared Service group covering financial operations with 46 filled. It appears that getting approval to fill existing positions has little delay. However it is generally thought by the Shared Services financial organization that new positions will take more time than in the past because of the current corporate approval requirements, more layers for approval. As a result, the organization feels it must account for this time lag in plans and processes.²⁹³
- Parties to the UIL Money Pool were UIL, as lender only, UI, SCG, CNG, and BGC . In April, UI, SCG, CNG, and BGC became parties to a Virtual Money Pooling Agreement, which includes their other utility affiliates. Borrowing under the Virtual Money Pooling Agreement is less costly than under the Avangrid Credit Facility.
- In addition, the firm has the money or access to money to provide capital when needed.
- As a result of this broad organization there is an opportunity to find, learn from, and replicate better practices across the organization.
- There is less communication from the top of the entire organization regarding the new corporate organization and as a result there is confusion regarding dollar approval levels, authorities, and decision making imperatives. While the Grants of Authority have been issued, there remains less understanding of authority by management than appropriate

²⁹³ Interview with S Favuzza May 11, 2016.

(see Executive Section covering management and operations committees and Grants of authority).

- When asked about the makeup of AVANGRID itself, key individuals knew little about this parent company other than the name of the CEO and the CFO.²⁹⁴
- In addition, well after all interviews for this audit were conducted, our request for a Shared Services organization remained unfilled. We did receive this Document Request on August 24, 2016.²⁹⁵
 - The RCG/SCG LLC audit team requested²⁹⁶ a “... complete organizational chart of AVANGRID/Iberdrola Networks/UII Corp. including all entities. For shared service organizations and other support groups interfacing with SCG and CNG show details of those organizations with individual names and functions served.”
 - The response received was “Due to ongoing corporate integration projects, a complete organizational chart for AVANGRID is not currently available.”
- In general, after conducting many interviews it became clear that there are a lot of changes and management is “learning and evolving as they go.”

Conclusion 5.1.3: *RCG/SCG LLC found that the financial area personnel participate in a reasonable level of training and have annual individual performance assessments to maintain an appropriate and strong level of talent; however turnover, workforce aging, and a current shortage of personnel is a challenge as it would be for any company.*

Analysis

The leadership talent within UII Holdings in support of SCG is reasonably strong. A CPA with a substantial financial background leads the Shared Services financial group. Further others have certifications such as the CMA (Certified Management Accountant) and the CIA (Certified Internal Auditor) as well as MBAs.

- The education, certification, utility experience, and professional background of the accounting employees at SCG is more than adequate to mitigate any risk associated with finance and accounting controls, policies, and procedures.

²⁹⁴ Interview J Earley May 24, 2016

²⁹⁵ Response To Data Request GEN 19 filed August 24, 2016

²⁹⁶ Response To Data Request GEN 005

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- There are no formal training requirements for financial personnel and the responsibility for Continuous Professional Education required for maintaining and staying current for certifications such as CPAs and CMAs are the responsibility of the individual employee.
- Numerous training programs were provided to keep this financial organization current or systems proficient. For example in 2015 various members of the organization took Financial courses, seminars, or attended informational conferences such as:²⁹⁷
 - Accounting conference by AGA/EEI,
 - Property Accounting and Depreciation seminar by AGA/EEI,
 - Excel courses by Connecticut Computer Assistants (CCA),
 - Advanced Public Utility Conference by AGA/EEI,
 - Computer Based Training (CBT) of TM1 by Quebit,
 - Knowledge Transfer on BAG by Quebit,
 - ICC Training by Open Text,
 - Advanced Excel course by CCA,
 - Supervisory Development Program by PPS International and internal employees,
 - TM1 Power User training by Quebit and internal employees,
 - Livelink Workflow Refresher training performed internally,
 - New Supervisors training performed internally,
 - New employee training performed internally,
 - Company Rates and Regulations course performed internally, and
 - Employees subscribe to various business journals that provide accounting and finance related information to stay current on the latest issues in the utility industry and accounting and finance.
- In addition, a variety of tax courses were taken by the Tax group:
 - Federal Income Tax Review Course,
 - Power and utilities Income Tax Training,
 - Domestic Tax conference,
 - Tax Committee Meetings,
 - Advanced Corporate Tax,
 - Quarterly Federal Tax Roundup,
 - Mergers and acquisitions Tax seminar,
 - Year end annual disclosures, and
 - Key Tax Developments Affecting the Power and Utilities Industry.

²⁹⁷ Response to Data Request FIN002

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- Annual performance reviews are conducted and Balanced Scorecard Metrics are used annually to measure the effectiveness and goal achievement of individuals within Shared Services financial organization.
- However, as with all corporations, the financial operations work force is aging and the future retirements will be a threat. Importantly at SCG's shared services (and within SCG itself), there is no formal program to capitalize on its aging work force and to leverage their system knowledge.
- In addition, turnover and retirements within the UIL Controller's organization have resulted in 46 positions filled out of 50 authorized. While the group feels that filling these positions is required, with the new organization these positions may or may not be justified.
- It is recognized that succession planning is enterprise wide, and includes Corporate Finance, Accounting, Planning & Reporting, and Internal Audit, on an annual basis during the Talent Planning Process.²⁹⁸ The succession planning part of the process consists of identifying successors based upon position. But succession plans have historically been created for officer and executive positions, the leadership positions that report directly to those positions, and then any other position within the organization that was deemed to be key.

Conclusion 5.1.4: *RCG/SCG LLC found that the policies and procedures that are in place are used and useful, but benchmarking or best practice programs are currently limited. In addition RCG/SCG LLC found that the Main SAP system used by the financial shared services organization is not the upgraded version used by AVANGRID and has a number of disadvantages. RCG/SCG LLC believes that upgrading to the newer version is necessary and should be planned as soon as possible.*

Analysis

SCG, through its Shared Services finance organization, uses well defined and written policies²⁹⁹ for relevant functions. With the change in their General Ledger system from PeopleSoft to SAP, some of these policies are being revised. The policies were reviewed and found to be both detailed and appropriately prescriptive. These relevant policies include:

- General Accounting and Financial Reporting Policies,
- Plant Accounting Policies,
- Tax Accounting Policies,

²⁹⁸ Response to Data Request FIN006

²⁹⁹ Response to Data Request FIN007

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- Accounts Payable Policies, and
- Treasury Policies.

The AVANDRID companies are said to be participating in best practice discussions aimed at determining the practices and processes needed to maximize collection effectiveness in order to reduce delinquent accounts receivables and uncollectible expense.³⁰⁰

At the parent level, while the acquisition may eventually enable AVANGRID wide and Iberdrola SA internal best practices to be evaluated and potentially applied, there has not been any recent benchmarking or best in class studies performed for Corporate Finance, Accounting, and Planning & Reporting.³⁰¹ Given the size of the parent company, an industry wide best practices effort, including companies with international and U.S based affiliates, potentially could provide some advantages to subsidiaries such as SCG.

A wide variety of systems are currently in use by the UIL Shared Services in support of the affiliated subsidiaries including SCG. The Exhibit below summarizes these systems.³⁰²

Area	Software Used	Function/Purpose	Hardware
Corporate Finance	SAP	Analysis	Hosted
General Accounting	SAP	General Ledger, Accounting	Hosted
Accounts Receivable	SAP	Billing Customer Accounts	Hosted
Accounts Payable	SAP	Posting & Paying Invoices	Hosted
Accounts Payable	Enterprise Scan	Scanning Software for Invoices	Hosted
Accounts Payable	ICC Validation	Invoice Capture Center for Invoices	Hosted
Accounts Payable	VIM	Vendor Invoice management	Hosted
Accounts Payable	W-2 Mate	1099 Upload to IRS	Cloud Solution
Accounts Payable	Image Station	View Images of Invoices	Hosted
Accounts Payable	Open Text Windows Viewer	View Images of Invoices	IBM
Treasury & Cash Mgmt/Forecasting	Banking Platform	Daily Cash Work (wires, etc.)	Cloud Solution
Treasury & Cash Mgmt/Forecasting	treasury workstation	Daily Cash Posting	Cloud Solution
Planning & Reporting	Impact	Corporate Modeling	IBM
Capital and O&M Budgeting	TMI Webworks	GUI Budgeting/Reporting Tool	IBM
Capital and O&M Budgeting	IBM Cognos Perspectives	Backend Budgeting/Reporting Tool	IBM
Tax	PowerPlan	Provisioning/Property Tax/PwrTax	IBM
Tax	E-Form	Sales & Gross Receipts Tax Returns	Cloud Solution
Property Accounting	PowerPlan	Fixed Asset Accounting	IBM

Exhibit 40 - Current Financial Systems Used by UIL Financial Shared Services

The SAP system used by the UIL Shared Services financial group is not the upgraded SAP system used by AVANGRID and has some disadvantages that would be eliminated with the use of the AVANGRID SAP version. These disadvantages include:

³⁰⁰ Response to Data Request FIN 072

³⁰¹ Response to Data Request FIN 008

³⁰² Response to Data Request FIN 009

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- A large number of manual processes,
- Built in controls are not included (for example, if an expenditure over budget were attempted, the upgraded system would automatically prevent it while the UIL system does not do so automatically),
- Financial reporting support is not as strong,
- It does not support organizational alignment when multiple systems are used,
- Unlike the SAP system used by AVANGRID, it does not contain a Treasury module, and
- International requirements are not supported.

The implementation of an upgraded SAP system could be a two year process. While most UIL Shared Services financial group members believe that this will eventually be done, we did not find a plan to do so and any further delay could mean not having the upgraded system until the end of 2018. However not all members of the group felt that it is critically necessary.

Regarding the systems used by SCG for its budgeting process:³⁰³

- They currently use IBM Cognos TM1 for budgeting.
- The normal monthly cycle begins about the 25th of the month and concludes on about the 10th business day of the following month.
- Budget updates are done in the working budget version and are due into TM1 by the 5th business day of the month.
- With final forecast allocations, actual loads completed, the system locked down, and the updated forecast is saved as a new reforecast version by the 10th business day.
- Human Resource data is loaded into TM1 from the SAP/HR system for existing employees, and open positions and financial actuals are loaded from SAP/ECC during this process.

Recommendations

Recommendation 5.1.1: *RCG/SCG LLC recommends that consideration be given to expand the current Internal Audit activity within UIL established during the earlier audit to include the Shared Services Controller function.*

Recommendation 5.1.2: *RCG/SCG LLC recommends for the benefit of all stakeholders that, beginning at the AVANGRID level, the financial group's ultimate organization, and functional roles and titles be finalized and communicated.*

Recommendation 5.1.3: *RCG/SCG LLC recommends that steps be taken by the Shared Services UIL Controllers organization to fill any positions that are still needed and reauthorized once the transitioned organization is finalized. Consider establishing a mentoring process to capitalize on the experience levels that exist.*

³⁰³ Response to Data Request FIN 060

Recommendation 5.1.4: *RCG/SCG LLC recommends that a detailed needs analysis of upgrading to the SAP System currently being used by AVANGRID be performed to ensure this particular upgrade and timing are justified; a cost benefit analysis should be performed, and if warranted, coupled with a formal implementation plan.*

Recommendation 5.1.5: *RCG/SCG LLC recommends that a Benchmarking and Best Practices program be designed and implemented for the entire UIL Shared Services financial functional area.*

5.2 Treasury, Corporate Finance, and Capital Structure

Conclusions

Conclusion 5.2.1: *RCG/SCG LLC found that the management process and systems used within the firm's Treasury function are reasonable and yield effective results even with an unclear organizational alignment.*

Analysis

The Treasury function in any corporate environment is a critical one with numerous core functions such as:

- Cash monitoring and management,
- Liquidity management, planning, and control,
- Maintaining the appropriate capital structure,
- Managing short and long term borrowing, financial investments, credit management, and interest rate risk, and
- Maintaining relationships with funding and ratings agencies.

The Director of Treasury, D Bernardi manages cash for UIL Holdings, and all companies in Connecticut and Massachusetts including non regulated companies.

Both SCG and its sister company CNG are managed separately but by this same Treasury area. Organizationally the Director of Treasury reports to and is directed by Avangrid Service Company Vice President and Treasures, Howard Coon. Steve Favuzza's role in Treasury is limited to signature authority on loans, debt compliance certificates, and bank accounts. Despite this unclear alignment, no impediments to performance were found.

The specific roles for this treasury function under the Director of Treasury include:

- Manage cash and cash forecasting,
- Deal with and assure liquidity,

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- Manage borrowing programs including pool arrangements, and
- Implement short and long term financing while complying with allowed capital structure requirements (for SCG the Equity ratio is 52 %).

SCG was party, along with its affiliated utilities in Connecticut and Massachusetts and UIL Holdings Corporation, to a revolving credit agreement (UIL Holdings Credit Facility) that was terminated on April 5, 2016 and replaced with a new credit agreement called the Avangrid Credit Facility.³⁰⁴

- The parties to the Avangrid Credit Facility include SCG, along with their utility affiliates in Connecticut, Massachusetts, New York, Maine, and AVANGRID.
- The borrowing limit for each of SCG and CNG under the UIL Holdings Credit Facility was \$150 million and remains the same with this new credit facility.
- The terms and conditions applicable to SCG under the UIL Holdings Credit Facility and Avangrid Credit Facility are the same in all material respects. Neither SCG nor its sister company CNG have borrowed under the Avangrid Credit Facility.

In 2012 UIL Holdings Corporation established the UIL Money Pool, an arrangement under which SCG and their Connecticut and Massachusetts utility affiliates may borrow funds from, and lend funds to, each other at rates that are lower than the rates as determined under the Credit Facilities described above. In April 2016, SCG executed a Virtual Money Pool agreement with their Connecticut, Massachusetts, New York, and Maine utility affiliates under which each utility affiliate may borrow from, and lend to, each other at the A2 / P2 commercial paper rates published by the Federal Reserve.

- These rates are lower than rates available to the borrowing company under the Avangrid Credit Facility and competitive with or higher than the rates of return on liquid marketable securities available to the investing company.
- There have been no borrowings or loans made between SCG or with their utility affiliates under the Virtual Money Pool.

Also, in April 2016, SCG and CNG each executed a separate bi lateral Loan Agreement with AVANGRID. SCG and CNG may borrow from AVANGRID at the A2 / P2 commercial paper rate published by the Federal Reserve, which are lower than the rates applicable under the Avangrid Credit Facility.

It is SCG's intent to first use the excess cash available amongst their utility affiliates that are parties to the Virtual Money Pool and then to borrow under their respective Loan Agreements

³⁰⁴ Response to Data Request FIN 013

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with Avangrid. SCG will use the Avangrid Credit Facility to the extent that those internal sources of funds are unavailable.

Treasury operates under a well defined and appropriate Treasury & Cash Management Process.³⁰⁵

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Recently a new system was put in place to support the Treasury function. This system, treasury workstation, allows Treasury to determine and manage cash positions more easily and communicates with their bank and uploads information into the system.

- The treasury workstation is a treasury management solution used by many organizations.
- It focuses on illuminating a treasury's liquidity by centralizing all incoming and outgoing banking activities.
- It enables tracking of all financial instrument activities, providing users real time insight and access into their liquidity.
- According to the UIL Holdings Shared Services Director of Treasury³⁰⁶ this system does not help with forecasting which must be done manually.
- Further the upgraded SAP, currently used by AVANGRID but not UIL Holdings, has a Treasury module. The Treasurer at UIL Holdings feels that this upgraded SAP system, if and when installed, would be far more efficient and would eventually replace treasury workstation.

Conclusion 5.2.2: *RCG/SCG LLC found that while the full write off of the Customer Rate Credits in 2015 skewed the numbers, SCG's financial statistics are reasonable and in some cases better than the norms in its industry.*

Analysis

During this management audit, the following table shows both key financial ratios and a balance sheet summary for SCG covering the past three years.

³⁰⁶ Interview with D Bernardi June 14, 2016

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Financial Ratios				
	Year	2015	2014	2013
Gross Profit Margin		54.70%	49.90%	48.00%
Working Capital		\$2,386,867	\$39,704,758	\$58,284,562
Current Ratio		1.02	1.5	1.71
Quick Ratio		0.79	1.08	1.28
Inventory Turnover		13.39	11.23	10.31
Inventory to Net Working Capital		9.85	0.85	0.61
Account Receivables Turnover		6.94	7.39	6.68
Total Debt to Equity (Per books, no regulatory adjustments)		0.67	0.59	0.63
Adjusted Debt to Equity (Per books, no regulatory adjustments)		0.55	0.55	0.58
Dividend Payout Ratio (note 1)		137%	98%	82%
DATA TABLE (data source = Annual report filed with SEC)				
		2015	2014	2013
Total Assets		1,021,650,658	936,493,209	895,565,788
Customer Accounts Receivables		45,345,625	51,102,177	54,845,987
Inventories(Gas Stored Underground)		23,502,814	33,646,978	35,509,997
Other Current Assets		34,182,701	34,822,420	49,896,387
Subtotal Current Assets		103,031,140	119,571,575	140,252,371
Long-term Assets		918,619,518	816,921,634	755,313,417
Total Liabilities		607,434,608	515,149,679	494,542,308
Notes Payable & Current Portion of L/T Debt		48,516,997	17,516,997	18,517,000
Other Current Liabilities		52,127,276	62,349,820	63,450,809
Subtotal Current Liabilities		100,644,273	79,866,817	81,967,809
Long-Term Debt		228,164,000	230,681,000	233,198,000
Other Non-Current Liabilities		278,626,335	204,601,862	179,376,499
Total Equity		414,216,050	421,343,530	401,023,480
Revenue		314,620,694	377,720,069	366,118,818
Natural Gas Purchased		142,457,137	189,308,364	190,401,830
Gross Margin		172,163,557	188,411,705	175,716,988
Operating Expenses		145,094,923	152,969,061	141,126,778
Operating Income		27,068,771	35,443,008	34,590,210
Net Income		18,996,000	21,724,798	20,878,308
Total Dividends		26,000,000	21,200,000	17,200,000
Note 1 - Financial results for the twelve months ended December 31, 2015 include customer rate credits of \$13.2 million pre-tax (\$7.8 million after-tax) associated with the change of control transaction per Docket 15-07-38.				

Exhibit 41 - SCG Three Year Ratio and Balance Sheet Results³⁰⁷

³⁰⁷ Response to Data Request FIN019 Attachment 1

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Given the ratios shown, we noted the fall in the Quick Ratio ($[(\text{Current Assets} - \text{Inventory}) / \text{Current Liabilities}]$) and an increase in the Dividend Payout Ratio ($(\text{Total Dividends} / \text{Net Income})$) to 137% coupled with a large fall in Net Income and Revenue.

Quick Ratio is an indicator of a company's Financial Strength. It measures amount of cash and other current assets to company's current liabilities. Hence the ability to pay current liabilities with the cash and other short term assets is demonstrated. The higher the ratio, the more financially secure a company is in the short term. A common rule of thumb is that companies with a quick ratio of greater than 1.0 are sufficiently able to meet their short term liabilities. The fall in SCG QR to .79 may raise some concern. However, the Utility sector typically has a far lower ratio. Industry analysts report an average of .17 for the utilities industry.³⁰⁸ For AVANGRID as of June 2016 their Quick ratio is .99. AGR's Quick Ratio is ranked higher than 51% of the 629 Companies in the Global Utilities Regulated Electric industry. The industry medium is .97.³⁰⁹

Further the Dividend Payout to 137% is quite high but not of concern when compared to the rather high Dividend Payout ratios within the Electric utility industry, where that sector averaged 169.53%.³¹⁰ The basic reason for the dramatic change from their historical levels has to do with the company deciding to absorb all of the Customer Rate Credits, agreed upon during the acquisition, at the end of 2015.

Other values of note include rising total liabilities that is indicative of SCG's current expansion and Capital Program. The decreasing revenue and an improved gross profit margin are both due to the fall of commodity prices. In addition, SCG had a reduction in net Income as it was heavily burdened by the full write off of the Customer Rate Credits agreed upon with the acquisition.

SCG's Capital Structure, short- & long-term debt facilities, and overall financial strength

Overall Assessment

SCG EXHIBITS ADEQUATE FINANCIAL STRENGTH AS EVIDENCED BY THEIR STRONG BALANCE SHEETS, ACCESS TO FINANCING AND SOLID CREDIT RATINGS. BOTH SCG AND ITS SISTER COMPANY CNG, HOWEVER, HAVE EXPANDED CAPITAL SPENDING SIGNIFICANTLY OVER THE PAST FEW YEARS TO FUND NEW BUSINESS AND ACCELERATE THE REPLACEMENT OF CAST IRON AND BARE STEEL MAINS. THESE LARGER CAPITAL REQUIREMENTS WILL RESULT IN GROWING CAPITAL NEEDS AND ADDITIONAL RATE RELIEF STARTING WITH SCG IN 2018.

³⁰⁸ <http://csimarket.com/screening/index.php?s=qrw>

³⁰⁹ http://www.gurufocus.com/term/rank_profitability/NYSE:AGR/Profitability-Rank/Avangrid-Inc

³¹⁰ <http://csimarket.com/screening/index.php?s=dpr>

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EVEN THOUGH AVANGRID, INC. (NYSE: AGR) WAS SPUN OFF FROM IBERDROLA S.A. IN DECEMBER 2015, IBERDROLA S.A. (MADRID: IBE), A MAJOR EUROPEAN UTILITY BASED IN SPAIN, STILL OWNS 81.5% OF AVANGRID. ACCORDINGLY, THE MAJOR CREDIT RATINGS AGENCIES STILL CONSIDER IBERDROLA'S CORPORATE CREDIT QUALITY IN ESTABLISHING AVANGRID, INC. AND ITS MAJOR SUBSIDIARIES' CREDIT RATINGS.

Conclusions

Conclusion 5.2.3: RCG/SCG LLC found that SCG has and plans to maintain an appropriate capital structure to optimize the cost of capital for ratepayers while still preserving adequate financial strength and ready access to additional capital as needed. However, rate relief will have to be approved over the next few years to fund the companies' growing capital spending programs.

Analysis

The Exhibit below shows the capital structure of SCG that was allowed in Docket No. 08 12 07RE02.³¹¹ SCG has not been in for a rate case since 2009, when this docket was completed.³¹² Under the merger settlement, SCG has agreed to not increase distribution base rates prior to 1/1/2018, which means that its rates will have been unchanged for about nine years.

Class	13-Month Average (\$000s)	Percent of Total	Cost in %	Weighted Average Cost of Capital
Short-Term Debt	22,500	4.65%	2.48%	0.12%
Long-Term Debt	209,800	43.35%	7.19%	3.12%
Common Equity	251,653	52.00%	9.36%	4.87%
Total Capitalization	\$483,953	100.00%		8.10%

Exhibit 42 – SCG Capital Structure

The Connecticut PURA accepted an equity component that is higher than those of many of its utility industry peers. However, the allowed return on equity (ROE) is 9.36%, only slightly lower than many of its peers when it was established in 2009. SCG's rates are established by PURA.

Additionally, SCG has a purchased gas adjustment clause, approved by PURA, which enables them to pass their reasonably incurred cost of gas purchases through to customers. This clause allows SCG to recover costs associated with changes in the market price of purchased natural gas, substantially eliminating exposure to natural gas price risk. For the US gas and electric industry, the average return on equity was 9.48% in 2015.

³¹¹ Response to Data Request Fin063 CNG-SCG Attachment 1.

³¹² Interview with James Earley, on 5/24/16.

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SCG has adopted a dividend policy that seeks to maintain the target capital structure of 52.0 percent.^{313,314} Neither CNG nor SCG use any off balance sheet financing vehicles.³¹⁵

For perspective, the following Exhibit shows the composite capitalization of the electric utility industry at the end of the past three years.³¹⁶

Component	2013	2014	2015
Common Equity %	42.70%	42.30%	41.40%
Preferred %	0.60%	0.90%	1.00%
Long-Term Debt %	56.70%	56.90%	57.60%
Total	100.00%	100.00%	100.00%

Exhibit 43 - Composite Electric Utility Capital Structure

The typical electric utility uses more leverage than a gas utility like SCG.³¹⁷

The next Exhibit shows the trend in average allowed return on equity in the U.S. electric utility sector. As overall interest rates have declined since the early 1990s, allowed returns on equity have moved downward as well. However, the return on equity allowed to SCG in 2009 is below the 9.48% average for US utilities. This tendency is generally balanced by a higher than average of common equity in the overall target capital structure. The red dot represents SCG's allowed rate of return.

³¹³ Response to Data Request Fin010 SCG-CNG.

³¹⁴ Response to Data Request Fin018 CNG-SCG.

³¹⁵ Response to Data Request Fin022 CNG-SCG.

³¹⁶ Chart excerpted from Edison Electric Institute (EEI) 2015 Financial Review, Annual Report of the U.S. Investor-Owned Electric Utility industry. Note that the figures may not add to 100.0% because of rounding.

³¹⁷ Note that many of the electric utilities covered by Edison Electric Institute (EEI) composite statistics are combination electric and gas utilities such as Con Edison, Consumers Energy, DTE Energy, Eversource Energy, PG&E, PSEG, Sempra and Avangrid among others.

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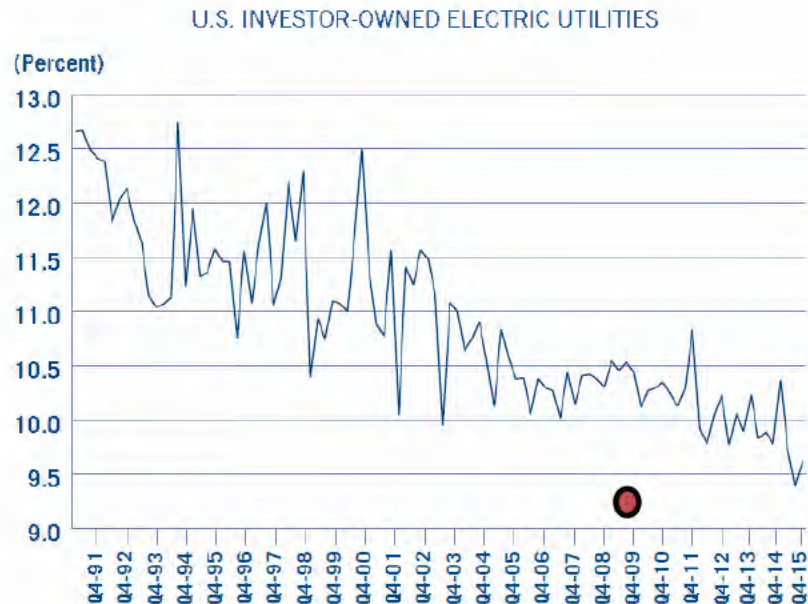


Exhibit 44 - Trend in Allowed Return on Equity

The Consolidated Balance Sheet³¹⁸ for SCG for years ending 2015 and 2014 is shown below. The auditor, PricewaterhouseCoopers, expressed an opinion that the financial statements present fairly, in all material respects, the financial position of The Southern Connecticut Gas Company at December 31, 2015 and December 31, 2014, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

³¹⁸ Response to Data Request FIN033 Attachment 24

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THE SOUTHERN CONNECTICUT GAS COMPANY		
Consolidated Balance Sheet		
December 31, 2015 and 2014		
ASSETS		
(In Thousands)		
	2015	2014
Current Assets		
Unsettled cash and temporary cash investments	\$6,946	\$428
Accounts receivable less allowance of \$,800 and \$,400, respectively	53,68	6 ,093
Unbilled revenues	5,805	22,3 0
Current equity assets	27,272	2 ,642
Notes and gas storage, average costs	32, 09	42,866
Materials and supplies, average costs	2,3	2,060
Refundable taxes	0,793	5, 72
Prepayments	523	782
Other	3 005	278
Total Current Assets	52 445	56 63
Other investments	9,645	0,832
To and from operating, additional equipment	833, 45	762,048
Less accumulated depreciation	205 76	9 052
	627,969	570,996
Construction work in progress	3, 02	2 ,488
Net operating, additional equipment	64 ,07	592,484
Regulatory Assets	46 440	0 78
Deferred Contract Gas and Other Assets		
Unamortized debt issuance expenses	25	249
Goodwill	34,93	34,93
To and from Deferred Contract Gas and Other Assets	35 056	35 80
Total Assets	\$,084,657	\$996,305
LIABILITIES AND CAPITALIZATION		
(In Thousands)		
	2015	2014
Current Liabilities		
Current portion of long-term debt (Note B)	\$2,5 7	\$2,5 7
Accounts payable	4 ,5 6	46,352
Accrued liabilities	6, 48	4,927
Current equity liabilities (Note A)	7,929	5,360
Reserves accrued	2,27	2,437
Taxes accrued	3,687	4,333
Compensation payable	46,000	5,000
To and from Current Liabilities	20 068	90 926
Deferred income taxes (Note E)	34 876	25 856
Regulatory Liabilities (Note A)	70,205	57,720
Other Noncurrent Liabilities		
Reserve for accrued (Note)	42, 73	42,496
Other post-employment benefits accrued (Note)	5,9 3	6,743
Environmental liabilities	49,000	-
Other	3,350	4,029
To and from Other Noncurrent Liabilities	20 436	73 268
Commitments and Contingencies (Note H)		
Capitalization		
Long-term debt, less of unamortized premium (Note B)	224,856	227, 9
Noncontrolling interests (Note A)	20,369	20,369
Common Stock Equity		
Common stock	8,76	8,76
Additional capital	369,737	369,737
Retained earnings	5,7 4	2,7 8
Accumulated other comprehensive income (loss)	-365	-24
Net Common Stock Equity	393,847	400,975
To and from Capitalization	639,072	648,535
To and from Liabilities and Capitalization	\$,084,657	\$996,305

Exhibit 45 - Consolidated Balance Sheet for SCG

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Conclusion 5.2.4: RCG/SCG LLC found that both SCG and its sister company, CNG, have and maintain appropriate credit ratings that enable them to access additional capital at reasonable rates and terms. The Connecticut Public Utilities Regulatory Authority (PURA) has been supportive of both companies by supporting an equity component that is higher than industry average.

Analysis

The Exhibit below summarizes the current credit ratings of both SCG and its sister company CNG.^{319,320} Both Standard & Poor's and Moody's Investor Service review the credit quality of SCG periodically.³²¹ All three major credit rating agencies review AVANGRID's credit quality. Ratings from Fitch for SCG are pending.

Company	Standard and Poor's	Moody's	Fitch
AVANGRID	BBB+/Stable	Baa1/Positive	BBB+/Stable
Connecticut Natural Gas	BBB+/Stable	A3/Stable	Rating Pending
Southern Connecticut Gas	BBB+/Stable	Baa1/Positive	Rating Pending

Exhibit 46 – SCG Credit Ratings

For SCG, S&P's Credit rating of BBB+ indicates that the company is investment grade with an adequate ability to repay debt. Moody's grade for SCG of Baa1, indicates it is subject to moderate credit risk. Because it is considered medium grade it may possess certain speculative characteristics. The Positive indication provides the likely direction of a rating over the medium term.

SCG expects³²² to maintain a credit rating that is considered investment grade, which is at least: (1) Baa3 from Moody's, (2) BBB from S&P, or (3) BBB from Fitch. There are factors outside of SCG's and CNG's control that rating agencies consider in their credit rating assessment including regulatory risk; accordingly, SCG cannot target any particular credit rating. For ratemaking purposes, SCG's allowed regulatory equity ratio is 52%,

The following Exhibit shows a summary of the credit ratings of U.S. investor owned electric utilities (Gas company data was not available) on December 31, 2015.³²³ The average credit rating across the U.S. electric utility industry was BBB+ for the second straight year after a

³¹⁹ Avangrid investor presentation at the AGA Investor Forum on May 16, 2016.

³²⁰ Response to Data Request Fin016 CNG-SCG.

³²¹ Response to Data Request Fin016 CNG-SCG.

³²² Response to Data Request FIN 018

³²³ Chart excerpted from Edison Electric Institute (EEI) 2015 Financial Review, Annual Report of the U.S. Investor-Owned Electric Utility industry.

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10 year prior period where it averaged BBB. Since the amount of capital supporting the electric utility industry is significantly larger than that supporting the natural gas distribution industry, the electric sector provides an excellent benchmark for comparison of credit quality.

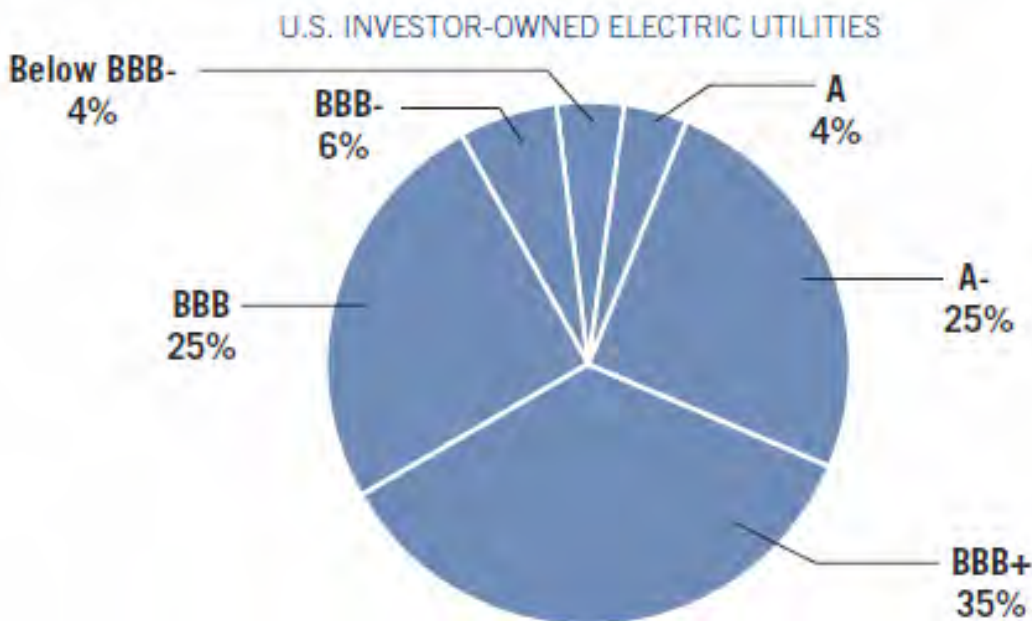


Exhibit 47 - Distribution of Utility Credit Ratings in 2015

A number of state regulatory commissions have concluded that a target credit rating of BBB to BBB+ represents a good balance between acceptable risk and the overall cost of capital. Some state regulatory bodies even specify a target capital structure for regulated utilities in their jurisdictions.

As shown earlier, SCG has a Moody's credit rating of Baa and a BBB+ from Standard & Poor's, indicating it would be in the second quartile of financial strength relative to U.S. electric utilities. However, the Moody's rating for SCG reflects a "positive" trend suggesting that the rating agency may be considering an upgrade over the next several years, presumably to A3.³²⁴

³²⁴ The three major credit rating agencies – Standard & Poor's, Moody's, and Fitch – generally indicate a credit rating outlook. "Negative" signals that a downgrade may be forthcoming; "positive" signals that an upgrade may be possible over the next 1-2 years. Fitch explains it thus on its website: Rating Outlooks indicate the direction a rating is likely to move over a one- to two-year period. They reflect financial or other trends that have

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The major credit rating agencies employ their own unique methodologies, but their overall guidance typically converges on a comparable rating. In late 2013, Moody's disclosed the factors and associated weighting that it uses for regulated gas and electric utilities.³²⁵ The following Exhibit summarizes the factors.

Key Factor	Weight	Considerations
Regulatory Framework	25%	Consistency (a three regulatory framework considerations specific to the state(s) where the utility has regulated operations)
		Predictability
		Supportiveness (such as Connecticut's support for to recover the cost of replacing gas and bare steel main)
Ability to Recover Costs & Earn Returns	25%	Rate/Tariff Reviews
		Outcomes (allowed returns, etc.)
		Timeliness (or rate cases)
Diversification	10%	Market Position (for local distribution companies (LDCs); the key consideration is typically exposure to large industrial customers)
		Generation and Fuel Diversity (not a factor for gas LDCs)
Key Credit Metrics	40%	Liquidity
		Cash Flow from Operations (Moody's uses three different measures of CFO) ³⁴⁹
		Debt / Capitalization or Debt / Regulated Asset Value

Exhibit 48 -Moody Rating Factors

Certain of the ratings are based on considerations that are driven heavily by the local regulatory environment. The Connecticut PURA has demonstrated ample support by enabling SCG both a strong equity component and supporting the new business initiatives and 20 year main replacement programs.

Conclusion 5.2.5: RCG/SCG LLC found that because AVANGRID, Inc. is still 81.5 percent owned by Iberdrola S.A. of Spain, its credit rating is still influenced significantly by the credit rating and outlook of Iberdrola.

not yet reached the level that would trigger a rating action, but which may do so if such trends continue. The majority of Outlooks are generally Stable, which is consistent with the historical migration experience of ratings over a one- to two-year period. Positive or Negative rating Outlooks do not imply that a rating change is inevitable and, similarly, ratings with Stable Outlooks can be raised or lowered without a prior revision to the Outlook, if circumstances warrant such an action. Occasionally, where the fundamental trend has strong, conflicting elements of both positive and negative, the Rating Outlook may be described as Evolving.

³²⁵ Moody's Investor Service presentation titled Electric & Gas Utilities, Assessing Their Credit Quality and Outlook. North American Power Credit Organization Conference, January 18, 2013.

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Analysis

AVANGRID, Inc. began trading separately on the New York Stock Exchange (NYSE) under the trading symbol AGR on December 17, 2016. On December 22, 2016, AVANGRID indicated in an investor presentation that:

“AVANGRID, Inc. is a diversified energy and utility company with \$30 billion in assets and operations in 23 states. The company operates regulated utilities, electricity generation, and natural gas storage through three primary lines of business. Iberdrola USA Networks includes eight electric and natural gas utilities serving 3.1 million customers in New York and New England. Iberdrola Renewables operates 6.5 gigawatts of electricity capacity, primarily through wind power, in states across the U.S. Iberdrola Energy Holdings operates 120 Bcf of owned or contracted natural gas storage and hub service facilities in the South and West. AVANGRID employs 7,000 people. The company was formed as a business combination between Iberdrola USA and UIL Holdings in 2015. AVANGRID remains an affiliate of the Iberdrola Group (emphasis added), a worldwide leader in the energy industry.”³²⁶

The key statement is that AVANGRID, Inc. is an affiliate of Iberdrola, which is still the dominant shareholder. The following Exhibit lists the current Board of Directors of AVANGRID, Inc.³²⁷

³²⁶ Avangrid, Inc. investor communication titled Avangrid Update, December 22, 2015.

³²⁷ As disclosed on Avangrid’s website on September 4, 2016.

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Individual	Title	Independence
Ignacio Sanchez Galán	Chairman	No
John Elias Baldacci	Vice Chairman	No
James P. Torgerson	Chief Executive Officer	No
Arnold L. Chase	Member	No
Felipe de Jesús Calderón Hinojosa	Member	Yes
Alfredo Elías Ayub	Member	Yes
Pedro Azagra Blazquez	Member	No
Carol Lynn Folt	Member	Yes
John L. Lahey	Member	Yes
Santiago Martinez Garrido	Member	No
Juan Carlos Rebollo	Member	No
José Sainz Armada	Member	No
Alan D. Solomont	Member	Yes
Elizabeth Timm	Member	Yes

Exhibit 49 - Board of Directors Affiliation

While AVANGRID, Inc. has a very impressive Board of Directors, it is not fully independent in the traditional sense and is still controlled by Iberdrola, S.A. The Chief Executive Officer of Iberdrola S.A. is the Chairman of the AVANGRID, Inc. Board of Directors. As currently constituted and disclosed, AVANGRID, Inc. considers six of the 14 members of its Board of Directors to be Non Executive and Independent. The other eight members are considered Non Independent and therefore apt to act in the best interests of Iberdrola, S.A. This is appropriate given that Iberdrola S.A. holds 81.5% of AVANGRID's common equity.

As provided by Article Three, Section 3.1 of the By Laws, the Board of Directors has fixed the number of Directors at fourteen (14) Directors. A minimum of three (3) Directors must be independent directors.

Recommendations

Recommendation 5.2.1: *RCG/SCG LLC recommends that the current UIL Holdings Treasury & Cash Management Process be reviewed and revised as needed and expanded to include the Virtual Money pool, the Avangrid Credit Facility, and the bi lateral Loan Agreement procedures.*

SEE Prior **Recommendation 5.1.4:** *RCG/SCG LLC recommends that a detailed needs analysis of upgrading to the SAP System currently being used by AVANGRID be performed to ensure this particular upgrade and timing are justified; a cost benefit analysis should be performed, and if warranted, coupled with a formal implementation plan.*

5.3 Accounting

Conclusion 5.3.1: *RCG/SCG LLC found that the while not benchmarked or having a Best Practice Review, accounting systems, processes, and staffing in support of SCG's accounting, tax, and reporting needs are effective yielding reasonable results for the time being but, as concluded earlier, manual process and International requirements will require a system upgrade. Further the Accounts Payable area is well managed but does not have a Priority Vendor program in place.*

ANALYSIS

The main purpose of the Accounting function for SCG is to provide for accurate and timely financial recordkeeping reflecting the results of SCG's operations on an ongoing basis. To accomplish its requirements the Accounting function needs a competent staff rigorously applying a clear set of policies and procedures along with internal controls coupled with systems and processes that are responsive to the current needs. The Accounting function requires meticulous recordkeeping, and data and information to be available to SCG and its affiliated or Parent company for internal use for forward looking planning and financially sound decision making (management accounting) and for external use for backward looking, precise information on the firm's past or current financial position (financial accounting). This requires conforming to generally accepted accounting principles. Financial accounting is used by investors, debt holders, ratings agencies, and government bodies to determine the financial health or value of the firm. For SCG, that requirement means that both domestic and international requirements must be met.

For SCG the accounting function is performed by the UIL Holdings Shared Services organization under the Director of General Accounting and Financial Reporting and reporting to the Controller. This group's responsibility includes the General Ledger both Gas and Electric. An individual within this organization has the specific responsibility for SCG and its sister company CNG's accounting activity. Some related activity is performed by other organizational components but verified and reported within the Accounting function. This includes:

- Customer Billing and Accounts receivables performed by Customer Services,
- Collections performed by Customer Services, and
- Payroll performed by Human resources.

In addition, another part of the Controller's organization handles Transactions including Accounts Payable, Fixed Asset Accounting, Systems Administration, and Work Order close outs and Reconciliations.

The staffing in terms of both size and competence appears reasonable.

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- While there has been increased activity following the merger, the staff size remains adequate with no unfilled position exception for one open position under the Assistant Controller.
- The Director of General Accounting and Financial reporting came here ten years ago focused on Financial reporting and after having worked at Arthur Andersen along with retail and pharmaceutical companies. He does not have a CPA but has a strong accounting and financial background.
- The Director covering Transactions is a CPA with an MBA from the University of New Haven.
- The Assistant Controller covering the Connecticut gas companies, including CNG, also works closely with Accounting and is a CMA with an MBA and a strong financial background. His SCG activities include efforts involving the month end closings, reporting, O&M and capital budgeting, Rate & regulatory support, variance analysis, and compliance filing support.
- All personnel costs are allocated to SCG and other affiliates by applying the Massachusetts formula.

A well developed and defined process is used to close the books every month.³²⁸ The monthly closing process consists of both system and manual transactions are sequential order and over a clearly defined period of time.

- SCG's closing schedule is over a period of six business days. The closing sequence includes, but is not limited to:
 - A pre closing activity before the end of the day on the last day of the month consisting of processing recurring journal entries, processing reversing entries, posting of correction entries from the prior month and updating rate tables for overhead or fleet allocations.
 - Six days of closings related to AR, WBS, and PMO line item submission into SAP, business analysis, internal order settlement, monthly journal entries, final adjustments, management sign off, process/validations within SAP, all ending with the Books being turned over to the Tax Department for the Tax Closing. AP, Credit and Collection, and inventory are closed as well.
 - Once the consolidation process is complete, the closing team performs the reporting and account analysis effort.

The Accounting function also develops many of the required financial documents including the SCG Balance Sheet, Income Statement, and Cash Flow Statement, and they

³²⁸ RESPONSE TO DATA REQUEST FIN029 Attachment 1

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support the development of the 10k and 10Q, which is now done by AVANGRID. Bank reporting is performed by the accounting group as well. In addition, the Accounting group supports the IFRS (International Accounting Standards Board accounting requirements manually using an excel spreadsheet since their SAP system does not support IFRS. IFRS requirements differ from GAAP.

- GAAP is rule based but IFRS is principle based. This results in a differing treatment of some similar transactions.
- For example, regarding inventory, GAAP allows either last in, first out (LIFO) or First in, first out (FIFO) in calculating inventory costs but IFRS does not allow LIFO.
- In addition, intangibles, such as R&D and write downs are handled differently.
- While there is a move to converge accounting standards into a single set of accounting standards to be used internationally by some countries, this has been taking place for decades and world wide convergence may never be finalized.
- The use of an excel spreadsheet is not overwhelming for the accounting group and no new staffing needs have been required at the current time. The group's Director said that they are "still feeling there way at this time."³²⁹

The Accounts Payable process has numerous controls and automation. Any future SAP upgrade, if performed, will result in far more automated controls with fewer manual activities.

- AP is transaction oriented with a high volume of about 80k invoices/year for gas and electric and close to half for SCG and its sister company CNG.
- The key to this is setting up the purchase requisition, PO number, and Vendor Setup. The more automated the process, with fewer hands, the better. However, many vendors cannot meet the utility's automation standards. They try to leverage technology but may current vendors cannot accept electronic payment.
- Currently there is no program established focused on identifying and using vendors capable of automation.
- For SCG there were 27,713 payments with 15,016 (54.18%) made using direct deposit and 12, 697 (45.81%) done by check.³³⁰
- Their KPI include days to post (often the approval process slows them down), volume, dollars, and number of invoices done fully automated. Overall, the Director explained the overall department numbers:

³²⁹ Interview A Danner, July 11, 2016

³³⁰ Response to Data Request FIN041 Sheet 2 of 2

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- Currently invoices automated are a 79% but they want higher.³³¹
 - They are also only doing 51% electronic payments.
- They have done benchmarking with EEI and the company strategy team is said to do Best Practice searches.
- The AP Invoice process³³² is well designed, given the current state of their ability to do automated and manual processing.
- Currently the Accounting function's major system is SAP. As we discussed in Section 6.1.4 covering Financial Policies, Procedures, Performance Reporting, and Systems, the SAP system used by the UIL Shared Services financial group is not the upgraded SAP system used by AVANGRID and has some disadvantages which would be eliminated with the use of the AVANGRID SAP version. These disadvantages include:
 - A large number of manual processes,
 - Built in controls are not included (for example, if an expenditure over budget was attempted, the upgraded system would automatically prevent it while the UIL system does not do so automatically),
 - Financial reporting support is not as strong,
 - It does not support organizational alignment when multiple systems are used,
 - Unlike the SAP system used by AVANGRID, it does not contain a Treasury module, and
 - International requirements are not supported.

Another major system used: the Power Plan system for Fixed Asset Management. This system receives information from SAP. Power Plan brings Fixed Assets in when they are complete, deals with AFUDC, closes our Work Orders, deals with retirements, sets up for depreciation and is part of the monthly close.

- Power Plan³³³ allows utilities to create and manage capital assets in enough detail to support decision making, and balance financial constraints, risk tolerance, and performance obligations.
- Power Plan combines financial, operational, and regulatory with automated workflows, what if scenarios, and operational risks.
- By ensuring visibility into detailed asset data at each phase of the asset life cycle, better decisions are enabled along with improved financial performance.

³³¹ Interview J Caffery June 14, 2016

³³² Response to Data Request FIN 026

³³³ www.powerplan.com

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The annual Independent Accounting Audits, now being performed by E&Y taking over from PWC have not resulted in any negative findings over the past several years.

Finally, there have been no benchmarking or Best Practice efforts performed within this function. In addition, there have been no internal audits of the overall controller function. In addition, it appears that overall corporate communication is too limited with some key individuals knowing little or nothing about AVANGRID, the role of the Corporate CFO, the Ring Fence agreement, or UI Group.³³⁴

Recommendations

Recommendation 5.3.1: *RCG/SCG LLC recommends that consideration be given to performing an SCG Best Practices and Benchmarking effort, perhaps by the Strategy Team, focused on the Shared Services Accounting function.*

Recommendation 5.3.2: *RCG/SCG LLC recommends that a Priority Vendor program be established within SCG and its sister CNG to increase the number of vendors capable of working within guidelines developed regarding Vendor Automation requirements.*

SEE Prior Recommendation 5.1.4: RCG/SCG LLC recommends that a detailed needs analysis be performed for upgrading to the SAP System, currently being used by AVANGRID, to ensure this particular upgrade and timing are justified, and that a cost benefit analysis should be performed, and if warranted, coupled with a formal implementation plan.

5.4 Tax

Overall Assessment

THE SCG TAX FUNCTION IS WELL MANAGED AND EFFECTIVE AND CONSISTENT WITH THE NEEDS OF THE UTILITY. THIS HAS RESULTED IN A CULTURE OF PROVIDING CONTINUOUS IMPROVEMENT, AND ACCURATE AND TIMELY FILINGS WITH A REASONABLY TRAINED STAFF.

Conclusions

Conclusion 5.4.1: *RCG/SCG LLC found that the Tax Department supporting SCG operates efficiently, takes steps to continuously add value and improve, has adequate and trained staff, and has generally performed well without either tax filing issues or negative Audit Results.*

³³⁴ Interview J Earley, May 5, 2016.

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Analysis

The Tax Department in any corporation has the role of implementing company tax policy, making appropriate tax filings and payments, hiring competent staff and training staff on an ongoing basis as changes evolve to allow them to be current regarding tax and technical issues, and doing their job in an effective and efficient manner and remaining aware of improvement opportunities.

The Tax Department, under the direction of the Director of Corporate Tax, is part of the UIL Shared Services group reporting to the Controller. The Director has 31 years of work experience including 26 years with utilities; three years at UIL and 23 years at Northeast Utilities, now Eversource.

- The director is a CPA with a Master's Degree in Tax from the University of Hartford.
- The Department's responsibilities include all non payroll tax; Sales, use, property, income tax, Federal, State, and local.
- In addition to the Director there are five staff members; a gas tax manager with an assistant, a manager with an assistant covering UIL and consolidated filings, and an analyst focusing on the current SCG Gross Earnings Tax audit.
- The group believes their important focus is to add value and always strive for process improvement. Filings have been shortened and process changes were said to have been made to result in increased efficiency.³³⁵
- As a result of the new AVANGRID structure this Tax department will now just add information to the Consolidated 1120 filing by AVANGRID; they essentially will now become a column on the tax filing.
- There are numerous tax returns that are filed by this group. These include those shown in the following Exhibit^{336,337}:

³³⁵ Interview D Beber, Director of Corporate Tax, June 14, 2016.

³³⁶ Line with Various/ Multiple - SCG annually submits declarations for each town within its service territory; currently 26.

³³⁷ Line with Various/ Income - CNG, but not SCG, files in Mississippi.

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Form/ Declaration	Tax Type	Jurisdiction	Filing Frequency	Taxpayers
OS-114	Sales and Use	CT	Monthly	CNG/SCG
UCT 212	Gross Receipts	CT	Quarterly	CNG/SCG
OP-216	Special Fuels	CT	Monthly	CNG/SCG
Various	Income	CT, MA, PA, MS, WV	Annual	CNG/SCG
1120	Income	Federal	Annual	CNG/SCG
720	Excise	Federal	Quarterly	CNG/SCG
Various	Property Tax Declaration	Multiple	Annual	CNG/SCG
T2	Income	Canada	Annual	CNG/SCG

Exhibit 50 - Tax Filings for CNG and SCG

- The system, including for SCG, used is OneSource (version 15.15.41.34A) to prepare its significant income tax returns. For other tax returns, the system in use is RIA E Forms (version 15.0.0.1). Both systems are generally acceptable in their corporate environment.
- The group and its activities are still in transition; while core requirements will remain unchanged, they will have added activities to support International requirements. They could not yet define the extent of that and other potential changes.
- Over the past five years a number of tax audits were conducted. The table below summarizes the audits that were conducted for both SCG and its sister company CNG. No substantial changes were made and the IRS accepted a modest refund claim made by the firm:³³⁸

Tax Authority	Tax	Period Audited	Audit Initiated	Date Closed
IRS	Income	2010-2012	Ju -13	Nov. 2015
IRS	Exc se – SCG	Jan. 2012 – Dec. 2013	Jan-15	Aug. 2015
IRS	Exc se – CNG	Apr. 2012 – Dec. 2013	Jan-15	Sep. 2015
CT Depart. of Revenue Serv ces	Income	2010-2012	May-16	Aud t n progress
CT Depart. of Revenue Serv ces	Gross Rece pts	Ju y 2011 – June 2014	Jun-14	Aud t n progress
CT Depart. of Revenue Serv ces	Sa es and Use	Nov. 2010 –Oct. 2013	Jan-14	Aud t n progress

Exhibit 51 Tax Audit Summary for CNG and SCG for Last 5 Years³³⁹

³³⁸ RESPONSE TO DATA REQUEST FIN048 Attachment 1 & 2

³³⁹ RESPONSE TO DATA REQUEST FIN047

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Conclusion 5.5.2: *RCG/SCG LLC found that the process used to ensure accurate and timely submission of tax returns was reasonable and effective.*

The Company uses a process to ensure the accurate preparation and timely submission of tax returns.³⁴⁰

- **Personnel Assignment** Personnel with appropriate levels of experience are assigned tax provision preparation and review roles.
- **Officer oversight and review** General tax department oversight and review of significant tax returns provided by designated corporate officer.
- **Monitoring of changes in accounting and tax law** – Personnel involved in tax return preparation receive and review material from subscription services and other sources to maintain current compliance and accounting knowledge.
- **Monitoring of changes in business** – Personnel involved in the tax return process attend accounting meetings to learn of new business developments. Information obtained by individuals is then shared with other appropriate personnel.
- **Control estimates** Unless insignificant or otherwise impractical, tax liabilities are accrued prior to payment.
- **Actual to Estimate Analysis** Tax return preparers and reviewers compare calculated return liabilities to the accrued liabilities for reasonableness.
- **Control Calendar** – Return preparers maintain a control list with compliance responsibilities and required completion dates. Tax Management likewise monitors due dates.

Conclusion 5.4.3: *RCG/SCG LLC found that the training of the Tax staff was adequate to ensure that the skills and awareness of current and pending tax regulation changes.*

Analysis

A number of options are made available to the tax staff members that prepare the variety of tax returns to help maintain or improve technical return preparation.³⁴¹ This includes attending graduate level tax courses, reviewing daily updates from tax and accounting subscription services including RIA, attending webcasts and specialized training programs and reviewing practice alerts from accounting and law firms. In addition, and an example of the Department's commitment to

³⁴⁰ RESPONSE TO DATA REQUEST FIN044

³⁴¹ RESPONSE TO DATA REQUEST FIN045

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training, the Exhibit below provides additional details related to programs attended or expected to be attended this year and those attended in 2015.

-2016-			
Attendee	Course/Program Title	Course Date	Program Sponsor
Ma zena B zostowska Komorek	Domestic Tax Conference	Apr 16	Ernst and Young
J awe He	Federal Income Tax Review Course	May 16	Troutman Sanders
Dav d Beber	Tax Committee meeting	Jun 16	American Gas Association
Ma zena B zostowska Komorek	Power and utilities income tax accounting training	Jun 16	PriceWaterhouse Coopers
2015			
Attendee	Course/Program Title	Course Date	Program Sponsor
J awe He	Advanced Corporate Income Tax	Apr - July 2015	University of New Haven
Dav d Beber	Q4 Fed Tax Roundup: A Passthroughs Update	May 15	Deotte
	Mergers & Acquisitions (Tax) Seminar	Jun 15	Tax Executives Institute
	Year end, annual disclosures, and updates: Hot topics for 2015	Sep 15	Deotte
	Key Tax Developments Affecting the Power and Utilities Industry – Series August 2015	Sep 15	KPMG

Exhibit 52 Tax Department Training 2015 & 2016 Planned

6. HUMAN RESOURCES

Objectives and Scope

The Human Resources (HR) assessment covers a variety of areas, compensation practices and programs; benefits; succession planning and employee development and evaluation; employee training; labor and employee relations; staffing; diversity and Equal Opportunity Employment and Affirmative Action (EEO/AA); and employee safety and health. Simply put, Human Resources encompass employment and employee relations support services. The identification of employee services, the effective design of these services, and the efficient and cost effective delivery of these services are critical to AVANGRID's ability to compete in the marketplace for talent and to retain their high performing employees. Additionally, through effective labor relations, AVANGRID can partner with labor leadership to deliver their customer focused services safely, efficiently, and cost effectively.

Today's utility HR function also plays an essential role in the cost of delivery and the quality of service. The cost of labor (both employee and contractor labor) represents one of the largest components in both O&M expense and capital costs. If the employee to contractor mix is not optimized for the workload variations, employee labor will automatically inflate expense costs and increase customer rates. Further, as the baby boomer generation retires, there will be an unprecedented experience drain that will not be filled easily through normal hiring practices. Effective leadership identification and development programs along with employee training must, therefore, be in place to address the effect of this loss of knowledge and to provide for the future leadership requirements.

To determine the effectiveness and improvement opportunities associated with the utility work force that will benefit the Connecticut utility customers, in addition to PURA criteria, RCG/SCG LLC will focus on the following: compensation and benefits benchmarking; labor contract barriers to flexibility and contracting; employee to contractor mix; EEO and affirmative action plans; and succession planning. We will divide this chapter into the following sections and address each in turn:

- Human Resources Organization,
- Compensation policies, practices, and programs,
- Employee Benefits including Pension Plan, 401K and OPEBs,
- Succession Planning, Leadership Identification, Employee Development and Evaluation,
- Employee Training,
- Labor and Employee Relations,
- Workforce Planning and Staffing,
- EEO/AA,

- Employee Safety, and
- Payroll Practices.

Overall Assessment

THE HUMAN RESOURCES ORGANIZATION STRUCTURE AT AVANGRID IS CONSISTENT WITH INDUSTRY PRACTICES. IT IS STRUCTURED TO SUPPORT THE AVANGRID BUSINESS STRATEGY. IT USES HR SPECIALISTS AT SCG HEADQUARTERS AND IS CONSISTENT WITH HR BEST PRACTICES. EMPLOYEE SAFETY PERFORMANCE, DIVERSITY AND INCLUSION PROGRAMS, THE VARIABLE COMPENSATION PROGRAMS, THE NUMBER OF LABOR AGREEMENTS, TALENT DRAIN AND SUCCESSION PLANNING, AND THE HR LEADERSHIP TRANSITION ARE HR'S CURRENT CHALLENGES.

The HR team follows industry standard policies and practices and develops specific programs to address the strategic and tactical needs of the business. The majority of the work completed by the Human Resources department is of best practice level.

Compensation strategies, policies, practices, and programs for SCG's executives, salaried and hourly employees are consistent with standard industry practices. AVANGRID handles these practices with impartiality, expertise, and a high level of integrity. The Total Rewards organization and the independent outside compensation consultants have designed and appropriately monitor all the compensation components. However, the target level of variable compensation for non officer salaried employees is lower than industry practice.

The Employee Benefits (including pensions, 401k Plans and OPEBs) offer a wide range of benefits that provides flexibility in meeting the changing and demanding needs of the diverse workforce marketplace. The benefit programs are integrated within an overall total rewards strategy. The AVANGRID's Rewards organization manages the benefits programs well. It has changed most of its benefit programs to be consistent across AVANGRID and consistent with the marketplace in an effort to control its benefit cost.

The succession planning, leadership identification, and employee development strategy focuses on developing and promoting from within. Hiring is used to fill skills gaps identified in the annual succession planning assessment. In this assessment, high potential employees are identified, their associated development gaps are detailed, and a development plan is established. This process has not yet been completed below the executive level and expects to be completed by year end for SCG and other business units of AVANGRID.

Training is comprised of five main components: management, leadership, and professional development programs; gas technical training; customer care training; IT and business system training; and safety, regulatory, and compliance training. All courses provide an

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adequate array of programs for specific populations. Operations delivered compliance training recordkeeping needs to be improved.

Labor and Employee Relations is staffed with experienced professionals who handle their responsibilities effectively while maintaining a good working relationship with the two major bargaining units (three labor contracts) covering the union employees of SCG. However, AVANGRID does not have a long term strategy to combine the labor unions.

The Workforce Planning and Staffing function of the organization implements the staffing strategy and develops the hiring strategy consistent with these strategies and the organizational current and future needs. The Recruiting function supports the diversity to the point where they will hold a position open if the candidate pool isn't deemed to be sufficiently diverse. AVANGRID takes a proactive approach to manpower planning by analyzing their workforce and anticipating their current and future staffing needs, while accounting for: leadership needs, skills gaps, and diversity goals. Their practice uses a comprehensive assessment of future needs, such as detailed turn over analysis, early identification of high potential employees, identifying future talent needs and either developing those talents internally or specifically targeting hiring to address that need. However, their planning does not have a link to any work management activities.

Equal Employment Opportunity (EEO) compliance and Affirmative Action (AA) planning is accomplished in conjunction with corporate compliance activities associated with the Code of Conduct. AVANGRID complies with both the letter law regarding ethics, EEO compliance, and AA planning. However, there are very few, if any, diversity or inclusion programs currently being conducted at AVANGRID. But they have said they are working on re instituting focus on diversity and inclusion in 2017.

SCG's employee safety performance has not met AVANGRID's management expectations and most of the safety goals for the last five years. However, executive and management's stated business priorities, reinforced by the safety metrics established for management, demonstrated that improving employee safety performance is no longer a concern.

The Payroll practices are consistent with industry standards. The use of paper timesheets for AVANGRID's gas field employees is consistent with limited computer availability for these employees.

Evaluation Criteria

The following evaluation criteria focused our investigation and foundation for this assessment.

- To what extent did SCG implement the 2009 and/or 2010 audit recommendations?

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- Are salary, wage and compensation, benefits package and pension/OPEB/401K practices in line with those of other Connecticut utilities?
- Are SCG's executive compensation packages reasonable for the industry and region?
- Are the development, training, and evaluation techniques effective?
- Are the current labor relations status and methodology appropriate for a company the size of SCG?
- Are the productivity and utilization level of the workforces appropriate?
- Is the human resources department's capability to access personnel information and perform their assigned duties reasonable?
- Are the affirmative action and equal employment opportunity (AA/EEO) policies, procedures, and functions effective and reasonable?
- Is the utility effectively using benchmarking for its total compensation for executives, supervisors, and professional and hourly workers?
- How does the utility determine what training it undertakes? Is the training effective?
- Does the utility have a formalized succession planning process? Does the utility have a process to identify high potential employees and the associated development process to address the "brain drain" associated with baby boomer retirements? Does the utility hire experienced personnel or develop from within or both?
- Do current labor agreements contain barriers to increased productivity, increased work flexibility, and increased use of contractors?
- Is the utility effectively benchmarking its employee safety statistics and measuring the effectiveness of its safety programs?
- What role does the Pension Plan, OPEBs, and 401K play in the employment strategy?
- What are the pension plan/OPEB/401K provisions? Are they consistent with other utility offerings? Are they consistent with the various labor marketplaces? Have these provisions been benchmarked to verify consistency?
- What are the various plan objectives and what support services are used to analyze performance and effectiveness in achieving these objectives?

6.1 HR Organization

Objectives and Scope

RCG/SCG LLC reviewed data responses and studied the Human Resources organization to determine what functions and roles are included and how the functions were organized. The analysis included scrutinizing annual plans, processes, policies and procedures, department goals and objectives, and the contents of the online employee handbook.

The audit also covered department performance measures to evaluate the performance management system. Benchmarking studies of human resource functions and HRIS were reviewed, and budgets, cost savings, and containment methods were studied.

RCG/SCG LLC also analyzed processes and actions that impact employees' well being and employment status. Interviews were completed with all levels of HR leadership and staff.

Overall Assessment

THE HR TEAM FOLLOWS INDUSTRY STANDARD POLICIES AND PRACTICES AND DEVELOPS SPECIFIC PROGRAMS TO ADDRESS THE STRATEGIC AND TACTICAL NEEDS OF THE BUSINESS. ITS USE OF HR SPECIALISTS AT SCG IS CONSISTENT WITH HR BEST PRACTICES. CONTRACT SERVICES ARE USED CONSISTENTLY WITH INDUSTRY PRACTICES. MUCH OF THE WORK COMPLETED BY THE HR ORGANIZATION IS AT THE LEVEL OF BEST PRACTICES. THERE IS NO HR LEADERSHIP DEDICATED TO UIL BUT THE SENIOR DIRECTOR POSITION IS EXPECTED TO BE FILLED IN THE NEXT SEVERAL MONTHS.

Conclusions

Conclusion 6.1.1: *RCG/SCG LLC found that the HR organization thinks, plans, and acts strategically and is organized to meet to support these efforts. However, implementation of HR policies and programs are impacted by the lack of HR leadership focused on UIL and SCG.*

Analysis

As a centralized shared service, Human Resources delivers the HR services to AVANGRID and its employees. Localized HR support is provided through the HR Specialist located at SCG's headquarters. The following Exhibit reflects the AVANGRID's Human Resources organization.

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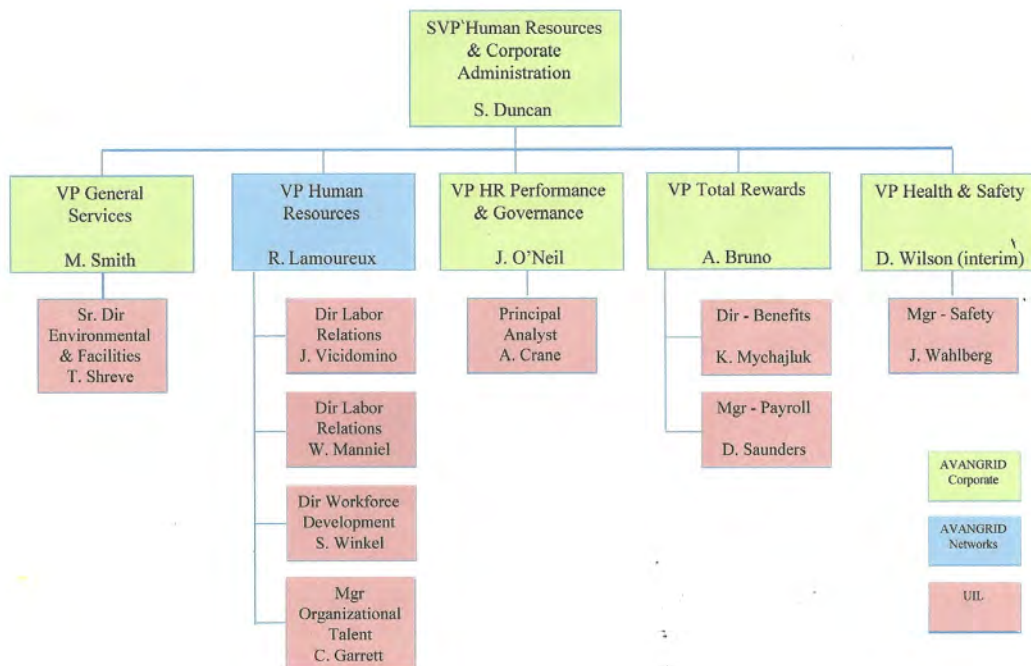


Exhibit 53 - AVANGRID's Human Resources Organization

In 2015, Human Resources organization was integrated into the AVANGRID HR organization. Subsequently, the HR leader responsible for UIL resigned/retired; this position is still vacant. This has resulted in a slow HR transition to the AVANGRID HR organizational model. The local leadership is currently provided by the AVANGRID VP HR.³⁴²

This organizational structure centralizes core services, allowing experts to focus on specific disciplines and core skills rather than spreading them throughout the organization. Locating the HR Specialist at SCG is consistent with leading HR practices.³⁴³ The HR Specialist is charged with the responsibility to translate a business unit's HR needs, to expedite HR service delivery, and to address the specific business requirements while maintaining consistency with AVANGRID practices. Additionally, it provides for individualized HR needs evaluation, while keeping the HR service menu consistent throughout AVANGRID.

At AVANGRID, Human Resources created several Centers of Excellence: Health and Safety; Leadership and Talent Development; HR Governance and Performance; Total Rewards (Compensation and Benefits); and AVANGRID Networks HR. This structure promotes consistency across all BUs, allowed HR to specialize, and results in economies of scale by handling the work from all of AVANGRID. This organizational construct is consistent with industry best practice.

³⁴² Interviews Sheila Duncan 06/24/2016 and Sheri Lamoureux 06/21/2016

³⁴³ Response to Data Request HR037

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Conclusion 6.1.2: *RCG/SCG LLC found that the HR team is strategic, expert, passionate, and committed. They employ industry standard HR practices and procedures. In spite of the lack of local leadership and a strong emphasis on labor relations at the HR Specialist level, they provide creative, legal, and good results.*

Analysis

HR has clear, written policies and procedures and delivers its services consistent with these documents.

HR ensures that all new policies, procedures, and plans comply with applicable federal and state laws and guidelines, and are legally defensible if challenged.

HR has a mission, goals, and objectives that align with those of the UIL business and were communicated to employees. These items have not been updated as a result of the transition and are being developed.³⁴⁴

HR has systems to handle workforce planning, hiring, talent management, competencies, and performance.

The Straight Talk Employee Survey prevails as the major means to assess how well employees' perceptions align with the business strategy and the effectiveness of the various HR initiatives regarding employee engagement.³⁴⁵ The survey was completed for SCG in 2013 and 2015.

The HR organization uses metrics that track performance of key HR initiatives and various HR processes and activities. The HR Balanced Scorecard contains the key HR metrics: Financial (O&M Budget and Facility Capital); Customer (Time to Fill, Wellness, and Safety Team Goal); Operations (Facilities, Security, Environmental, and Real Estate); and Capability (Technical training and Workforce Planning & Development).³⁴⁶ These metrics cover the full spectrum of typical HR activities and for the most part are consistent with industry practices. However, the metrics do not include any targets for Diversity or Inclusion program development or improvement efforts.

Recommendations

Recommendation 6.1.1: *RCG/SCG LLC recommends that the UIL HR leadership position be filled as soon as practicable and a set of HR directed operational objectives be targeted for completion within the first 90 days.*

³⁴⁴ Interview Sheri Lamoureux 06/21/2016

³⁴⁵ Response to Data Request HR051

³⁴⁶ CONFIDENTIAL [REDACTED]

Recommendation 6.1.2: *RCG/SCG LLC recommends that the HR Balanced Scorecard contain a Diversity/Inclusion metric.*

6.2 Compensation Policies, Practices and Programs

Objectives and Scope

The assessment in this Area will focus on the compensation strategy, policies and practices, and the resulting compensation programs. Are they applied consistently to all business units of AVANGRID, including SCG? Are they integrated with the benefit programs to form a consistent focus on total rewards? Are they appropriately guided by the need to remain competitive in attracting and retaining competent executives, management, and professional and hourly employees?

Overall Assessment

COMPENSATION STRATEGIES, POLICIES, PRACTICES, AND PROGRAMS FOR AVANGRID'S GAS EXECUTIVES, SALARIED, AND HOURLY EMPLOYEES ARE CONSISTENT WITH STANDARD INDUSTRY PRACTICES. AVANGRID HANDLES THESE PRACTICES WITH IMPARTIALITY, EXPERTISE, AND A HIGH LEVEL OF INTEGRITY. THE TOTAL REWARDS ORGANIZATION AND THE INDEPENDENT OUTSIDE COMPENSATION CONSULTANTS HAVE DESIGNED AND APPROPRIATELY MONITOR ALL THE COMPENSATION COMPONENTS. HOWEVER, THE TARGET LEVEL OF VARIABLE COMPENSATION FOR NON-OFFICER SALARIED EMPLOYEES IS LOWER THAN INDUSTRY PRACTICE.

Conclusions

Conclusion 6.2.1: *RCG/SCG LLC found that AVANGRID's compensation strategy, policies, components, and procedures are consistent with industry experience and practice.*

Analysis

AVANGRID Total Rewards (Compensation and Benefits responsibility) organization is centralized under the AVANGRID Chief HR Officer. The Director of Total Rewards is located and directly responsible for the compensation and benefit strategies at SCG. The execution of the compensation strategy is the responsibility of the Director of Compensation.

The compensation strategy is focused on "Total Rewards," or total compensation³⁴⁷ that includes base and variable compensation and the value of employee benefits. AVANGRID has

³⁴⁷ Response to Data Request HR067

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consolidated all management and salaried employee compensation under one approach and uses benchmarking with the other Connecticut utilities and similarly sized utilities to ensure their pay practices are consistent with the marketplace in which they expect to find and attract future employees. All SCG executives are part of the AVANGRID's executive compensation system and salaries are determined based on market data.³⁴⁸

Regular and periodic compensation studies are performed every two years for all non union positions.³⁴⁹ The union position studies are completed prior to each contract's negotiations.³⁵⁰

A compensation strategy and associated policies are in place and used to direct the compensation practices.³⁵¹

The leadership responsible for the compensation programs is very experienced and well grounded in all aspects of compensation practices, data analysis, and the delivery of compensation advice. The leadership is included in all strategic compensation discussions and has full access to the Board's compensation committee and the CEO in regard to compensation.³⁵²

Conclusion 6.2.2: *RCG/SCG LLC found the utility is effectively using benchmarking for its total compensation for executives, supervisors, professional, and hourly workers.*

Analysis

AVANGRID uses appropriate compensation consultants, surveys, and databases to support the various compensation recommendations. Regular and periodic compensation studies are performed every two years for all non union positions.³⁵³ The union position studies are completed prior to each contract's negotiations.³⁵⁴ AVANGRID uses this benchmarking to verify market competitiveness of their compensation programs and to verify the salary ranges for the 3 Band levels of compensation for management and salaried employees. Additionally, the benchmarking is used to support placement of each salaried position within the Band.³⁵⁵

³⁴⁸ Response to Data Request HR016

³⁴⁹ CONFIDENTIAL [REDACTED]

³⁵⁰ Interview A. Bruno 06/06 and 07/11/2016

³⁵¹ Response to Data Request HR016

³⁵² Interview A. Bruno 06/06 and 07/11/2016

³⁵³ CONFIDENTIAL [REDACTED]

³⁵⁴ Interview A. Bruno 06/06 and 07/11/2016

³⁵⁵ Response to Data Request HR016

Conclusion 6.2.3: *RCG/SCG LLC found AVANGRID's compensation practices to be mostly consistent with good business and utility practices except for the short term incentive target levels for non officer salaried employees.*

Analysis

AVANGRID uses a 3 Band approach to compensation of the non officer salaried employees. The market range for each level is updated bi annually. The latest Compensation benchmarking of all positions shows that AVANGRID's total cash compensation was at CONFIDENTIAL [REDACTED]³⁵⁶ of market for their salaried non officer positions. The level of compensation within each band is based on the employee's performance against previously determined goals, metrics, and competencies. This data however is not broken down between base and variable target compensation.

Based on the experience of RCG/SCG LLC, the components of compensation (base salary and variable compensation or incentive pay) for AVANGRID non officer salaried employees are inconsistent with utility industry practices. The variable pay opportunity or target payout varies between 2.0 and 15% depending on the position pay grade.³⁵⁷ The targeted payout for the 329 eligible participants in 2015 was 5.9%. The actual payout was 5.6% based on the achievement of the previously identified metrics.³⁵⁸ Current compensation strategies in the industry typically target a minimum of 10% of base compensation for the value to be sufficiently meaningful to motivate employee behavior. Additionally, AVANGRID's benchmarking does not break down the data into its base and variable components so that the variable component can be compared to their current offerings.³⁵⁹

AVANGRID has in place the appropriate approval process for all compensation decisions.

Conclusion 6.2.4: *RCG/SCG LLC found HR's management and control of the performance evaluation is consistent with industry practices.*

Analysis

Employee evaluations for non union employees are completed annually and become the source document for identifying high potential talent and development needs of individuals included in the succession plan.

³⁵⁶ CONFIDENTIAL [REDACTED]

³⁵⁷ Response to Data Request HR067

³⁵⁸ Response to Data Request HR067

³⁵⁹ CONFIDENTIAL [REDACTED]

The performance evaluation process is completed on line in the SAP system. The evaluation compares performance against personal goals and job competencies. The performance assessment is completed prior to and is input for the annual merit compensation process.³⁶⁰

Recommendations

Recommendation 6.2.1 RCG/SCG LLC recommends that the short term incentive (variable compensation) component target of the total cash compensation for all non officer salaried employees be increased consistent with benchmark variable compensation data and with maintaining a competitive range of total cash compensation.

6.3 Employee Benefits Including Pension Plan, 401K, and OPEBs

Objectives and Scope

This section focuses on the health and welfare benefit programs and retirement programs, including the pension plan, 401k plan, and OPEBs (other post employment benefits). These benefits are available to executives, management, professional, hourly, and bargaining unit employees.

Overall Assessment

AVANGRID TOTAL REWARDS (COMPENSATION AND BENEFITS RESPONSIBILITY) ORGANIZATION IS CENTRALIZED UNDER THE AVANGRID CHIEF HR OFFICER. THE DIRECTOR OF TOTAL REWARDS IS DIRECTLY RESPONSIBLE FOR THE COMPENSATION AND BENEFIT STRATEGIES AT AVANGRID NETWORKS. THE EXECUTION OF THE BENEFITS STRATEGY IS THE RESPONSIBILITY OF THE DIRECTOR OF BENEFITS.

AVANGRID'S EMPLOYEE BENEFIT OFFERINGS FOR HEALTH, WELFARE, AND RETIREMENT PLANS ARE CONSISTENT WITH INDUSTRY PRACTICES AND COMPETITIVE WITH THE MARKETPLACE TO ATTRACT AND RETAIN CURRENT AND FUTURE TALENT. NEGOTIATIONS WITH THE UNION LOCALS HAVE BEEN COMPLETED TO BRING THE BENEFIT PLAN INTO ALIGNMENT AND REDUCE THE OVERALL COST OF PROVIDING BENEFITS INTO THE FUTURE.

³⁶⁰ Interview A. Bruno 07/11/2016

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Conclusions

Conclusion 6.3.1: *RCG/SCG LLC found AVANGRID's benefits packages for current employees of SCG and the associated pension/OPEB/401k practices are in line with those of other Connecticut utilities and industry practices.*

Analysis

The Employee Benefits (including Pensions, 401k, and OPEB) need to include a wide range of benefits that provides flexibility in meeting the changing and demanding needs of the diverse workforce marketplace. The benefit programs are integrated within an overall total rewards strategy needed to compete for talent in the regional employment marketplace. AVANGRID manages its benefits programs well. It has changed most of its benefit programs to be consistent throughout AVANGRID and consistent with the marketplace to control its benefit cost.

All non union employees hired at SCG prior to January 1, 2004 are eligible for the traditional defined benefit pension plan. Those hired on or after this date are only eligible for a Cash Balance Pension Benefit. All non union employees also are eligible to participate in the 401k Plan.³⁶¹ Benefit levels in these Plans are consistent with industry practices.

AVANGRID Rewards organization uses a periodic BENVAL survey to compare the benefit value provided to SCG union employees to those provide to other industry companies.³⁶²

The benefit offerings, the OPEBs, the retirement plan offerings (traditional pension, cash balance, and the 401k) and the health and welfare offerings are all consistent with the industry practices.

Conclusion 6.3.2: *RCG/SCG LLC found that AVANGRID has been proactive in seeking opportunities to reduce the overall cost of their benefit offerings and the cost impact of the Pension, 401k, and OPEB Plans serving SCG employees.*

Analysis

AVANGRID Rewards organization regularly reviews vendors and benefit Plan(s) and consults with its insurance broker (for Health & Welfare Plans), references national surveys, such as those developed by EAP Data Information Solutions, LLC, Segal, recognized consulting groups, and internal committees, such as the Retirement Benefits and Investment Committee and the Benefits Advisory Committee.³⁶³

³⁶¹ Response to Data Request HR059

³⁶² [REDACTED] **CONFIDENTIAL**

³⁶³ Response to Data Request HR013

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Since 2011, the UIL's goal was to streamline and align benefit offerings where possible across all CT companies to maximize cost effectiveness. The following is a summary of what they have accomplished:³⁶⁴

- For active employees:
 - Moved medical plans to self insured ASO model for 2013 and marketed to several self insured carriers. Secured a multi year cap for self insured costs. Negotiated a "hold" of medical admin fees for 2016 and marketed stop loss for 2016. Marketed medical stop loss to several carriers for 2014.
 - Consolidated medical vendors and coverage from five vendors to three vendors. All the non union groups have the same medical offerings. The union populations have similar medical offerings where possible. Re evaluated the cost share structure for the active population so as to make it similar across all companies. 20% cost share for active employee coverage remained the same and added dependent coverage to 23% cost share to the employee for the non union population commencing 1/1/2014. Union cost shares were calculated based upon the current union contract agreements.
 - Introduced a High Deductible Health Plan to the SCG and CNG non union groups. This increased employee participation in the High Deductible Health Plan.
 - As a result of SCG Union negotiations in 2015, converted the medical plan for the active and under 65 retiree population to the Steelworker's plan effective 01/01/2016.
 - Consolidated vision coverage to one vendor – Eye Med for all groups.
 - Consolidated dental coverage to three offerings with one vendor for all the groups – Delta Dental.
 - Wellness Programs offered to employees
 - Consolidated life coverage offerings for all the groups – The Hartford.
 - Marketed Life and Disability plans as they came off prior rate guarantee. Remained with the Hartford. Marketed medical stop loss to several carriers for 2015.
 - Effective 1/1/2012, contracted with BuckHRSolutions/Xerox to manage the Health and Welfare benefits for all SCG's active and retiree populations.

³⁶⁴ Interview A. Bruno 06/06 and 07/11/16 and Response to Data Request HR013 and HR060

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- OPEBs: Offered the private medical exchanges to the over 65 non union retirees for all companies commencing in 2015. This includes a subsidy given to each retiree participant into a Health Reimbursement Account (HRA) at Benefit Wallet. This created better offerings to the retiree and cost savings to both AVANGRID and retiree.
- 401k Plans: Because of the acquisition of the gas companies by UIL Holdings, the 401k plans were restated in 2012 and consolidated to one 401k vendor – Vanguard in July 2013. Also, consistent with industry best practices, AVANGRID continues to review investment offerings in the plans. These types of changes resulted in cost savings to both AVANGRID and employees. As a result of the consolidation to one vendor, they have also combined and simplified the non union 401k plans.

UIL undertook an assumptions experience study in 2014. Based on that study, the actuarial assumptions were updated for the retiree welfare valuation, such as termination rates, retirement rates, spousal coverage assumption, and participant rates. The update of assumptions resulted in a decrease of plan obligation for the CNG and SCG plans as shown below. Please note that these numbers have been rounded to the nearest \$0.1 million.

	<u>CNG</u>	<u>SCG Salaried</u>	<u>SCG Union</u>	<u>Total</u>
Impact of experience study assumptions on 12/31/2014 APBO ³⁶⁵	\$4.1 Million	\$1.2 Million	\$2.6 Million	\$7.9 Million

Exhibit 54 - Retiree-Welfare Plan Valuation Assumption Change Impact

Recommendations

RCG/SCG LLC has no recommendations for this audit item.

6.4 Succession Planning, Leadership Identification, Employee Development and Evaluation

Objectives and Scope

Succession Planning, Leadership Identification, and Employee Development strategy is to develop and promote from within. Hiring is used to fill skills gaps identified in the Talent Cycle.

³⁶⁵ Response to Data Request HR060

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In AVANGRID's annual Succession Planning, Leadership Identification, and Employee Development process, high potential employees are identified, their associated development gaps are detailed, and a development plan is established.

Overall Assessment

RCG/SCG-LLC BELIEVES THE AVANGRID SUCCESSION PLANNING, LEADERSHIP IDENTIFICATION, AND EMPLOYEE DEVELOPMENT PROCESS IS CONSISTENT WITH INDUSTRY BEST PRACTICES. HOWEVER, IMPLEMENTATION AT AVANGRID HAS NOT BEEN COMPLETED BELOW THE EXECUTIVE LEVEL. AS A RESULT OF THE RETIREMENT AND RESIGNATIONS ASSOCIATED WITH THE RECENT MERGER, AVANGRID IS FINDING IT NECESSARY TO SEEK EXTERNAL CANDIDATES TO FILL KEY SENIOR LEVEL POSITION, SUCH AS THE SENIOR DIRECTOR OF HR IN CT.

Conclusions

Conclusion 6.4.1: *RCG/SCG LLC found AVANGRID has a well defined formal succession planning process (Talent Cycle) that integrates talent identification and employee development. The approach is consistent with best practices. The process includes the identification of key positions, of high potential employees and the associated development process to address the "brain drain" associated with baby boomer retirements. However, RCG/SCG LLC found succession planning and associated development planning and implementation has not been communicated and therefore very few management employees are aware of the succession plan for their position.*

Analysis

Succession planning, leadership identification, and employee development are a well defined process, see following Exhibit.³⁶⁶

³⁶⁶ Response to Data Requests HR065 and 66.

2016 Talent Review Process

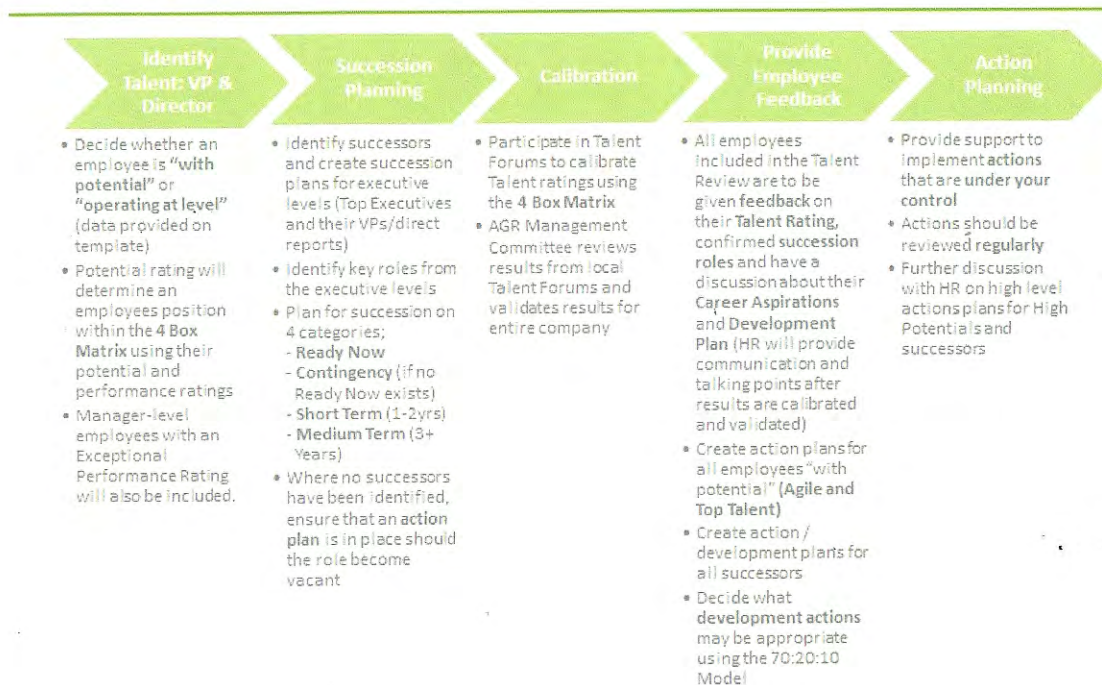


Exhibit 55 – 2016 Talent Review Process

AVANGRID Networks is in the process of completing the first succession planning exercise since the merger. They initially focused on the top executives and senior leaders reporting to them across the organization during the more formal annual talent review conducted in the month of June. They focus succession planning for AVANGRID, not just a specific focus for SCG. However, later this fall, they will be looking to drive succession planning deeper into SCG, at a minimum, looking at directors and managers and any other key roles identified. Moving forward in subsequent years, the plan would be to incorporate succession planning deeper into the organization during the annual talent review process, instead of an additional one off exercise.

An integral part of AVANGRID's focus is on their "Talent Cycle." Through this approach they use a consistent and common approach to identifying key positions and key people for further development and succession planning. They seek to identify:

- Key positions in the organization,
- Successors to Key and other Leadership Positions (Succession Planning),
- Individuals with Potential, and
- Action Plans for Successors and High Potential.

The Talent Review process that supports the Talent Cycle is planned to be undertaken annually. It has yet to be completed.

The Director – Talent & Leadership reports to the Chief Human Resources Officer. The Director is responsible for the strategic planning of talent management programs related to: talent assessments, succession planning, key role identification and risk mitigation, executive and other leadership development programs, and coaching. The Director is also responsible for the execution of the annual talent review process across the enterprise to identify top talent, succession plans, and key development areas for targeted population.

The process has not been implemented fully over the last several years. As such, RCG/SCG LLC found many of the individuals interviewed during this audit were not consulted regarding a successor for their position nor were they aware that there was an identified successor.

Recommendations

Recommendation 6.4.1: *RCG/SCG LLC recommends that AVANGRID complete the Talent Cycle process as planned for year 2017, update it annually thereafter, and communicate to the management organization that the process has been complete and succession candidates have been identified for key positions.*

6.5 Training

Objectives and Scope

Training assessment focused on the responsibilities for training, the breadth of the programs offered, and the delivery of the required training.

Employee training responsibility is divided into three areas: enterprise training, compliance training, and technical or on the job training. HR is responsible for both enterprise and compliance training. Each business unit is responsible for their specific technical training.

Overall Assessment

EMPLOYEE TRAINING WAS COORDINATED, DEVELOPED, AND/OR DELIVERED EFFECTIVELY. HOWEVER, THE TRAINING PAPER RECORDKEEPING PROCESS NEEDS TO BE UPDATED TO AN ELECTRONIC PROCESS CONSISTENT WITH INDUSTRY PRACTICES.

Conclusions

Conclusion 6.5.1: *RCG/SCG LLC concluded that the enterprise training is developed and conducted using industry practice techniques.*

Analysis

Training is comprised of five main components: management, leadership and professional development programs; gas technical training; customer care training; IT and business system training; and safety, regulatory, and compliance training. HR is responsible for the content and delivery of all training in the first four components.

Corporate Safety personnel are responsible for all safety compliance training. HR assists with some scheduling and program delivery. Operations is responsible for all training regarding operator qualification/certifications and standards. HR is responsible for sexual harassment prevention and Code of Business Conduct training.

Union leadership has recently been involved with the gas technical training needs assessment. This assisted in developing the focus of such training to be delivered by the HR staff at the new training facility.³⁶⁷

Conclusion 6.5.2: *RCG/SCG LLC found the Compliance training is completed annually. The paper based recordkeeping of completed operations compliance training, however, is inconsistent with leading industry practices.*

Analysis

Compliance training, including operator qualifications/certification, sexual harassment and business conduct, has been completed annually, as required.³⁶⁸ Operations reports back to HR the completion of the compliance training that they conduct by mailing the attendance sheet to HR.

Recommendations

Recommendation 6.5.1: RCG/SCG LLC recommends that the compliance training completion records for training completed by SCG be entered into the centralized recordkeeping system immediately following such training.

6.6 Labor and Employee Relations

Objectives and Scope

The assessment of Labor and Employee Relations examined each of the critical components: employee and union relations, negotiations, grievance processing, company wide disciplinary actions, and position vacancy analysis. Has Labor Relations focused labor

³⁶⁷ Response to Data Request HR021

³⁶⁸ Interview S. Winkle 06/06/2016.

negotiations on negotiating changes in compensation, benefits, and work rules to bring the union programs in line with the marketplace? Have labor discussions focused on delivering customer natural gas services safely, reliably, and at a reasonable cost?

Overall Assessment

LABOR AND EMPLOYEE RELATIONS IS STAFFED WITH EXPERIENCED PROFESSIONALS WHO HANDLE THEIR RESPONSIBILITIES EFFECTIVELY WHILE MAINTAINING A GOOD WORKING RELATIONSHIP WITH THE TWO MAJOR BARGAINING UNITS (THREE LABOR CONTRACTS) COVERING THE UNION EMPLOYEES OF SCG. HOWEVER, AVANGRID DOES NOT HAVE A LONG-TERM STRATEGY TO COMBINE THE LABOR UNIONS.

Conclusions

Conclusion 6.6.1: *RCG/SCG LLC determined that the AVANGRID labor relations organization is appropriately staffed with experienced professionals, provides a dedicated labor professional to handle the SCG's two labor contracts, and has completed work stoppage planning.*

Analysis

Labor and Employee Relations handle employee union relations, negotiations, grievance processing, company wide disciplinary actions and position vacancy analysis. Labor Relations has a critical role in negotiating changes in compensation, benefits, and work rules to bring the union programs in line with the marketplace and deliver customer natural gas services safely, reliably, and at a reasonable cost.

The Director of Employee and Labor Relations is responsible for relations with the Steelworkers local union and the two contracts at SCG.³⁶⁹ SCG has an HR Generalist assigned to its headquarters. This HR Generalist delivers the employee and labor relations support activities on a day to day basis.³⁷⁰

There have been a minimum number of grievances that have gone to the third step or arbitration. These results are better than those of utilities of similar size.³⁷¹

³⁶⁹ Response to Data Request HR009

³⁷⁰ Interview J. Vicidomino 06/02/2016

³⁷¹ Response to Data Request HR026

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Based on discussions with both management and union members, relations with the unions' leadership have been good and the relationship meets the needs of both parties.³⁷² However, consistent with industry practices, SCG has in place work stoppage planning.³⁷³

Conclusion 6.6.2: *RCG/SCG LLC found that the labor agreements do not contain barriers to increased productivity, increased work flexibility, and increased use of contractors.*

Analysis

The labor contracts have no barriers to productivity, staffing, or the use of contractors and the contracting out of work previously performed by union employees. The labor agreements contain very few work rules and limits to the selective use of contractors and no barriers to productivity and improvements in work methods. Management has full rights to decide the number and mix of employees needed to perform the work. This is unusual in utility labor agreements and should contribute to lower costs for the same quality of work.

Standardization of the benefit plans and getting all union employees on one benefit platform has been a major focus of recent labor negotiations. For the most part, this strategy has been accomplished.

Conclusion 6.6.3: *RCG/SCG LLC found the number of labor relations contracts and local unions is not consistent with companies the size of SCG and may pose a future barrier to management's potential effort to consolidate the operations of SCG and CNG.*

Analysis

The Steelworkers local union and two labor contracts cover the 220 union employees at SCG.³⁷⁴ AVANGRID has assigned a dedicated HR Specialist to each local, thus providing consistency in dealing with the respective union leadership. The result of this activity is a relatively low number of grievances, all being settled in third step or arbitration.

Management has been consolidating operations management at SCG and CNG. However, the number of local labor unions and labor contracts may be a barrier to further consolidation. Future negotiation will need to address any barriers this situation may present. Management does not have any current plans or a long term strategy to consolidate the union employees under one local union.³⁷⁵ Industry practices and RCG/SCG LLC experience has shown that such consolidation of labor locals and contracts results in reduced costs.

³⁷² Interviews C. Malone 05/12/2016, SCG union employees 06/8/16

³⁷³ CONFIDENTIAL [REDACTED]

³⁷⁴ Interview Y. Crespo 07/11/2016

³⁷⁵ Response to Data Request HR040

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Conclusion 6.6.4: *RCG/SCG LLC found that all filling of vacancies are reviewed and approved by HR to determine the need for a replacement and the most effective way to meet the need.*

Analysis

The Director of Employee and Labor Relations, personally, reviews all recommendations to fill a vacancy at SCG. He then determines whether the position needs to be filled and what resource (internal transfer or external hire) will be used to meet the need.

Recommendations

Recommendation 6.6.1: *RCG/SCG LLC recommends that AVANGRID develop a long term strategy to consolidate the union employees of SCG and CNG into one labor union and contract.*

6.7 Workforce Planning and Staffing

Objectives and Scope

In today's utility, the cost of labor (both employee and contractor labor) represents one of the largest components in both O&M expense and capital costs. If the employee to contractor mix is not optimized for the workload variations, employee labor will automatically inflate expense costs and increase customer rates. Further, as the baby boomer generation retires, an unprecedented experience drain will not be filled easily through normal hiring practices.

Overall Assessment

AVANGRID TAKES A PROACTIVE APPROACH TO MANPOWER PLANNING BY ANALYZING THEIR WORKFORCE AND ANTICIPATING THEIR CURRENT AND FUTURE STAFFING NEEDS, TAKING INTO ACCOUNT LEADERSHIP NEEDS, SKILLS GAPS, AND DIVERSITY GOALS. THEIR PRACTICE USES A COMPREHENSIVE ASSESSMENT OF FUTURE NEEDS, SUCH AS DETAILED TURN-OVER ANALYSIS, EARLY IDENTIFICATION OF HIGH-POTENTIAL EMPLOYEES, IDENTIFYING FUTURE TALENT NEEDS, AND EITHER DEVELOPING THOSE TALENTS INTERNALLY OR SPECIFICALLY TARGETING HIRING TO ADDRESS THE NEED. HOWEVER, THEIR PLANNING DOES NOT HAVE A LINK TO ANY WORK MANAGEMENT ACTIVITIES.

Conclusions

Conclusion 6.7.1: *RCG/SCG LLC concluded that SCG management met the intent of the two 2010 SCG Management Audit recommendations.*

Analysis

The 2010 Management Audit specified two recommendations that impacted the SCG

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management organization and their workforce management.

Item # 17, Chapter VII, Human Resources & Workforce Management, Recommendation VIII 1: Increase spans of control through attrition and reorganization. (Refers to Finding VIII 12) SCG has multiple opportunities to increase spans of control, particularly at the higher levels in the organization. A common technique used to increase spans of control is to not fill future manager and supervisor vacancies and reassign the direct reports to others to increase their spans of control. As of October 5, 2009, there were five manager or supervisor positions open.

RCG/SCG LLC believes that the actions taken by SCG to consolidate its senior management with CNG have reached to the intent of this recommendation.

Item # 18, Chapter VII, Human Resources & Workforce Management, Recommendation VIII 2: Develop and implement a comprehensive workforce planning process. (Refers to Finding VIII 14) There is no formal workforce planning process and work management and project management systems are incomplete.

RCG/SCG LLC believes that the completion of the Human Resources Strategic Workforce Plan,³⁷⁶ updated in 2015, by AVANGRID reached to the intent of this recommendation. This Plan includes specific analysis of the SCG workforce requirements. However, no evidence of a formal work management or a comprehensive project management process was uncovered in this audit. This will be further discussed elsewhere in this audit report.

Conclusion 6.7.2: *RCG/SCG LLC found that AVANGRID's Human Resources Strategic Workforce Plan and the associated processes to be comprehensive and consistent with the employment environment utilities are currently encountering.*

Analysis

Workforce planning at AVANGRID includes extensive analysis of potential future employees which includes a review of potential retirements, a review of the "age bands" of their employee mix, and input from the Business Partners feedback on each business unit's anticipated needs. This assessment is rolled up into the Human Resources Strategic Workforce Plan. From this assessment, potential sources of talent are identified, such as college recruiting for professional positions or community colleges or trade schools for entry level technical or hourly worker positions. Non traditional sources, such as persons with disabilities, have been targeted this past year.³⁷⁷ The EEO/AA needs are also factored in to the recruiting requirements and positions are held open if a sufficiently diverse candidate pool has not been identified. Their

³⁷⁶ CONFIDENTIAL [REDACTED]

³⁷⁷ Interview C. Garrett 06/09/2016

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staffing strategy is to promote from within and hire from outside when the talent need is identified.

The “time to fill” a vacancy is an established metric. The metric is reported out annually. The days “time to fill” results³⁷⁸ against the established target ranges for the past three years are as follows:

Year	Threshold	Target	Maximum	Actual
2015	31	28	26	44
2014	31	28	26	44
2013	40	36	30	28

Exhibit 56 - Actual Time-to-Fill a Vacancy (Days) vs. Metrics

With the recent merger, the succession planning and talent assessment work has been a limiting factor in their manpower planning effort. They are in the process of identifying the leadership needs to manage the new organization and selecting the individuals internally to fill these positions or recruiting the talent where gaps exist. In several cases, such as the AVANGRID’s Sr. Director of HR and the AVANGRID Officer responsible for Safety and Health, no internal candidate was identified and outside hiring is being pursued.

Conclusion 6.7.3: *RCG/SCG LLC found that AVANGRID’s staffing budget process is focused on current headcount and future turnover and does not integrate with any work management or project management forecasts and/or programs.*

Analysis

The Staffing Budget process has been decentralized within each AVANGRID company. Each budget recommendation has been approved by the VP responsible for that organization. The recommendation then has been rolled up into the overall BU’s budget.

At the end of 2015, TM1 was installed as the AVANGRID budgeting system. This system, however, is not used by the rest of AVANGRID Networks. SAP staffing data is downloaded into TM1 as the budget starting point. In 2016, HR was given the additional responsibility to approve any request to fill a vacancy and identify the source, if a vacancy is to be filled. Additionally, the AVANGRID HR Governance organization monitors the budget process and compares the results to the targets set by the AVANGRID senior leadership.³⁷⁹

³⁷⁸ Response to Data Request HR055

³⁷⁹ Interview A. Crane 07/11/2016 and J. O’Neil 06/21/2016

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In discussions with leadership in Fleet and SCG management, RCG/SCG LLC did not find any evidence that any work management or project management staffing requirements and forecasts were formally incorporated into the staffing budget process.^{380,381} As a result, RCG/SCG LLC could not determine if the employee to contractor mix was appropriate.

Recommendations

Recommendation 6.7.1: RCG/SCG LLC recommends that SCG integrate their work management and project management staffing requirements and forecasts formally into the staffing budgeting process.

6.8 EEO/AA

Objectives and Scope

Compliance with EEO laws and the development and maintenance of an effective AA Plan is the minimum requirement of any Diversity/Inclusion Strategy. Workforce or Manpower Planning must consider the goals of any such strategy. In this section, RCG/SCG LLC seeks to determine:

- If the equal employment opportunity and affirmative action (EEO/AA) policies, plans, procedures, and functions are effective and reasonable?
- Do the Diversity and Inclusion programs reach to address cultural barriers to full employment opportunities for all qualifies candidates and employees?

Overall Assessment

AT AVANGRID, EQUAL EMPLOYMENT OPPORTUNITY (EEO) COMPLIANCE AND AFFIRMATIVE ACTION (AA) PLANNING IS ACCOMPLISHED IN CONJUNCTION WITH CORPORATE COMPLIANCE ACTIVITIES ASSOCIATED WITH THE CODE OF CONDUCT. AVANGRID COMPLIES WITH THE LETTER OF THE LAW REGARDING ETHICS, EEO COMPLIANCE, AND AA PLANNING. SENIOR MANAGEMENT IS NOTIFIED BY E-MAIL ON THE ANNUAL PERFORMANCE OF THE AA PLAN. WHILE NO DIVERSITY OR INCLUSION PROGRAMS ARE CURRENTLY IMPLEMENTED AT AVANGRID, THEY HAVE SAID THEY ARE WORKING ON RE-INSTITUTING FOCUS ON DIVERSITY AND INCLUSION IN 2017.

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³⁸⁰ Interview M. Smith 06/02/2016

³⁸¹ Response to Data Request OPS042

Conclusions

Conclusion 6.8.1: *RCG/SCG LLC found that AVANGRID's EEO/AA policies and procedures comply with the letter of the law. However, it is lacking any programs directed at Diversity or Inclusion, which is necessary to reach to best practices.*

Analysis

EEO/AA compliance and reporting and Code of Conduct compliance are centralized under the Manager of Corporate Compliance and Organizational Alignment. The organization's results are reported under three EEO reports.³⁸² Several of the 2014 AA Plan goals or minorities were not met³⁸³

AVANGRID complies with both the letter of the law regarding ethics, EEO Compliance, and AA planning.³⁸⁴ 2014 goal attainment information was provided to the executive and management team of SCG.³⁸⁵ The 2015 AA Plan goal attainment analysis has not been completed but is expected to be completed later in 2016 due to an SAP HR data extraction issue. No formal presentations to senior executive regarding AA performance are planned.

RCG/SCG LLC found that AVANGRID does not have any on going Diversity or Inclusion targeted programs. All the efforts in this regard are focused on EEO compliance and associated recordkeeping and the annual updating of the AA Plan. They have an established a cross functional Culture Champion Team with representatives across the full organizational spectrum of AVANGRID. The Team Charter is:

*"The purpose of the Culture Champions team is to reinforce and apply the culture shaping concepts using simple activities and to support their respective business leaders in this effort throughout the organization."*³⁸⁶

However, this does not reach to a true focus on diversity and inclusion. This has been cited by SCG employees in the 2015 Straight Talk Employee Survey:³⁸⁷ *Overarching Themes – UIL: "While employees acknowledge efforts related to UIL's diversity initiative, it is notable that the*

³⁸² Response to Data Request HR010

³⁸³ Response to Data Request HR049 CNG-SCG Attachment 1

³⁸⁴ M. Bissell Interview 06/03/16

³⁸⁵ Response to Data Request HR049 CNG-SCG Attachment 1

³⁸⁶ Response to Data Request HR048

³⁸⁷ Response to Data Request HR051

belief/confidence in the level of commitment from senior leadership is less strong that it was in 2013.” Best in class companies have moved well beyond compliance and even diversity alone (A focus on who gets invited to the party). They are now additionally focusing on Inclusion (A focus on asking an individual to dance).

Their Ethics Hotline continues to be operational and has received calls annually from approximately 2% of the SCG and CNG employees over the past three years.³⁸⁸ These complaints have been investigated promptly by the Manager of Corporate Compliance.³⁸⁹

The Recruiting area supports the diversity to the point where they will hold a position open if the candidate pool isn’t deemed to be sufficiently diverse.

Recommendations

Recommendation 6.8.1: *RCG/SCG LLC recommends that AVANGRID develop a Diversity and Inclusion program consistent with Best in Class Companies that reaches well beyond compliance and addresses any cultural barriers to full inclusion in employment for all qualified candidates and employees. Such Program must include an annual formal presentation to the senior leaders of AVANGRID and a report back to all employees.*

6.9 Employee Safety

Objectives and Scope

This audit reviewed employee safety performance against AVANGRID’s internal safety performance targets and any benchmarking of performance against other utilities. We looked at whether the utility is effectively benchmarking its employee safety statistics and measuring the effectiveness of its safety programs. Are the roles and responsibilities clearly identified and are these responsibilities executed effectively? Does the historical safety performance reflect an environment of continued improvement?

Overall Assessment

SCG’S EMPLOYEE SAFETY PERFORMANCE HAS NOT MET AVANGRID’S MANAGEMENT EXPECTATIONS AND GOALS FOR THE LAST FIVE YEARS. HOWEVER, EXECUTIVE AND MANAGEMENT’S STATED BUSINESS PRIORITIES, REINFORCED BY THE SAFETY METRICS ESTABLISHED FOR MANAGEMENT, DEMONSTRATED THAT IMPROVING EMPLOYEE SAFETY PERFORMANCE IS NO LONGER A CONCERN.

³⁸⁸ Response to Data Request HR050 CNG-SCG Attachment 1

³⁸⁹ Confidential [REDACTED]

Conclusions

Conclusion 6.9.1: *RCG/SCG LLC concluded that the AVANGRID has the strategies, policies, and procedures in place and consistent with industry practices; the roles and responsibilities are clearly delineated; and the safety personnel are executing their responsibilities. However, in some of the functional areas at SCG, operational management is not executing their responsibilities effectively as reflected in the safety results.*

Analysis

The “Safety Roles & Responsibilities” document³⁹⁰ clearly states AVANGRID’s safety strategy and the role and responsibilities of the Safety personnel, Division management, local supervision, and each employee. Consistent with industry practices, AVANGRID’s safety performance is audited and operation’s safety management is supported by the Safety Specialist assigned to SCG and the Manager of Safety. The Safety organization is part of the AVANGRID Health and Safety organization reporting to the AVANGRID Chief HR Officer.

The Responsibility document lays out the safety strategy as follows (excerpted):

SAFETY PHILOSOPHY³⁹¹

The following safety principles govern UIL’s approach toward safety and are used in all decisions regarding safety. To achieve continuous safety improvement, all employees, from management to hourly workers, will need to know, understand, and accept these principles as the standard reference for a safe work environment.

All injuries can be prevented

- Be the cornerstone of our safety approach
- Governs our attitude to unsafe acts and conditions
- Establishes responsibility for reporting unsafe conditions
- Causes us to investigate incidents that could have caused injury

Management is responsible for preventing injuries

- Provide tools and equipment and PPE
- Provide safety training
- Hold employees accountable for working safely

Working safely is a condition of employment

- Applies to all employees
- Important aspect for assessing employee’s work

³⁹⁰ Response to Data Request HR038 CNG-SCG Attachment 1

³⁹¹ Response to Data Request HR038 CNG-SCG Attachment 1, p2

- Impacts chances for promotions and raises
- Persistent disregard can lead to dismissal

All operating exposures can be safeguarded

- UIL Safety Manual
- OSHA Regulations
- Operating procedures
- Best practices of gas/electric utility trade organizations

Training employees to work safely is essential

- OJT
- Enhanced Skills Training
- Continuous refresher training

Prevention of personal injuries is good business

- Time away from work
- Costs of injuries to the business
- Morale

Exhibit 57 - Safety Philosophy

This Philosophy clearly rests the responsibility for injury prevention on management and the employees performing the work. Recognition of this responsibility by management in SCG was clearly evident in their responsiveness to safety issues brought forth by union employees, in their open response to incident investigation and review, and in their reinforcement of the need for crew tailboard safety discussions. Additionally, management encourages employee participation at the safety meetings and the employees have responded well to this encouragement at both the meetings and on an individual basis.³⁹² The union leadership also participates in the monthly Managers Safety meetings.

The Safety organization is well focused on their specific responsibilities to audit safety performance in the field and issuing safety guidance both at safety meetings and in regular communications with management and employees. Safety related metrics are included in the HR Balance Scorecard. CONFIDENTIAL [REDACTED]. This Safety Team Goal³⁹³ was:

Safety Team Goal:

1. Provide Job Hazard Analysis (JHA) training for all field supervisors so that they can more effectively recognize and understand the risks associated with their field work, and communicate those risks to their direct reports / associates in the field. This will help to lower our injury rates and reduce workers' compensation costs.

³⁹² Interviews SCG management and union employees 06/08/2016

³⁹³ Confidential [REDACTED]

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2. Review the previously developed SCG matrix of OSHA required training topics and departments requiring training, develop twenty (20) lesson plans for the identified topics. Second, conduct the associated training for all affected departments and employees.

3. Update the safety section of the "Welcome to UIL" presentation, incorporating content from the newly revised safety "Roles and Responsibilities" booklet.

RCG/SCG LLC recognizes that the Safety Team Goal is consistent with the safety personnel's roles and responsibilities; however, industry practices and our experience find that this Goal should also include an employee safety performance improvement metric. This practice encourages Safety leadership to work in partnership with operations management to drive improvements in safety performance.

Conclusion 6.9.2: *RCG/SCG LLC concluded that improving employee safety performance is no longer a concern of AVANGRID's gas executive team and SCG.*

Analysis

The employee safety performance at SCG has not met HR management's expectations over the past five years. Gas Operations management has not set improving employee safety performance as a priority in either 2016 High Level Priorities included in the Management Audit Kickoff Presentation³⁹⁴ nor in any 2016 performance metrics for SCG management. They had one annual safety performance metric in 2011 thru 2014: Combined Safety Index below 5.0. In 2015, four safety metrics were established: Dart Rate, MVAs, Investigations on time, and Safety Initiatives.³⁹⁵ The following Exhibit shows the performance against the safety metrics.

³⁹⁴ Audit Kickoff Meeting 05/10/2016

³⁹⁵ Response to Data Request EXE020

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	Combined Safety Index Metric	Actual	SCG Safety Metrics	Actual
2011	5	7.5		
2012	5	5.44		
2013	5	2.83		
2014	5	6.11		
2015			DART below 3.47	2.38
2015			MVA below 5.41	3.47
2015			Investigations Completed on Time better than 75%	100%
2015			Safety Initiatives started: 2	3
2016	None		None	

OSHA DART Rates are the number of employee injuries requiring restricted duty or days away from work per 100 employees. PMVA is Preventable Motor Vehicle Accidents.

Exhibit 58 - SCG Safety Metrics Performance

The following Exhibit reflects SCG's safety performance for employee injuries and motor vehicle accidents. As can be seen, the performance varies year over year without any trend toward improving performance.

Year	DART Rate	Number of Incidents	PMVA Rate	Number of Incidents
2011	8.28	33	9.06	19
2012	4.26	24	7.01	15
2013	2.89	14	6.68	13
2014	6.4	30		
2015	2.91	21	4.94	11
Jun-16	5.55	10	4.69	4

OSHA DART Rates are the number of employee injuries requiring restricted duty or days away from work per 100 employees. PMVA is Preventable Motor Vehicle Accidents.

Exhibit 59 - SCG Safety Performance

AVANGRID does use periodic safety benchmarking to identify companies with best in class performance. The results of such benchmarking provide an excellent summary of the poor safety performance at both SCG and CNG see the following Exhibit.³⁹⁶

³⁹⁶ Response to Data Request HR024 CNG-SCG Attachment 1

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2011 - April 2016 Benchmarks							
Operating Company	Date	LTA Rate	DART Rate	DART Severity Rate	Recordable Rate	Reportable MVA Rate	Preventable MVA Rate
CNG	2011	4th Quartile	4th Quartile	4th Quartile	4th Quartile	3rd Quartile	3rd Quartile
	2012	3rd Quartile	4th Quartile	No-Data	4th Quartile	3rd Quartile	3rd Quartile
	2013	3rd Quartile	4th Quartile	4th Quartile	4th Quartile	2nd Quartile	2nd Quartile
	2014	4th Quartile	4th Quartile	4th Quartile	4th Quartile	3rd Quartile	3rd Quartile
	2015	4th Quartile	4th Quartile	4th Quartile	4th Quartile	4th Quartile	4th Quartile
	April 2016 Ytd	3rd Quartile	3rd Quartile	3rd Quartile	3rd Quartile	1st Quartile	1st Quartile
SCG	2011	4th Quartile	4th Quartile	4th Quartile	4th Quartile	4th Quartile	4th Quartile
	2012	4th Quartile	4th Quartile	No Data	4th Quartile	4th Quartile	4th Quartile
	2013	3rd Quartile	3rd Quartile	3rd Quartile	3rd Quartile	4th Quartile	4th Quartile
	2014	4th Quartile	4th Quartile	4th Quartile	4th Quartile	4th Quartile	4th Quartile
	2015	4th Quartile	4th Quartile	2nd Quartile	3rd Quartile	4th Quartile	4th Quartile
	April 2016 Ytd	4th Quartile	4th Quartile	4th Quartile	4th Quartile	3rd Quartile	4th Quartile

CNG,SCG Benchmarked against AGA Data.

Exhibit 60 – 2016 Safety Benchmarks

As can be seen above, with limited exception, safety performance, in terms of both employee injuries and motor vehicle accidents, is also poor when compared to other gas companies.

AVANGRID's executive team and the AVANGRID HR executives³⁹⁷ expressed concern over the poor employee safety performance. They described the problem is an aging workforce and issues associated with strains and sprains. The Safety Dept. performs periodic and focused safety audits.³⁹⁸ AVANGRID parent company,³⁹⁹ AVANGRID's insurance carrier, AEGIS⁴⁰⁰ and OSHA and CT state safety inspectors⁴⁰¹ have all performed safety reviews. Additionally, the Manager of Safety investigates all safety incidents and near misses along with the operations Manager.

SCG uses limited duty assignments for injured employees to reduce the impact of the injury on operations and get the employee back to work sooner. The daily tailboard discussions must include a safety review and are documented and reviewed by supervision. The agenda for safety meetings varies between SCG and CNG. There is very limited posting of safety related results and proactive safety messages at SCG.

³⁹⁷ Interviews D. Wilson 07/11/2016 and S. Duncan 06/24/2016,

³⁹⁸ CONFIDENTIAL [REDACTED]

³⁹⁹ CONFIDENTIAL [REDACTED]

⁴⁰⁰ Response to Data Request HR046 CNG-SCG Attachment 1

⁴⁰¹ Response to Data Request HR025

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In spite of these expressed concerns and the above noted actions, none of the metrics established for the management of SCG from 2011 through 2015 seeks to move the targeted safety performance to the first or even the second Quartile of performance. Combine that with the fact that there isn't any 2016 safety metric for operations management. RCG/SCG LLC can only conclude that employee safety performance improvement is no longer a management concern

Recommendations

Recommendation 6.9.1: *RCG/SCG LLC recommends that AVANGRID HR Safety Team Goal include a metric tied to improving safety performance at SCG. Such a metric target should be safety performance at a level that is at least in the second Quartile of AGA Gas Company benchmarking companies.*

Recommendation 6.9.2: *RCG/SCG LLC recommends that SCG's executive and management scorecards used in their performance appraisal system and variable compensation include a metric tied to improving safety performance at SCG. Such metric target should be safety performance at a level that is in at least the second Quartile of AGA Gas Company benchmarking companies.*

6.10 Payroll Practices

Objectives and Scope

In this section, RCG/SCG LLC reviews the Payroll practices for SCG and how these practices compare to those of other companies. This review was Special Topic 16 in the Audit RFP.

Background

Payroll processing is provided through the AVANGRID HR Organization. Within this organization, the Payroll Dept. reports to the VP of Rewards. The Payroll Dept. in CT processes payrolls for UI, CNG, SCG, and other AVANGRID organizational units in CT.

Time and attendance data is captured in a WorkForce software. This product has the capability to model the payroll rules associated with the various labor contracts. Once the time data is processed in WorkForce, it is downloaded to SAP to calculate the net payroll and issue any paper payroll advice summaries. ADP then processes the payroll checks or direct deposits.

Overall Assessment

AVANGRID'S PAYROLL PRACTICES ARE CONSISTENT WITH INDUSTRY STANDARDS. THE PROCESS HAS FEW MANUAL STEPS AND IS NOT VERY LABOR INTENSIVE. THE TIME AND ATTENDANCE SYSTEM WAS REPLACED TWO YEARS AGO WITH WORKFORCE SOFTWARE THAT

HAS THE CAPABILITY TO HANDLE ALL THE PAYROLL RULES ASSOCIATED WITH THE LABOR UNION CONTRACT. THIS CHANGE HAS IMPROVED THE PROCESS AND REDUCED THE NUMBER OF OVERTIME PAYMENT ERRORS ASSOCIATED WITH LABOR CONTRACT INTERPRETATION BY THE EMPLOYEES.

THE PAYROLL PROCESSING PRACTICES ARE CONSISTENT WITH UTILITY PROCESSES WITH LIMITED FIELD FORCE ACCESS TO COMPUTERS. ALTHOUGH AVANGRID IS ROLLING OUT MOBILE DEVICES AND ASSOCIATED APPLICATIONS IT DOES NOT HAVE ANY PLANS TO UPGRADE TO THE MOBILE WORKFORCE SOFTWARE APPLICATION. THIS WILL CONTINUE THE PRACTICE OF FIELD FORCE TIME BEING ENTERED BY OFFICE PERSONNEL.

Conclusions

Conclusion 6.10.1: *RCG/SCG LLC found the time and attendance collection and processing practices are consistent with those of utilities having similar penetration of computers in their field operations. The time and attendance process has few manual steps.*

Analysis

Employees with either handheld or personal computer access input their time directly into WorkForce. The remaining employees, mostly field union employees, complete a paper timesheet. This timesheet is input into Workforce by designated timekeepers in the local headquarters. Three FTEs in the Payroll Dept. process the payroll for 1900 employees.

Once OEI is implemented at SCG, employees will have the capability of entering their own time and submitting the transaction for supervisory approval.⁴⁰²

Conclusion 6.10.2: *RCG/SCG LLC found that supervisory review and approval process is working well and has kept the payroll errors to a minimum.*

Analysis

All time sheets are required to be reviewed and approved electronically by the supervisor. The few errors being experienced in the payroll processing are input data errors.

Management did not express any concerns with supervisory oversight and approval of time sheets in either accuracy of the time and attendance data or contributing to a delay in time sheet processing.

Conclusion 6.10.3: *RCG/SCG LLC determined that payroll processing of time data requires a minimum amount of data checking and correction.*

⁴⁰² Response to Data Request HR068

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Analysis

The Manager of Payroll is responsible for the accuracy of the payroll and the timely delivery of all employee payments. She has the authority to stop or delay the process if she feels there is an accuracy problem. RCG/SCG LLC found that the payroll process produced a limited level of errors that required corrections.

Conclusion 6.10.4: *RCG/SCG LLC found the use of payroll direct deposits is high for an organization that does not require all employees to use it. However, the printing of payroll advice summaries for union employees enrolled in direct deposit is inconsistent with industry practices.*

Analysis

Approximately 95% of employees have elected direct deposit.⁴⁰³ Electronic payroll advice summaries are issued to management and non union employees who have elected this option. Paper payroll advice covers issues for all union employees including those who have elected direct deposit. Due to CT laws, employees must elect to direct deposit their pay. The union employees must elect electronic payroll advice summaries. The election of direct deposit and electronic payroll advice options are selected separately through the Employee Self Service intranet site.⁴⁰⁴ The Payroll Dept. conducts periodic reminders of the electronic options to encourage employees to select this option.

Recommendations

No recommendations.

⁴⁰³ Response to Data Request HR069

⁴⁰⁴ Response to Data Request HR069

7. CUSTOMER SERVICE

Objectives and Scope

From a customer's perspective, Customer Service is the utility. The customer's satisfaction is generally driven by the credibility of employees and the quality of their results in reading the meters, rendering bills, and answering the customer's inquiries. Therefore, a review of the utility's processes and policies for meter reading, collections, call center, billing, and new business services – and the management of its employees in these areas – is necessary. During major emergency events, such as 2012's Super Storm Sandy, Customer Service must coordinate its information on a near real time basis, with the Incident Command Center (ICC) or Emergency Operations Center (EOC), to provide useful, appropriate, and consistent responses to customer inquiries.

Customer focused target aspirational initiatives include the following:

- Customer satisfaction needs to keep pace with the current day's highly informed and demanding customers.
- Financial support programs must be adequate for poverty level customers.
- Call Center service and credit and collection policies need to be aligned with the realities of the current Connecticut economy.
- Meter reading and billing accuracy need to be virtually error free.
- Customer self service technologies (telephone, IVR, mobile, web/internet, social media and "push" SMS technologies) must be incorporated into the customer experience strategy to manage costs better and satisfy customer preferences.

To address these concerns, this chapter is divided into the following sections:

- Call Center Operations,
- Credit and Collections and Low Income Programs,
- Billing Practices,
- Meter Reading and AMR,
- Service Theft,
- Customer Complaints and Inquiries,
- Customer Satisfaction, and
- Customer Self Service Technologies.

Overall Assessment

SCG RESPONDS EFFICIENTLY TO CUSTOMER REQUESTS, ISSUES ACCURATE AND TIMELY BILLS, RECEIVES PAYMENTS AND ADMINISTERS LOW-INCOME PROGRAMS THROUGH MULTIPLE CHANNELS IN A PROFESSIONAL, COST-EFFECTIVE MANNER.

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SCG handles customer requests through their call center infrastructure in a professional, cost effective manner; service levels have degraded and volumes have grown over recent years but with budget increases and other focused changes, service levels are improving in 2016.

SCG has made operational improvements in their collections practices and management, realizing reductions in operational write offs. However, non hardship customers' receivables over 60 days have grown while total receivables have been reduced.

The SCG billing processes are using leading practices that result in timely and accurate billing and remittance processing while also continuing to seek ways to improve the operation by leveraging external service partners.

SCG's meter reading is completed on a timely basis with highly accurate cost effective readings, and SCG continues to improve the operation wherever possible.

SCG does an effective job in pursuing and prosecuting service theft identified through field personnel but continues to rely on reactive techniques for discovery and hasn't effectively used customer messaging for deterrence.

SCG does an effective job tracking and resolving customer complaints and inquiries.

SCG has multiple customer survey instruments in place to provide customer feedback; however, they provide little actionable feedback that can be used to plan and invest in customer satisfaction improvement initiatives.

SCG is continually looking for ways to expand customer use of self service technologies to keep pace with the evolving preferences of various customer groups.

Evaluation Criteria

The following evaluation criteria are the principal areas of investigation and the foundation for this chapter.

- To what extent did the Company implement the 2010 audit recommendations?
- Are call center performance statistics on par with those of other CT utilities?
- How are customer satisfaction metrics trending?
- Where satisfaction is below the peer group, what are the major causes for deficiency, and are there plans in place to improve?
- Are there adequate financial support programs for poverty level customers?
- How has the current Connecticut economy impacted the Company's customer service and credit and collection policies?

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- How have the company's AMR meters changed SCG performance in meter reading accuracy and billing?
- Are customer self service technologies (telephone and cell phone, the internet and web based social media, and “push” technologies) being used?
- How effective are customer service and communications during major emergencies?
- How are the public messages being coordinated with other corporate functions responsible for communicating with the public?
- Does the Company have adequate systems for customer billing, accounts receivable, and collections in place to safeguard assets as well as to record, summarize, and report the financial results?

Conclusions

Conclusion 7.0.1: *RCG/SCG LLC concluded that SCG has met the intent of the 2010 management audit recommendations. Eight recommendations were made in the Customer Service Operations area of the audit.*

Analysis

RCG/SCG LLC has seen no evidence to the contrary that these recommendations have not been addressed by the Company per the commentary that follows. The 2010 auditing firm stated for SCG that:

This task area includes a review of the quality of customer service, meter reading, complaints and inquiries, credit and collections, service theft, and customer support systems.

The 2010 Management Audit included the following recommendations:

IX 1: Update the customer service policies and procedures. (Refers to Finding IX 4.)

Company Response as of 2Q 2011: *Procedures have been drafted and will be circulated 2011 Q3. In 3Q 2011, Complete. Policies will be reviewed on an annual basis.*⁴⁰⁵

IX 2: Modify the Customer Billing Issue Notification Procedure to more clearly define notification thresholds and parameters (e.g., “significant financial customer impact”). (Refers to Finding IX .7)

Company Response as of 4Q 2010: Complete. SCG adopted the same process being used by CNG which was accepted by the DPUC in Docket No. 08 02 02. This

⁴⁰⁵ Response to Data Request GEN012 Attachment 2.

process is working effectively and therefore we do not believe that changes are necessary.⁴⁰⁶

IX 3: Review the number of live agent call transfers to iQor with the intent of reducing the CRC call volume. Reassess staffing requirements based on associated reductions in workload/call volume. (Refers to Findings IX 13.)

Company Response as of 4Q 2010: Complete. Training at both the SCG call center and iQor has been conducted. Call Center transfers have been significantly reduced.⁴⁰⁷

IX 4: Determine whether both the vacant CRC manager and supervisor positions should be filled. It is likely that one of the positions will be required. (Refers to Findings IX 12 and IX 13.)

Company Response as of 2Q 2011: Complete. Position filled Q2.⁴⁰⁸

IX 5: Develop the systems and data collection procedures necessary to analyze individual collections initiatives, evaluate customer response to various collections methods, and better manage the performance of the first party collections agencies. (Refers to Findings IX 15 and IX 18.)

Areas to consider include:

- Relative effectiveness of various dialer strategies and call times, and the elimination of blaster dials.
- Credit scoring for existing customers based on payment history and associated collections strategies based on relative risk.
- Cost effectiveness of sending termination notices to all customers and whether notices themselves influence customer behavior.
- Relative cost and effectiveness of individual collections mechanisms, including payments/promises made in response to various collections activities.

Company Response as of April 2016: Complete. Expanded and automated the use of active collections vendor at SCG. The results will be increased recoveries, which will more effectively offset the amount going to uncollectible expense. Also hired vendor who specializes in managing Finals vendors to maximize recovery rates to improve Accounts Receivable and mitigate uncollectible expenses.⁴⁰⁹

⁴⁰⁶ Response to Data Request Gen012, Attachment 2.

⁴⁰⁷ Response to Data Request Gen012, Attachment 2.

⁴⁰⁸ Response to Data Request Gen012, Attachment 2.

⁴⁰⁹ Response to Data Request Gen012, Attachment 2.

IX 6: Determine whether additional security deposits of new residential customers are possible. (Refers to Finding IX 17.)

Company Response as of 4Q 2010: Complete. Additional aggressive deposit procedures within the parameters of State regulations have been implemented.⁴¹⁰

IX 7: Modify the contract with iQor to include appropriate collections performance metrics. (Refers to Finding IX 18.)

Company Response as of 4Q 2010: Complete. Performance metrics have been included in the most recent contract.⁴¹¹

IX 8: Evaluate the potential consolidation of service technicians and field collections to increase the number of terminations for nonpayment. (Refers to Finding IX 19.)

Company Response When Receiving the Recommendation: Disagree. The Company disagrees with consolidating the service technicians and field collections. However, Collections and Operations will continue to work together to determine ways to leverage field service personnel and continue to maximize the effectiveness of prompt service terminations as necessary. As of 4Q 2010: Ongoing. Collections will continue to use Field Service personnel to supplement the field collectors' efforts. As of 1Q 2011: Complete.

7.1 Call Center Operations

Objectives and Scope

The Call Center must be positioned to handle a wide variety of customer inquiries efficiently and effectively. Call centers must be staffed with trained customer service representatives (CSR) who understand the company policies and can offer the right level of empathy for customers. Further, there needs to be a clear balance among talk time, the time spent on a call with a customer, and ensuring that the customer's issue is resolved to the customer's satisfaction, as much as possible on the first call. For a number of years CSRs were heavily incented to complete calls in less than three minutes. As a result of this efficiency policy, however, customers were making repeated calls to get the answers they needed. Enlightened

⁴¹⁰ Response to Data Request Gen012, Attachment 2.

⁴¹¹ Response to Data Request Gen012, Attachment 2.

utilities realize that setting an artificial efficiency time limit on calls just created more calls, so they revise their policy to more of a “one call resolution.”

Today’s call centers rely on multiple means of handling customer inquiries, specifically, CSRs, interactive voice recognition (IVR), email, mobile applications, and even social media. Well established call center operations drive a significant level of their calls through the automated solutions, but offer an easy way to get to a CSR, when necessary, especially for customer requests that are more advisory than transactional. Also, these operations have a means to escalate “problematic” calls to a higher level.

CSRs receive on going training to ensure they possess the level of knowledge to address any customer issue and situation effectively. Management has the ability to monitor CSR performance to ensure the level of responses meets their quality standards.

During times of emergencies, the Call Center has the means to expand its call handling ability through both automated and additional CSRs.

Overall Assessment

SCG HANDLES CUSTOMER REQUESTS THROUGH THEIR CALL CENTER INFRASTRUCTURE IN A PROFESSIONAL, COST-EFFECTIVE MANNER; SERVICE LEVELS HAVE DEGRADED AND VOLUMES HAVE GROWN OVER RECENT YEARS BUT WITH BUDGET INCREASES AND OTHER FOCUSED CHANGES, SERVICE LEVELS ARE IMPROVING IN 2016.

SCG currently operates a customer call center in Orange, CT with approximately 20 FTE call takers scheduled to handle calls for requests that include billing, service, general topics, and leak calls. The SCG agents or CSRs are well trained and professional, operating in a well designed and modern center. Annually, roughly half of the agent handled calls are routed to and addressed by iQor agents, an outsourced business partner.⁴¹² Their agents handle calls for credit, and administer turn ons to collect, and move ins/move outs. The call center also has an Interactive Voice Response (IVR) system that is available for customer requests that can be self served. Over the last five years, the amount of calls handled by the IVR has gone from 30% of total received to over 40% now and nearly 50% in the first four months of 2016.⁴¹³

Calls received have averaged slightly above six minutes per call for the prior two years, budgets have been slightly reduced since 2012 through 2015 (but are projected to be up 20% from 2015 to 2016), and inbound volumes have grown by 75% for the years 2013 2015, but are

⁴¹² Interview: B. Reis 05/12/16.

⁴¹³ Response to Data Request CS001.

down by 20% for the first four months of 2016.⁴¹⁴ Over the same period of analysis (2013-2015), the cost per answered inbound call has dropped from approximately \$3.93 per call to \$2.22.⁴¹⁵

Customer Service leadership indicated that since the acquisition by Iberdrola and formation of Avangrid Networks, there have been no substantial changes for the SCG Customer Services organization. Leadership is also optimistic that AVANGRID takes a well-balanced approach to evaluating investments and/or changes by decision-making based on a combination of cost reduction and customer experience impact.⁴¹⁶

Evaluation Criteria

The following evaluation criteria focused on the call center:

- To what extent did the Company implement the 2010 audit recommendations?
- Are call center performance statistics on par with those of other CT utilities?

Conclusions

Conclusion 7.1.1: *RCS/SCG LLC has identified how SCG addressed the 2010 audit recommendations regarding the call center in the beginning of the Customer Service chapter above.*

Conclusion 7.1.2: *RCS/SCG LLC found that SCG's Call Center has experienced increased call volumes over recent years, with degraded service levels, while staffing budgets have remained consistent.*

Analysis

Over the 2013-2015 period, SCG's call volumes have grown substantially and the budget has been flat, only rising recently (the 2016 increase is predominantly due to unionization of employees and the increase in salaries received with no new call takers added). Customers have seen the abandonment rate rise to over 10% (high by industry standards) and service levels as measured by the Average Speed of Answer (ASA) with or without technology have both risen by over 50%, with hold times between 2 and 4 minutes (a good target is 60 seconds or less). The exhibit below shows these performance metrics.

Over this period, it's unclear why call volumes have risen so dramatically while customer counts and the weather have remained relatively stable. Calls/meter has nearly doubled, rising

⁴¹⁴ Interview: B. Reis 05/12/16.

⁴¹⁵ Response to Data Request CS001.

⁴¹⁶ Interview: B. Reis 05/12/16.

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from 3.12 calls/meter in 2013 to 5.3 calls/meter in 2015.⁴¹⁷ Over this same period, the number of financial hardship cases (generally hardship customers initiate more calls than other segments of customers) have also dropped by 20% from 24,286 in 2013 to 20,277 in 2015.⁴¹⁸

Detailed analysis to better understand why groups of customers call more than once a year, why they call, and what alternatives might be available to handle their request in another way might provide input into call volume increases, timing of expected calls (be it seasonal or based on milestones in a customer's billing cycle that might be avoided with proactive messaging), and the consequences of staffing models. Increasing budgets can help to improve these critical customer "dissatisfiers" (such as high abandonment rates and long service wait times), but with a pool of only 20 agents, it's difficult to accommodate the normal seasonal and weekly peaks. Improved analytics may provide improved staffing models with the budget that is in place.

Surprisingly, call center transactional customer satisfaction surveys have only slipped mildly during this same period of lagging service levels, from 89.5% satisfied in 2013 to 87.6% satisfied in 2015.⁴¹⁹

Late in the audit cycle, the team received updates on 2016 progress from the Customer Service team. The 2016 budget increase is due to unionization of employees (with resulting salary increases) and the addition of 5 FTEs to the call taking team. Some of these FTEs were making permanent existing, temporary staff. These additions have positively affected service levels with abandonment rates dropping into single digits and ASA down to 75 seconds with a target of 90 seconds. Additionally, call volumes continue to remain down, year over year, mostly due to improved service levels from better staffing and fewer lost calls or call backs.⁴²⁰

⁴¹⁷ Response to Data Requests derived from CS001 and CS011.

⁴¹⁸ Response to Data Request CS023.

⁴¹⁹ Response to Data Request CS003, Attachment 1.

⁴²⁰ Phone conversations and emails with Bill Reis, October 2016.

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Year	Call Statistics - SCG							Average Handle Time
	Total Calls	Handled by IVR	Calls Handled - Live Rep	Abandoned Calls	% Abandoned Calls	Average Speed of Answer - Without Technology	Average Speed of Answer - With Technology	
2011	593,463	182,400	379,453	31,610	5.30%	114	71	N/A
2012	636,051	190,711	360,075	85,265	13.40%	300	172	N/A
2013	608,339	222,277	349,594	36,468	6.00%	152	85	N/A
2014	737,313	238,044	421,965	77,304	10.50%	252	144	373
2015	1,068,462	428,910	529,905	109,647	10.30%	244	132	370
Jan - April 2016	325,117	147,336	160,341	17,440	5.40%	125	65	362

Exhibit 61 -- SCG Call Center Performance Statistics

Conclusion 7.1.3: *RCS/SCG LLC has concluded that SCG has put in place reliable technology to provide customers with self service options for many of their requests, helping to offload voice calls to agents for customers to handle their requests via self service options.*

Analysis

Accommodating customers' desires to "self cure" or handle their own requests, if offered in a simple and straightforward way, is more satisfying to customers and reduces costs on the utility and its ratepayers.

SCG has seen calls handled by the IVR grow from 30% in 2012 to 50% in the first four months of 2016.⁴²¹ Additionally, payments made through the website or IVR have grown by over 35% since 2012, an increase that is keeping up with leading utilities and customer preferences in most industries.⁴²²

Recommendations

Recommendation 7.1.1: *RCG/SCG LLC recommends an analysis be undertaken to better understand why SCG call volumes have increased in recent years, specifically who's calling (in order to create a better understanding of market segments), why they're calling, what alternatives are available today or could be created to self serve, proactive techniques to provide requested information before a phone call is made, or avoid the request. In addition, in conjunction with the recommendations from section 7.2 of this chapter, Credit & Collections and Low Income Programs, it's important to gain insight into how much the financial hardship policies are affecting the call volumes.*

⁴²¹ Response to Data Request CS001.

⁴²² Response to Data Request CS001.

Recommendation 7.1.2: *RCG/SCG LLC recommends a thorough analysis be conducted to evaluate consolidation of call centers, perhaps initially in a virtual manner across gas and/or electric companies in Connecticut or across Avangrid Networks companies and then evaluate physical consolidation of centers across the Avangrid Networks business, insuring the Ring Fence Agreement⁴²³ commitment remains. Potential benefits include economies of scale across staffing models, deeper competencies across major business functions, and better leverage of strategic technologies. As part of the analysis, seeking customer feedback on service functions they might have an interest in that isn't currently available with smaller, individual company budgets, and it should be identified along with a pro forma financial model of the economic differences in distributed, virtually consolidated, and physically consolidated (multiple centers for back up and overflow) call centers. Challenges to consolidation will continue to involve multiple unions and other corporate issues that will need to be addressed.*

Recommendation 7.1.3: *RCG/SCG LLC recommends enhancements to existing technology platforms, and delivery of additional functions that will enhance the customer experience with the utility, improve service delivery, offload calls to self service, and lower overall costs for customer support. Recommendations include improving the corporate web site to provide more personalized information and enable functions on the web site and/or mobile platform for service requests including self service move in/move out, appointment scheduling, payment arrangements, and payment extensions. Through ongoing customer dialogue, identification of what's important to customers should be carried out and how they want to be informed (potentially proactively) of areas such as alerts or notifications that a bill is due or past due, the ability to make a payment on a mobile device, or awareness of field work in a customer's neighborhood that will impact their service.*

7.2 Credit & Collections and Low-Income Programs

Objectives and Scope

RCG/SCG LLC's review of Credit & Collections and Low Income programs focused on the activities and results of the department's activities. The team reviewed whether there is a clear definition of roles and responsibilities and well documented policies and procedures that captured institutional knowledge of current practices. Further, each area (as discussed below)

⁴²³ Interview J Earley, May 5, 2016

had specific measurements or tests that the Team evaluated to determine if the specific function is operating effectively, efficiently, and (where necessary) coordinates well with other functions.

The review included organization and management functions and their contributions to the effectiveness of the group and adherence to the State of Connecticut Regulatory policies for Credit and Collections and Low Income assistance programs.

Overall Assessment

SCG HAS MADE OPERATIONAL IMPROVEMENTS IN THEIR COLLECTIONS PRACTICES AND MANAGEMENT, REALIZING REDUCTIONS IN OPERATIONAL WRITE-OFFS. HOWEVER, NON-HARDSHIP CUSTOMERS' RECEIVABLES OVER 60 DAYS HAVE GROWN WHILE TOTAL RECEIVABLES HAVE BEEN REDUCED.

A collections staff of 14 (including a few shared with its sister company, CNG), including a supervisor, focus on the collection of delinquent accounts and on the development of new programs and procedures that aid in the collection of arrearages to mitigate potential write offs.⁴²⁴ Recently, a new role has been added, a hardship administrator, to work specifically on hardship cases for customers.⁴²⁵ The staff is split between office workers and field workers. The office staff is responsible for coordinating activities related to theft of service; acting as a liaison between the company credit outsourcing contracts, Community Action Agencies, the Department of Social Services and field workers; and managing bankruptcy activity and hardship coding for low income programs. The field personnel support field collection of payments.⁴²⁶

When an account goes delinquent, SCG follows the prescribed regulatory process and begins dunning at five days via a mailed letter, and then a courtesy call before the next 13 15 days are up should the account still be delinquent. Shut off follows this if there is still no payment received, and extension may be provided if payment arrangements are agreed upon. The exception to this would be if this falls during the moratorium period of November 1 through May 1 and the customer has been qualified as a hardship financial case.^{427,428}

⁴²⁴ Response to Data Request CS050.

⁴²⁵ Interview: B. Reis 05/12/16.

⁴²⁶ Interview: L. Gonzalez 06/07/16.

⁴²⁷ Interview: L. Gonzalez 06/07/16.

⁴²⁸ "The Winter Moratorium is the time period from November 1 through May 1 when customers who are deemed a "hardship case" (because of income or illness) cannot have their utility service terminated if they lack the financial ability to pay their entire bill for gas or electric service. The customer is required to apply to the company with proof of hardship, at which time if the requirements are met, the customer's account is put into protected status." See: <http://www.ct.gov/pura/cwp/view.asp?a=3352&q=404054>.

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RCG/SCG LLC found SCG is using a wide range of collection practices—outsourced call center agents, in house personnel, credit bureau reporting of delinquent accounts, a legal firm which handles escalated collection efforts on accounts with delinquent balances of \$1,000 or more or greater than 60 days delinquent, collection agencies for inactive accounts, and automated resources—to address the increased number of delinquent accounts.⁴²⁹

All in bound customer collection calls are handled by a third party call center (iQor)⁴³⁰ or by using the interactive voice response (IVR) to make a payment.

The Company provides a dedicated credit and collections team to collect past due balances and assist customers with options to pay arrearages via payment plans and an arrearage forgiveness program.

Security deposits may be requested and collected, based on the evaluation of customers' ability to pay, from both residential and commercial customers to mitigate the impact of bad debt. At account initiation, commercial customers may be required to pay a security deposit. Both commercial customers and residential customers may be required to pay a security deposit as terms of a credit reconnection of service. Customers may also be required to pay a security deposit when they have had payment issues in the past. All deposits may be held until the customer demonstrates twelve consecutive months of good payment history. Residential customers that have verified financial hardship or an inability to pay may have their deposit waived or refunded. Students are not required to use guarantors on their accounts.⁴³¹

The Company provides outreach to customers via bill inserts, letters, calling campaigns, events, inbound phone calls, and referrals to Community Action Agencies (CAA)⁴³² to educate customers on additional resources available to them, to code the customer's account hardship, and to enroll the customer into an arrearage forgiveness program.

Accounts that meet the criteria established in the 2014 Connecticut General Statutes, CT Title 16, Sec. Chapter 283, 16 262c "Termination of utility service for nonpayment," are routed through the Company's disconnect process which uses both a disconnect notice, next bill notification of delinquency, and outbound calls to attempt customer notification of the potential for disconnect due to nonpayment and to allow the customer to make payment on their account.

⁴²⁹ Response to Data Request CS006.

⁴³⁰ iQor is a large outsourcing company that "provides customer service, third-party collections and accounts receivable management." See: <https://www.iqor.com/>.

⁴³¹ Interview: L. Gonzalez 06/07/16.

⁴³² There are Community Action Agencies such as Action for Bridgeport Community Development, Inc. (see: <http://www.abcd.org/>), Community Action Agency of New Haven (see: <http://www.caanh.net/>), and Community Renewal Team, Inc. (<http://www.crtct.org/en/>), among others that help low-income customers access energy assistance programs.

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Currently, SMS/Text messaging is not used for slow paying or delinquent customers to notify them of unpaid balances or upcoming shut offs. Customers who do not make the required payment, or are ineligible for a payment plan, or decline a payment plan or participation in the Matching Payment Program, and continue to meet the requirements for service termination set in Sec.16 262c, may have their gas service interrupted.

In cases where the regulations do not permit the termination of service due to nonpayment, the Company may pursue legal action to remedy the arrearage. In cases where access to the Company's equipment may not permit the termination of service due to nonpayment, the Company may attempt to terminate service at the street, if applicable, or move Company equipment to a location where it is accessible.

In recent years, the company has begun to prioritize the shut offs to be executed based on factors involved to optimize productivity and influence customer behavior in a positive way. In past years, the goal was focused on the number of total shut offs. This was heavily influenced by the ability to easily access a meter. Now, through expanded analytics software (DebtNext),⁴³³ other factors are reviewed including weather, the age of outstanding balance, dollars in arrears, and location of the meter (inside vs. outside). Additional analytics are applied to forecast, if a customer is late with payment, when the customer is most likely to pay and become current. If so, these customers should not be put on a shut off list and induce an expensive truck roll to disconnect service. The goal has now transitioned more to outstanding dollars and to achieve 80% collectibles current and 20% delinquent. Currently, SCG is at 37% delinquent.⁴³⁴

When a customer does call with a delinquent account, all efforts are made to have a partial payment provided to demonstrate progress. If the customer can't pay the full amount, they are asked initially to pay 75%, but the company agent is able to move down to a minimum of 20% to maintain service. Regulations allow for a onetime 20% payment arrangement with an agreement and/or budget plan going forward.

Pursuant to 2014 Connecticut General Statutes section 16 262c, paragraph b(5), all Connecticut utilities file an annual joint Arrearage Forgiveness Program. This regulation allows those customers that qualify (an income of 60% or less of the State average income) to be deemed hardship and participate in an arrearage forgiveness program as well as being protected from any interruption to service during the moratorium period of November 1 through May 1. Customers have to demonstrate income (initially) through one of the community action agencies. In the past, customers had to reapply each year, but now they are "auto enrolled" for another

⁴³³ DebtNext offers "a suite of software solutions designed to support the entire life-cycle of charged-off accounts." See: <http://www.debtnext.com/>.

⁴³⁴ Interview: L. Gonzalez 06/07/16.

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season, even if they didn't complete the prior program successfully.⁴³⁵ Until the customer's financial situation improves, they remain in the financial hardship category and balances have generally grown season to season and year over year.

At the end of 2015, SCG had approximately 20,000 customers participating in the plan and receiving energy assistance (EA).⁴³⁶ For calendar year 2016, there were 15,579 applicants who enrolled in the plan and of these 8,421 participated in the Plan (receiving Energy Assistance). Of these, 71% or nearly 6,000 of them successfully completed the plan. This success rate in 2016 is up from roughly 50% over the prior three years. While 2016 is an improvement, it demonstrates that over the prior three years nearly 18,000 or 6,000 per year have been unsuccessful, meaning they will again participate in the program the following fall.⁴³⁷

In addition to the customers qualifying for financial hardship, another approximately 1,744 or 7% of hardship customers, were medical hardship cases.⁴³⁸ There are no criteria for being deemed a medical hardship except for a physician completing an approved PURA form.⁴³⁹ These customers are also protected from shutoffs during the heating season moratorium. There is currently no financial review of medical hardship customers.

When a customer's service ends or there is a move out, the Company issues a final bill to the customer. Should the account remain unpaid, an outbound call is placed that enables customers to make their payment through the Company's IVR either during or subsequent to the call. If these attempts to secure payment are unsuccessful, after 45 days, the final billed account is transmitted to Nair & Levin P.C.,⁴⁴⁰ a legal firm, for resolution or final collection.

If after persistent attempts, these accounts aren't settled, the accounts are turned over to a more traditional collection agency. The use of collection agencies and credit bureau reporting started in the 2012 2013 timeframe.⁴⁴¹

RCG/SCG LLC found that SCG is continuously seeking innovative and reasonable methods to improve its credit and collection effectiveness. Over the last few years, the Credit and Collections organization has taken actions to improve collections performance through enhanced processes, analytics initiatives, and strategic staffing with the overall goal of reducing bad debt expense.

⁴³⁵ Interview: L. Gonzalez 07/13/16

⁴³⁶ Response to Data Request CS023.

⁴³⁷ Response to Data Request CS024.

⁴³⁸ Response to Data Request CS023.

⁴³⁹ Interview: L. Gonzalez 07/13/16

⁴⁴⁰ See: <http://www.nairlevin.com/areas-of-practice>.

⁴⁴¹ Interview: L. Gonzalez 06/07/16.

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In addition to the activities mentioned above, since the last audit, SCG began a series of initiatives and actions to improve collections performance in the following ways:⁴⁴²

Expanded leverage of partner resources: The Company has expanded its efforts around collections using partner resources to extend its capabilities. These include continued reporting of delinquent accounts to credit bureaus, working with a legal firm for early stage collections activities, partnering with a collection agency for later stage and ongoing close collaboration with the iQor contracted call center. Additionally, the company is now able to receive bankruptcy notices online, enabling them to make more timely adjustments to accounts and make decision for charge offs.⁴⁴³

Movement to more aggressive shut off activities: As mentioned above, since 2013 when the company's shut off activities due to an SAP information technology conversion were severely hindered, shut off actions have risen by 65% in the 2013 2015 period.⁴⁴⁴ The company is now utilizing CAD mobile technology to complete field disconnections versus an older, slower manual process.

Review of documentation and key metrics on a regular basis: Over the last few years, the Credit & Collections team has begun to set specific targets, capture progress, and track results for key collections information. Below is a sample of the Credit & Collections of the SCG Customer Service Dashboard.

AVANGRID -Customer Service - Credit and Collections - SCG							
Credit and Collections							
data input: R. Rodriguez							
August	monthly results	YTD results	Projected Year End "Performance"	threshold "Results"	target "Results"	maximum "Results"	
Dashboard performance	40.0%	101.9%	100.0%	50%	100%	200%	
Goal 1: Uncollectible Factor							
	monthly results	YTD results	Projected Year End "Results"	threshold "Results"	target "Results"	maximum "Results"	weights
Uncollectible Factor*	NA	1.75%	2.03%	2.17%	2.03%	1.89%	5%
Goal 2: Improve Operational Performance							
Improvement 60+ days aging 2016 vs 2015 ⁽¹⁾	NA	0.005%	-7%	-5%	-7%	-10%	20%
Percent greater than 60 days (60+ buckets) ⁽²⁾	NA	36%	28%	32%	28%	25%	20%
Collection Efficiency (Benchmark with PSEG & AGA participants) ⁽³⁾	NA	52%	50%	40%	50%	60%	15%
Budget Reduction in Uncollectible Expense (NHS Charge Offs plus Amortization)	-27%	-31%	0%	5%	0%	-5%	20%
Recover Rate - Year End % of dollars recovered by 3rd party ⁽¹⁾	NA	28%	25%	20%	25%	30%	20%

Exhibit 62 - Credit and Collections Dashboard

⁴⁴² Response to Data Request CS006.

⁴⁴³ Response to Data Request CS008

⁴⁴⁴ Response to Data Request CS026

Evaluation Criteria

The following evaluation criteria focused our investigation and served as a foundation for this assessment:

- Are there adequate financial support programs for poverty level customers?
- How has the current Connecticut economy impacted the Company's credit and collection policies?
- Are the company's credit and collection policies effective in minimizing customer account write offs?
- Does the Company have adequate systems for customer billing, accounts receivable, and collections in place to safeguard assets as well as to record, summarize, and report the financial results?

Conclusions

Conclusion 7.2.1: *RCG/SCG LLC did not find any recommendations for Credit & Collections/ Low Income programs resulting from the 2010 SCG Company audit.*

Conclusion 7.2.2: *RCG/SCG LLC concluded that the SCG Credit & Collections team has reduced the level of write offs and billing that have gone into the current year's collections expense over recent years to be more in line with other natural gas companies in the northeastern United States.*

Analysis

RCG/SCG LLC concluded a mixed set of influences have combined to affect SCG's Credit and Collections performance over the last few years. From a Connecticut economy point of view, the home energy affordability gap has increased by 7% over the last four years and existing sources of energy assistance continue to be insufficient to address the gap.

While the affordability gap has expanded from an economic point of view, at the same time the delivered price of natural gas has dropped by 15% from 2013 through 2015.⁴⁴⁵ Additionally, the weather over the most recent two to three years has not been out of the ordinary.

During this period, SCG has undertaken the initiatives and programs described in the above section, such as more aggressive shut off activity, leveraging additional external resources to more aggressively pursue delinquent accounts, and conducting better analytics to optimize the dollars spent and collected.

⁴⁴⁵ *The Home Energy Affordability Gap Report for 2015 in Connecticut – Published by Fisher, Sheehan & Colton.*

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The results show that in 2015, the uncollectible expense derived from current year operations for SCG was **CONFIDENTIAL** ⁴⁴⁶ which was a reduction from \$8.3m in 2014 and the team has targeted (on the 2016 Avangrid Networks Performance Scorecard⁴⁴⁷) another reduction down to **CONFIDENTIAL** ⁴⁴⁸. As of the writing of this plan, they were on or ahead of this target. This shows improvement over prior years and a good trend based on the activities and tactics described above.

However, due to the program guidelines for financial hardship customers, once they are approved to enter the program, a customer's delinquent balance continues to grow, year over year. Success rates for hardship customers in the arrearage forgiveness program that reduce their balance to \$0 or make the minimum payments, are less than 50%. For many, once eligible and welcomed into the program, during the moratorium months of the winter, little or no payments are required and customer balances grow. In the spring, there is a soft close done for the customer and their gas is turned off even though they haven't moved and their balance is not written off. In the fall, assuming nothing has changed, their gas is turned on again and the balance grows and the cycle continues. The balances for these customers become larger and the days outstanding longer.

SCG results show that in 2015, the uncollectible expense of **CONFIDENTIAL** was 2.39% of revenues. In 2014, looking at the New England (gas only) region as a benchmark⁴⁴⁸ (the only year SCG had as a reference), the average uncollectible expense was 2.28% and also in 2014, Yankee Gas' uncollectible expense as a percent of revenues was 2.61%.

During the course of our audit, we reviewed the most recent FERC Form No. 2 filings for SCG and found that for the prior three years (2013 2015) an average of \$20 million of amortized uncollectible expense was included each year, in addition to the current period uncollectible expense. In our conversations with management, these were explained as items included from the 2008 rate case from deferred expenses for years prior to that case. While this affects the current net income of the Company, it is not related to current collections operations or success.

It is unclear how the collections efforts will trend over the coming years with the uncontrollable influences of weather severity, gas prices, Connecticut regulatory policies, the Connecticut economy performance, and federal/local funding for energy assistance.

Conclusion 7.2.3: *RCG/SCG LLC concluded that Low Income programs are administered properly by SCG but contribute to the difficulty in experiencing a higher collections success rate.*

⁴⁴⁶ Response to Data Request CS015.

⁴⁴⁷ **CONFIDENTIAL**

⁴⁴⁸ **CONFIDENTIAL**

Analysis

RCG/SCG LLC found that there is good customer awareness of the low income programs offered in the state of Connecticut and strong coordination with community action agencies and other sources of information to facilitate to the greatest degree possible the administration and enrollment of qualified customers.

The participation rate has increased over the last two years while the number eligible has dropped, due to better awareness programs from the utility and other entities participating in the energy economy.⁴⁴⁹

There are some challenges from the existing regulatory environment that the company continues to work through and they can have a negative impact on collections. The combined influences described in the above section have challenged SCG's receivables situation with the percentage of hardship receivables at 27% of total collectibles for approximately 10% of the customers in 2015.⁴⁵⁰ Additionally, as hardship customers' delinquent accounts continue to grow, the overhang of increasing receivables from ever expanding delinquent hardship accounts will continuously lead to amortized uncollectible expenses in future years that will need to be included in future rate cases.

Conclusion 7.2.4: *RCG/SCG LLC concluded that accounts receivable for non hardship customers have grown longer and larger in recent years than might have been anticipated.*

Analysis

RCG/SCG LLC observed that total receivables for non hardship customers saw a reduction of 20%, from \$55.6 million in 2013 to \$45 million in 2015. As shown in the Exhibit below, however, for non hardship customers, during this same 2013 2015 period, 90 day and 60 day receivables grew by 7%.⁴⁵¹ When reviewing the growth from 2014 to 2015, it shows a much faster growth. It will be important to maintain the programs put in place for dunning, communicating and proactively responding each and every year. Non hardship uncollectibles made up 66% of total uncollectibles for 2015.⁴⁵²

⁴⁴⁹ Response to Data Request CS024.

⁴⁵⁰ Response to Data Request CS025, Attachment 1 – SCG tab.

⁴⁵¹ Response to Data Request CS025, Attachment 1 – SCG tab.

⁴⁵² Response to Data Request CS025, Attachment 1 – SCG tab.

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CS025 CNG-SCG Attachment 1						
Management Audit of						Witness: Laura Gonzlez
Connecticut Natural Gas Corporation						
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SOUTHERN CONNECTICUT GAS						
COMBINED	CURRENT	30 DAYS	60 DAYS	90 DAYS	TOTAL	
2015	\$38,254,164	\$1,614,486	\$585,779	\$21,095,831	\$61,550,260	
2014	\$50,578,057	\$1,172,911	\$836,614	\$20,433,492	\$73,021,075	
2013	\$53,547,493	\$1,776,273	\$589,870	\$21,021,102	\$76,934,737	
Total	\$142,379,714	\$4,563,670	\$2,012,263	\$62,550,425	\$211,506,073	
HARDSHIP	CURRENT	30 DAYS	60 DAYS	90 DAYS	TOTAL	%Hardship of Combined
2015	\$5,183,147	\$340,408	(\$35,474)	\$10,984,990	\$16,473,070	27%
2014	\$9,447,410	\$391,759	\$379,044	\$13,418,142	\$23,636,355	32%
2013	\$9,175,493	\$595,628	\$207,277	\$11,352,158	\$21,330,556	28%
Total	\$23,806,049	\$1,327,795	\$550,847	\$35,755,290	\$61,439,981	29%
NON-HARDSHIP	CURRENT	30 DAYS	60 DAYS	90 DAYS	TOTAL	% non-hardship of combined
2015	\$33,071,018	\$1,274,078	\$621,253	\$10,110,841	\$45,077,190	73%
2014	\$41,130,648	\$781,153	\$457,570	\$7,015,350	\$49,384,720	68%
2013	\$44,372,000	\$1,180,645	\$382,593	\$9,668,944	\$55,604,181	72%
Total	\$118,573,665	\$3,235,875	\$1,461,416	\$26,795,135	\$150,066,092	71%

Exhibit 63- SCG Accounts Receivable report by hardship & non-hardship customers

Recommendations

Recommendation 7.2.1: RCG/SCG LLC recommends that SCG should continue to pursue the identified collection improvement initiatives as well as benchmark other gas and non energy consumer based industries to refine best practices in the activities of notifying customers, analyzing which customers to pursue, and reducing write offs. SCG needs to maintain focus on non hardship financial customers to reverse the trend of longer accounts receivables for this segment.

Recommendation 7.2.2: RCG/SCG LLC recommends that, without regulatory change to Connecticut's low income programs, SCG evaluate and conduct a thorough and detailed analysis to identify initiatives and evaluate the cost/benefits of various proactive and innovative programs to lower the financial burden on the utility and its ratepayers by reducing expected losses from uncollectible expenses of hardship customers and/or reducing extended accounts receivables.

The analysis, prior to identifying solutions, should evaluate results based on areas such as sub categories of customers that struggle, their usage patterns, home environment energy efficiency, customer knowledge of and/or participation in conservation activities, predictive events that might indicate delinquency, and alternative guarantor programs, etc.

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Some of the programs to identify, consider, and evaluate might include:

- *Means testing for medical hardship;*
- *Leveraging digital channels, especially with low income customers, as many don't have home phones any more, with proactive alerts that might include SMS/text notifications for balance due, minimum balance due, apply for an extension, balance past due, shut off notifications rather than paper (opt in that can be gained through waiving fees at some earlier point);*
- *Reviewing deposit programs, especially for students, to include a parental or guardian guarantor after determining how many students from financially stable families have their accounts end up delinquent and/or written off;*
- *Conducting analytics to better understand customer situations to identify early warning signals that might indicate that something more definitive should be done by the utility earlier;*
- *Conduct an ongoing analysis to review those customer accounts that have been in hardship status for more than one year to better understand how long they've participated, success rates, and total outstanding balance averages for this group;*
- *Modifying the regulatory reimbursement levels for the utility and potentially float with fuel charges or price of natural gas to change the levels of reimbursement;*
- *Conducting analyses of customer profiles that are in financial hardship status evaluating their home (age, vintage of furnace and/or water heater, size, usage of gas vs. other similar homes), income levels, etc. and develop a program to retrofit a certain number of homes per year to reduce their wasted energy usage and lower the home's future bills.⁴⁵³ There are C&LM funds available for low income customers in the range of \$2.5 million per year; increasing this amount substantially could help alleviate future extended delinquencies;⁴⁵⁴ and*
- *Evaluating the value and practicality of deploying pre pay meters for customers who qualify for Energy Assistance under certain circumstances. May utilities in the U.S. have deployed prepay meters (mostly electric) and have found customers actually use*

⁴⁵³ For example, SCG might develop a special energy conservation program directed solely at hardship customers that might include the installation of additional insulation in attics and/or walls, insulating hot water heaters, furnace "tune up," minor weather-stripping, etc. Such a program would have the added benefits of creating jobs in the energy service sector, reducing greenhouse gases, and reducing peak loads on the SCG system as well as reducing overall uncollectible expenses.

⁴⁵⁴ Response to Data Request Com008.

less energy and are more satisfied. They are not just for low income as more affluent customers also place value on these programs.⁴⁵⁵ Gas pre pay meters have been deployed in other parts of the world including Ireland at Bord Gais Energy.⁴⁵⁶

7.3 Billing Practices

Objectives and Scope

The three components to billing practices are billing generation, bill presentment, and remittance processing. SCG's customer billing is done through SAP's enterprise platform Version ECC 6.0 Enhancement Pack 6. Billing performs the bill calculation and produces the billing data after receiving periodic meter readings. Bill printing or eBill presentment processes ensure the bills are delivered on time and accurately. Remittance processing advances the customer payments and associated deposits to the utility's bank account.

There are currently 9 people in the SCG billing department that work on billing exceptions on a daily basis for the 18 billing cycles run each month. This team works on high low edits and tracks "kick outs" of bills falling outside of billing boundaries. Additionally, the department focuses on vendor efficiencies and continues to pursue innovations through other vendor offerings to improve bill presentment or remittance processing options.

Overall Assessment

RCG/SCG-LLC CONCLUDED THAT THE SCG BILLING PROCESSES ARE USING LEADING PRACTICES THAT RESULT IN TIMELY AND ACCURATE BILLING AND REMITTANCE PROCESSING WHILE ALSO CONTINUING TO SEEK WAYS TO IMPROVE THE OPERATION BY LEVERAGING EXTERNAL SERVICE PARTNERS.

Evaluation Criteria

The following evaluation criterion focused on meter reading and AMR:

- How have the Company's AMR meters changed SCG performance in meter reading accuracy and billing?

⁴⁵⁵Prepay for Everyone: Prepay Energy and Higher Income Consumers.

⁴⁵⁶Bord Gais Energy - Pay as You Go Bord Gais Energy serves 680,000 natural gas customers in Ireland.

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Conclusions

Conclusion 7.3.1: *There we no 2010 audit recommendations for the Billing Practices area.*

Conclusion 7.3.2: *RCG/SCG LLC concluded that billing generation is done in a timely and accurate manner.*

Analysis

SCG's billing generation process begins each day a meter reading cycle is run. Meter readings are entered in to the billing system within 24 hours after meters are read. Bills are then produced, posted electronically, and mailed within 48 hours after readings are entered into the billing system.⁴⁵⁷

The bills are printed and inserted for mailing, as well as eBills posted by Kubra (<http://kubra.com/>), a print based, customer interaction management provider, at their processing center in New Jersey. All service level agreements with SCG have been met to date.⁴⁵⁸

The key metrics to determine billing accuracy and timeliness are the number of estimated bills that need to be done and erroneous billing amounts produced based on incorrect input. Estimated bills are a good gauge at billing accuracy and timing. SCG has continued to reduce their estimated bills each year. In 2015, they estimated less than 0.8% of all bills.⁴⁵⁹ SCG also runs edits of the bills generated and reviews those exceptions by billing clerk inspection to make sure they are accurate. On average, 10% of the bills generated have an exception and less than 1% require a cancel and rebill.⁴⁶⁰ Auditing reviews these high low checks on a regular basis to determine whether adjustments are needed. The last review was June 2015.⁴⁶¹

Conclusion 7.3.3: *RCG/SCG LLC found that SCG remittance processing is using industry leading practices, resulting in timely and accurate customer payment processing. They also offer payment options comparable to leading industry participants.*

Analysis

SCG uses three methods to receive customers' payments: lock boxes for check payments; online or IVR programs for payments using credit cards, ACH, and EFT; and approximately 50

⁴⁵⁷ Response to Data Request CS030

⁴⁵⁸ Response to Data Request CS031

⁴⁵⁹ Response to Data Request CS011

⁴⁶⁰ Response to Data Request CS038

⁴⁶¹ Response to Data Request CS039

walk in centers for customer cash payments. Third party contractors, including Kubra and Century Bank,⁴⁶² provide all of these methods.⁴⁶³ In a recent survey, over 88% of customers expressed satisfaction for electronic bill payment methods that SCG offers.⁴⁶⁴ Currently, approximately 25% of customers subscribe to eBilling, which is in the upper quartile of American utilities. The billing team continues to focus on increasing the eBill adoption rate and optimizing vendor performance for costs and customer service quality.

Recommendations

Recommendation 7.3.1: *RCG/SCG LLC recommends redesigning the bill, including sister company's bills with the appropriate variety of individual company logos, to personalize messaging to customers whether they receive paper or eBills. Additionally, enhancing the eBill, potentially an interactive bill delivered via email or SMS, and offering a different experience may drive more customers to higher adoption rates. Recently, eBill adoption has stagnated and even reversed.⁴⁶⁵ Customers constantly seek new information and innovative vehicles for reviewing information and satisfying requests. Messaging on the bills can drive eBill adoption, other utility programs, safety, seasonal or storm planning, etc. Additionally, where possible, offering electronic payments for customers who don't adopt eBills will help drive more electronic payments for customers. Currently, only customers subscribed to eBill are able to make recurring payments electronically. Online and/or regular payments have been proven to reduce delinquent payments for some customers.*

Recommendation 7.3.2: *RCG/SCG LLC recommends evaluating a consolidation of the billing clerks across gas and/or electric companies to gain economies of scale.*

⁴⁶² Interview: B. Reis 05/12/16.

⁴⁶³ Response to Data Request CS015 – Attachment 1

⁴⁶⁴ Response to Data Request Com015- 2016 SCG Residential Survey

⁴⁶⁵ Response to Data Request CS015, page 34.

7.4 Meter Reading and AMI

Objectives and Scope

SCG's Meter Reading department reports through the Senior Director of Operations for the company and provides regular meter readings as input to the billing department. SCG installed a fixed network meter reading system in 2015.

The following evaluation criteria were used as the focus of the review:

- To what extent did the Company implement the 2010 audit recommendations?
- How have the company's AMI meters changed SCG performance in meter reading accuracy and billing?

Overall Assessment

SCG's METER READING IS COMPLETED ON A TIMELY BASIS WITH HIGHLY ACCURATE READINGS IN A COST-EFFECTIVE MANNER, AND CONTINUES TO IMPROVE THE OPERATION WHENEVER POSSIBLE.

The SCG recently replaced its drive by automated meter reading system with a fixed network meter reading system. The fixed network system consists of a transmitter on the meter and receivers mounted on utility poles in neighborhoods throughout the entire SCG service territory. The system was turned over to SCG in November 2015. This new system is operated by SCG employees, eliminating the vendor operated drive by system.⁴⁶⁶

Currently, there are four meter readers; this is down from a high of 23 meter readers and 23 routes prior to deployment of the AMR meters.⁴⁶⁷ The new AMI system replaced the vendor operated drive by system.

As of May 2016, there were 202,532 meters installed at SCG. Included in that number are 2,940 meters that do not have an automated meter reading module (1.4%). The old modules were not replaced during the project due to access issues. The old automated meter reading modules continue to be read by a temporary drive by system until access is gained and the new module is installed. All new meter installations and meter exchanges are completed with meters equipped with the new fixed network modules.⁴⁶⁸

⁴⁶⁶ Response to Data Request, CS010.

⁴⁶⁷ Interview: R. Cunningham, 07/14/16.

⁴⁶⁸ Response to Data Request, CS010.

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The annual objectives for Meter Services employees include reducing the number of old drive by meter modules. This objective will continue until all meters are equipped with an AMI device and are reading through the new fixed network system.

The year to date percentage of customer bills based on actual reads is 99.5%. Out of nearly two and half million meter reads in 2015, there were 21,304 (<1%)⁴⁶⁹ estimated bills due to lack of access and/or a failing component or a meter change out during reading cycles.⁴⁷⁰

Conclusions

Conclusion 7.4.1: *RCG/SCG LLC did not identify any 2010 audit recommendations made for the meter reading area.*

Conclusion 7.4.2: *RCG/SCG LLC concluded that the meter reading function accurately reads the vast majority of meters each month in a timely manner.*

Recommendations

RCG/SCG LLC has no recommendations for the SCG meter reading operation.

7.5 Service Theft

Objectives and Scope

Theft of service is the physical act of modifying, bypassing, or tampering with Company owned piping or metering with the intent to use gas without payment. Locked Meter Using Gas (LMUG) are accounts which have been physically locked off by the Company whose lock is subsequently broken or removed without Company authorization.⁴⁷¹

RCG/SCG LLC's review of Service Theft assessed the activities and results of the department's efforts. The team reviewed how the company identified potential theft, investigated these cases, and the results over recent years.

Overall Assessment

SCG DOES AN EFFECTIVE JOB IN PURSUING AND PROSECUTING SERVICE THEFT INCIDENTS IDENTIFIED THROUGH FIELD PERSONNEL, BUT CONTINUES TO RELY ON REACTIVE TECHNIQUES FOR DISCOVERY AND HASN'T EFFECTIVELY USED CUSTOMER MESSAGING FOR DETERRANCE.

⁴⁶⁹ Response to Data Request, CS011.

⁴⁷⁰ Interview: R. Cunningham, 07/14/16.

⁴⁷¹ Response to Data Request GS061 CNG-SCG Attachment

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Initial identification of potential theft is most often provided by field personnel who notice something wrong on a customer premise and are then eligible for a \$100 bonus award.⁴⁷² Investigations are handled by the Credit & Collections Supervisor on an ongoing basis. They receive and follow up on two to three referrals/week requiring 20% of their time. Approximately 65 cases have been confirmed as thefts for SCG since the beginning of 2011.⁴⁷³

Once a referral is made, the supervisors research the address using the SAP Customer Information System to better understand the premise type, property owner, meter usage, and service order history.⁴⁷⁴ If warranted, a field visit is conducted to evaluate or validate theft and gather additional information. Field investigations include the following:

- Crossed meter issues,
- Illegal taps,
- Locked Meter Using Gas,
- Padlocked meters,
- Stolen gas meters,
- Bypasses,
- Company by passes,
- Underground illegal gas line taps, and
- Tampered shut off valves.⁴⁷⁵

Depending on what is discovered, the supervisor will then contact the owner and possibly the residents with police present with them for an interview. If after reviewing the occupancy period from property records or leases, theft is confirmed, a police report is filed and the details are submitted to the Company for back billing on estimated usage.

Evaluation Criteria

The following evaluation criterion was used as the focus of the review:

- How effective is the company in identifying potential service theft and recovering lost revenues due to this?

Conclusions

⁴⁷² Response to Data Request CS045

⁴⁷³ Response to Data Request CS049

⁴⁷⁴ Response to Data Request CS042

⁴⁷⁵ Response to Data Request CS049

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Conclusion 7.5.1: *RCG/SCG LLC did not find any recommendations for Service Theft resulting from the 2010 audit.*

Conclusion 7.5.2: *RCG/SCG LLC concluded that SCG has a reasonable process and adequately staffed function within Credit & Collections for pursuing and stopping identified service theft.*

Analysis

It is SCG's policy to investigate and prosecute to the fullest extent of the Law all reported and verified incidents of Gas Theft. In accordance with Section 53a 127c of the Connecticut General Statutes, tampering is a Class D Felony and is grounds for termination of service and prosecution under the law.

SCG's Credit and Collections supervisor has a sound set of steps in place and good information to pursue and ultimately convict and/or collect revenues lost to gas theft. One in ten referrals received is verified to be theft and roughly 30% of these cases result in prosecution and/or restitution decisions made by the Judicial Courts.⁴⁷⁶ The Company will also bill the customer for equipment theft or damage as well as any associated costs with the investigation will be included in the police report.⁴⁷⁷ The company does not track the level of lost revenues, fines, or jail time.⁴⁷⁸

The Company consistently applies an approach to investigating all potential thefts and verifying them. Field personnel are well trained and incented to report any discrepancies that might be theft.

A 30% conviction rate appears to be low once a case is identified and verified with the steps described. Additionally, by not tracking the level of lost revenues, fines, and/or jail time, it is difficult to assess progress or learn from prior period efforts.

Conclusion 7.5.3: *RCG/SCG LLC concluded that many of SCG's practices for identifying service theft are traditional and reactive in nature, highly dependent on field employees in the course of their field activities to come across, evidence of theft. As AMI/AMR meters in place have now limited the amount of time Company employees are exposed to the meters, alternative and complementary methods for identification may make the process more effective and deliver better results.*

⁴⁷⁶ Response to Data Request CS043

⁴⁷⁷ Response to Data Request CS044

⁴⁷⁸ Response to Data Request CS043

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Analysis

In Docket 16 04 13, the document estimated LUF Gas due to theft for 2015 as \$26,138 for SCG. In the same year, Yankee Gas had over \$200,000 of service theft identified and CNG also had the same amount estimated at \$26,138.⁴⁷⁹ This estimate is based on an analysis conducted in 2005 for SCG and the methodology used continues for both gas companies. In any given year, there is no way of knowing how accurate this is as no estimates from the identified cases are tracked.

In 2005, the identified theft cases for the prior five years were a total of 152.⁴⁸⁰ For the prior five years, from 2011 through 2015, there were 59 verified theft cases or roughly half of the five year period, 2001 2005 with more customers and a more challenging economy.

These are only estimates for the Company and many cases could be overlooked. In the past, there was a high dependence on field personnel to report potential theft and there was a large amount of “eyes on the ground,” especially with regular meter readers. As SCG now has meters not requiring an individual reading, many of these homes don’t have the same physical visitation and scrutiny they did in the past. As the number of cases identified has fallen, this might be because fewer are occurring, fewer are being identified, or a combination of both.

CIS technology as well as other public databases (housing, ownership), are vastly improved, so investigations of theft are more quickly done within the corporate office. This provides an opportunity to set up smarter analytics from these systems to proactively identify potential theft without an employee or other customers having to report it.

RCG/SCG LLC was not able to identify consistent SCG public messages around customer theft or the consequences that might act as a deterrent for other customers. The only ones found in recent Google searches were two articles and one television spot about electricity theft regarding the sister company, United Illuminating (*Utility Crime Doesn’t Pay*, May 20, 2013, http://wtnh.com/2013/05/20/utility_crime_doesnt_pay/). Many utilities regularly build public awareness of cases through various mediums, including local radio, TV, social media, and corporate websites. In these stories, the consequences, including fines and jail time, are often publicized effectively. The audit team also couldn’t find on the SCG corporate website a function for a customer to report potential theft or a specific phone number to call for reporting someone.

Recommendations

Recommendation 7.5.1: *RCG/SCG LLC recommends SCG develop a program to coordinate with local media and regularly publicize through social media, billing messages, the corporate website*

⁴⁷⁹ Response to Data Request GS061 Attachment 2

⁴⁸⁰ Response to Data Request GS061 Attachment 1

and other forums stories about gas service theft to serve as a deterrent due to the chances of being caught, legal consequences, and safety issues. In parallel messages, it is important to make potential customers aware of assistance programs that may be available to them if having trouble paying their bill.

Recommendation 7.5.2: *RCG/SCG LLC recommends preemptive research and sophisticated analytics be developed and used to identify potential theft that is unidentified by field personnel.*

Recommendation 7.5.3: *RCG/SCG LLC recommends SCG put in place more thorough tracking of not only activities but also the results of service theft investigations, including final outcomes, revenues lost, and re captured revenue.*

7.6 Customer Complaints and Inquiry Handling

Objectives and Scope

In addition to reading the meters, rendering bills, and answering the customer's inquiries, utilities must capture, track, and handle in a timely manner customer complaints and/or inquiries that are received by the utility. These can be a key indicator of how customer satisfaction is trending and also serve as an early warning sign to avoid future customer problems by performing root cause analysis on complaints as they are grouped together and indicate an area that needs to be addressed.

RCG/SCG LLC's review of Customer Complaints assessed the activities and results of the department's efforts. The team reviewed how the company identified captured complaints, responded to them, and endeavored to avoid future complaints.

Overall Assessment

SCG DOES AN EFFECTIVE JOB TRACKING AND RESOLVING CUSTOMER COMPLAINTS AND INQUIRIES.

Complaints are defined as anything received, even an inquiry, that is referred from corporate, the Connecticut Attorney General's office, or from PURA. These are logged and investigated by one of three Review Officers (RO) that cover all three companies (UI, CNG, and SCG) within Connecticut. They follow a well defined and documented process to resolve the complaints and/or identify root cause analysis in other parts of the corporation.⁴⁸¹ The review officer is a new role for SCG that was put in place in the fall of 2015. Previously, complaints were spread across customer service agents. The RO role and process ensure better capture, tracking, investigation, and resolution of complaints across the corporation.

⁴⁸¹ Response to Data Request CS027.

Evaluation Criteria

The following evaluation criterion was used as the focus of the review:

- How are customer satisfaction metrics (specifically, complaints logged) trending?

Conclusions

Conclusion 7.6.1: *RCG/SCG LLC found one recommendation from the 2009 Audit that has yet to be addressed, the institution of a gas marketer Complaint Log.*

Analysis

Item 50 19 2 Gas Marketers The Company should maintain a gas marketer complaint log. However, the Company's Manager of Customer Complaints stated that only if complaints about Gas Marketers were logged with PURA would they capture these. There have only been 2 to 4 complaints over recent years.

Conclusion 7.6.2: *RCG/SCG LLC concluded that SCG handles customer complaints and inquiries in a manner consistent with leading industry practices.*

Analysis

Overall complaints have begun to come down since the institution of the Review Officer role that was initiated within UIL over recent years. Benefits have included a more accurate capture of all complaints, the ability to quantify types of complaints, the ability to do more robust root cause analysis, and the capability to drill down to address and communicate complaint status more quickly.⁴⁸²

Complaints logged have not increased or decreased over recent years as the number of shut offs has been increased. The company's 2015 complaints increased slightly due to a more rigorous tracking set of processes. In prior years, SCG had less dedicated resources logging complaints and the process was not as disciplined at capturing all complaints. For 2016, year to date, complaints are down by 50% over the target set which was below 2015 results.⁴⁸³ The team also has put in a place a monthly Complaints scorecard for tracking results against targets.⁴⁸⁴

Recommendations

Recommendation 7.6.1: *RCG/SCG LLC recommends that SCG continue to drive down complaint sources across the corporation through root cause analysis. Additionally, there is no common*

⁴⁸² Interview: J. Thomas 07/14/16.

⁴⁸³ Response to Data Request CS005.

⁴⁸⁴ Response to Data Request CS028.

tracking/follow up system that is used by the company across the immediate Complaint team that others can view, such as call center supervisors. RCG/SCG LLC recommends deploying a complaints management system that creates follow up actions, reports progress, and notifies owners of pending actions to be taken.

7.7 Customer Satisfaction and Customer Experience

Objectives and Scope

Customer satisfaction is a key performance indicator for many utilities when combined with safety, profitability, and ROE. Many gas utilities use the J.D. Power company survey for gas utilities. The survey has now been used in the industry for fifteen years. This survey tests six aspects of a customer's experiences, including billing & payment, price, corporate citizenship, communications, customer service, and field service.

According to J.D. Power, satisfaction with residential gas utilities has improved year over year:

*Customer satisfaction with residential gas utilities (calculated on a 1,000 point scale) ... the current industry wide average score represents a 17 point overall increase from 2015. This increase is driven primarily by customer satisfaction with price—as the cost of natural gas has remained low—and communications.*⁴⁸⁵

Customer Experience can be defined as the sum of all interactions, perceptions, and feelings evoked between a company and a customer over the duration of their relationship. The customer's experiences can begin with a customer's attraction, awareness, discovery, cultivation, advocacy, and purchase and throughout the use of a service.

Many other industries have begun to intentionally design their customers' experiences based on the ongoing capture of deep customer insight to understand what problem they are trying to solve, what their expectations are for the request, and other important preferences. In fact, many of the leading companies collaboratively design new experiences (products, processes, technology, and employee experiences) with their customers in an iterative fashion. Once launched, they will continually enhance the experience, as customer expectations are dynamic based on expectations set by other industry and company experiences.

⁴⁸⁵ [JD Power Gas Utility 2016 Results](#)

Overall Assessment

SCG HAS MULTIPLE CUSTOMER SURVEY INSTRUMENTS IN PLACE TO PROVIDE CUSTOMER FEEDBACK, BUT THEY PROVIDE LITTLE ACTIONABLE FEEDBACK THAT CAN BE USED IN PLAN AND INVEST IN CUSTOMER SATISFACTION IMPROVEMENT INITIATIVES.

Evaluation Criteria

RCG/SGC LLC applied the following evaluation criteria to the customer satisfaction and customer experience review:

- How are customer satisfaction metrics trending?
- Where satisfaction is below that of the peer group, what are the major causes of deficiency and are there plans in place to improve?
- How effective are customer service and communications during major emergencies?
- How are the public messages being coordinated with other corporate functions responsible for speaking with the public?

Conclusions

Conclusion 7.7.1: *RCG/SCG LLC concluded that SCG has contradictory satisfaction research that is also inadequate for identifying what customers want in areas identified for improvement since there is an insufficient level of details on findings to prescribe what and how to change.*

Analysis

SCG does an annual survey of residential and commercial customers on various topics conducted by GreatBlue.⁴⁸⁶ Additionally, our audit team found 2015 and 2016 JD Power results on the JD Power website for SCG. GreatBlue showed a drop in the Customer Satisfaction Index (CSI) to 81.8% in 2016 over 2015 by nearly 8 percentage points.⁴⁸⁷ The report stated that these were driven by decreases in the average ratings of the company characteristics (6.1 percentage points), office personnel (10.6 percentage points), and field personnel (6.3 percentage points). Over the last four years, a similar survey has been conducted with CSI ratings slipping each year (see the following Exhibit).

⁴⁸⁶ GreatBlue is a market research firm. See: <http://www.greatblueresearch.com/about/>.

⁴⁸⁷ Response to Data Request COM015, Attachment 2.

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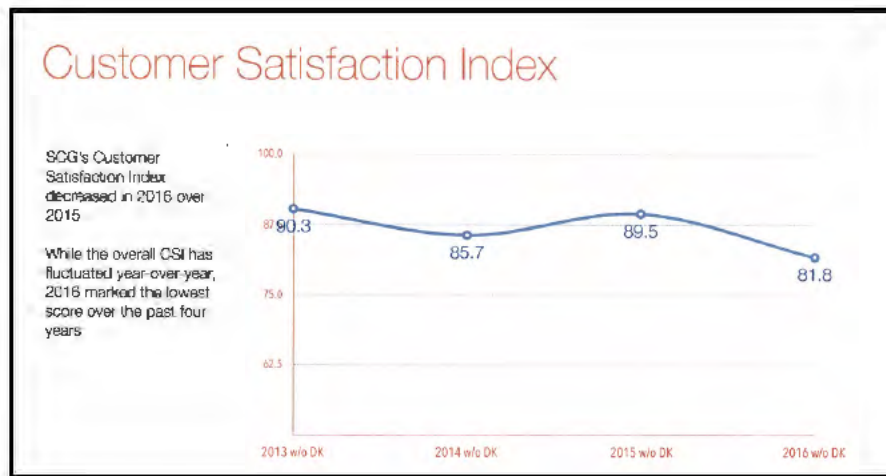


Exhibit 64 - SCG 2016 Residential Customer Survey Satisfaction Index

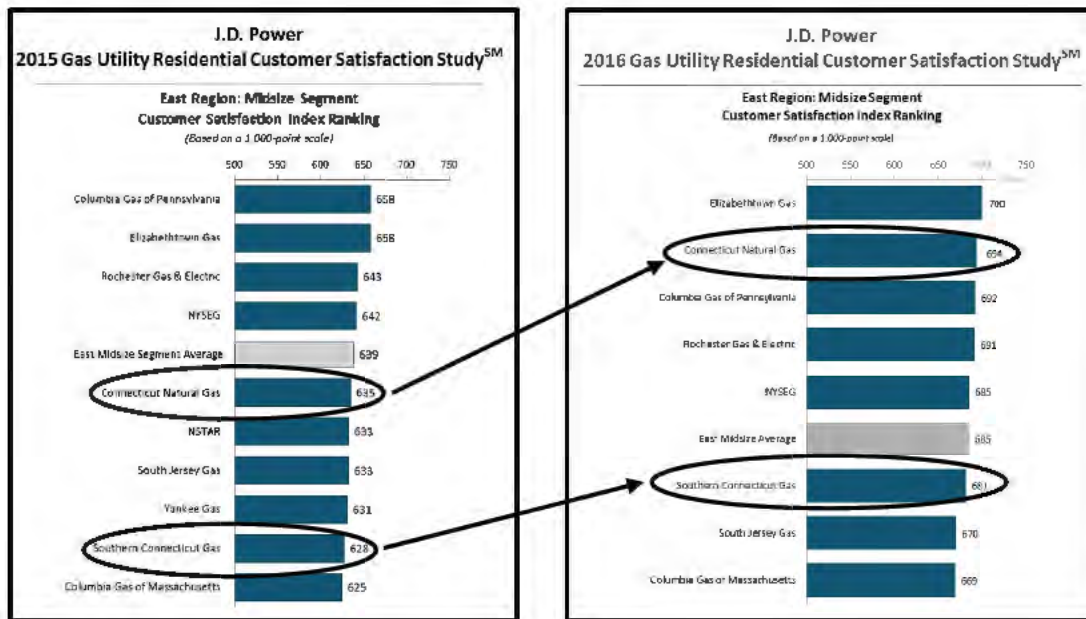


Exhibit 65 – J.D. Power Survey 2015 and 2016 Gas Utility Report – East Region

For the prior three years, a J.D. Power survey was conducted and SCG was compared against other mid sized gas companies in the East Region showing improvements from year to year and against other gas utilities in the same category. In 2016, SCG showed an improvement

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of slightly more than 50 points over 2015⁴⁸⁸ and moved up from the fourth Quartile to the third Quartile. The detailed findings were unavailable for this audit.

It is unclear what caused these two extensive surveys to move in opposite directions. The call center also runs transactional surveys after calls received. Over the timeframe of 2011 through 2015, the satisfaction results also slipped from 90% to 86.3%.

Without more detailed information about what customers are dissatisfied with and want to change, it is challenging for SCG leadership to identify and invest in appropriate initiatives that will reliably improve customer satisfaction with the Company.

Conclusion 7.7.2: *RCG/SCG LLC concluded that SCG does not have effective instruments in place to track customer satisfaction on an ongoing basis versus once a year, preventing them from discerning trends or reactions to events or intentional changes in service offerings or delivered.*

Analysis

The annual GreatBlue survey is completed by 500 customers via the telephone. There may be some customers whose opinions are not expressed because they prefer to interact with the utility digitally. Some segments of customers, especially those targeted for self service enhancements, may not be given the opportunity to provide their input.

Additionally, without regular (monthly, at least) surveys of customers and/or customer panels providing feedback on new channels, programs, or communications, it is challenging for SCG leadership to identify and invest in appropriate initiatives that will reliably improve customer satisfaction with the Company.

The customer operations team shared a copy of the Customer Experience Vision, which includes a high level plan or Digital Roadmap⁴⁸⁹ that focuses on continually improving the customer experience and moving the organization from one that is reactive to one that is proactive. The report is high level and directional but begins to provide a vision for where the utility might need to invest. However, without engaged customers providing both collaborative insights to innovations and constant feedback, the investments may be ineffective.

Conclusion 7.7.3: *While RCG/SCG LLC was not aware of any major emergencies in recent years, SCG appears well positioned to communicate effectively both internally and externally during any such event.*

⁴⁸⁸ Response to Data Request CS003, Attachment 1.

⁴⁸⁹ Response to Data Request CS019, Attachment 1.

Analysis

RCG/SCG LLC conducted multiple interviews within the Corporate Relations and Customer Operations groups and heard of no reason for concern regarding emergency customer service or communications. Discussions conducted and documents reviewed demonstrated effective planning⁴⁹⁰ and well considered external communications channels including IVR, media, social media, and the web⁴⁹¹ sufficient for supporting a major gas event.

Conclusion 7.7.4: *RCG/SCG LLC found that SCG coordinates across functions in speaking with the public in the areas of public events, corporate activities, energy conservation, and safety.*

Analysis

Corporate Communications coordinates message development and delivery (see External Relations chapter) across the corporation by working with the customer facing groups, such as customer service, Conservation and Load Management (CLM), governmental relations, gas operations, and marketing. Promotions and public announcements posted by the Company were reviewed for the recent past and are clear and timely. As some customers (a subset choosing unsatisfied on survey instruments such as J.D. Power or GreatBlue annual survey) appear to be unaware of SCG/AVANGRID programs in which they have an interest, the Company needs more focus on where customers may go to get information and when they are most likely to see it.

Recommendations

Recommendation 7.7.1: *RCG/SCG LLC recommends that SCG conduct deeper research to gain customer insight into where their customer base gets information about Company programs and status. Additionally, this insight should offer deeper understanding to how and where customers would like to satisfy requests such as starting service, paying bills, and reviewing consumption. As enhancements are made to existing processes in the call center or self service channels, it's important to gauge regular and ongoing feedback from customers to discern how changes were received and if adjustments are necessary.*

Recommendation 7.7.2: *RCG/SCG LLC recommends that for the annual customer satisfaction surveys conducted, more dialogue and detailed analysis be added in order to better understand why customers feel more or less satisfied with specific offerings, interactions, and messages. Without more detailed clarity, it will be difficult to improve specific and overall satisfaction levels or understand what moves the needle up or down.*

⁴⁹⁰ Response to Data Request COM003.

⁴⁹¹ Response to Data Request COM004.

7.8 Customer Self-Service Technologies

Objectives and Scope

Most, if not all, industries today have provided and continue to provide their customers with many options for handling their requests and transactions. As the preferences of the younger generations, and now even older segments, preferences change, it is important for service providers to offer simple, consistent, and effective transactional support through newer self service channels, such as mobile technology, SMS/text, web sites, and social media in addition to the more traditional channels of a centralized call center and IVRs.

Overall Assessment

SCG IS CONTINUALLY LOOKING FOR WAYS TO EXPAND CUSTOMER USE OF SELF-SERVICE TECHNOLOGIES TO KEEP PACE WITH THE EVOLVING PREFERENCES OF VARIOUS CUSTOMER GROUPS.

SCG customers can currently perform many self service requests via the IVR and corporate website, including making payments (one time or recurring), receiving a copy of the last bill, analyzing bill history or usage, account information, energy assistance status, payment locations, energy consumption tools, and signing up for automated billing alerts.⁴⁹²

Evaluation Criteria

The following evaluation criterion focused on self service technologies:

- Are customer self service and digital technologies (telephone and cell phone, internet and web based, social media and “push” technologies) being used?

Conclusions

Conclusion 7.8.1: *RCG/SCG LLC has concluded that SCG is well positioned for continuing to expand their self service technologies to improve their customers’ experience and hold expenses in check.*

Analysis

Currently, SCG has a mix of transactions and payment types than can be accomplished through self service channels. They are standard transactions that most utilities offer in the power industry. Efforts are underway to begin to analyze and plan enhancements to existing functions and the provision for additional functions and self service channels to be deployed.

⁴⁹² Response to Data Request CS012.

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This will be a journey that must be started and continuously updated as consumer expectations change. Iberdrola has extensive experience with leading edge technologies in other parts of the world and this bodes well for their U.S. domestic companies and their customers. The Avangrid Networks portfolio of companies will have enough leverage to make strategic investments in these technologies and share them across companies allowing their customers access to preferred channels and leading edge technologies. The establishment of a strategic digital roadmap with specific technologies, functional enhancements, dates, and investments required will be a good start to these long term efforts.⁴⁹³

Recommendations

Recommendation 7.8.1: *RCG/SCG LLC recommends that a focused study/analysis be undertaken to put in place a detailed plan for prioritization, digital design, the case for change and deployment of self service technologies based on customer preferences, economic impact, strategic fit, and least risk/easiest to do to determine prioritization.*

⁴⁹³ Response to Data Request CS019.

8. EXTERNAL RELATIONS

Background

External Relations has seen an unprecedented change in just the last five years as new channels of communications, such as social media, have moved from being an amusing diversion to a requisite for communicating with the Company's external stakeholders. Customers, policymakers, investors, and even employees have come to expect highly accurate and consistent information instantly when critical events occur, and utilities now need to provide near real time information to their customers, vendors, investors, and policymakers. Providing real time information goes well beyond the external relations function and now touches every operating unit in the company. Disasters like 2012's Super Storm Sandy highlight the importance for continually updating the various public and governmental agencies. Additionally, the current nature of much heavier proactive communications and promotions with customers includes taking into consideration areas such as energy efficiency programs, how/where to pay bills, and corporate citizenship. These types of messages and promotions are prime candidates for leveraging multi faceted media campaigns along with the more traditional awareness building methods of billing inserts, web pages, local meetings, and call center interactions.

Objectives and Scope

RCG/SCG LLC's review of external relations focused on the effect of SCG's management and the methods by which SCG relates to its various external stakeholders (i.e., customers, regulators, communities, media, and investors) in the fulfillment of corporate goals and objectives. The review included organizations and management functions and their contributions to the effectiveness of external relations, including:

- Corporate Communications,
- CES, Sales & Marketing,
- Account and Municipalities Management,
- Government Relations,
- Regulatory Affairs, and
- Conservation and Load Management.

The RCG/SCG LLC team reviewed whether each area listed above has a clear definition of role and responsibilities and includes well documented policies and procedures that captured institutional knowledge of current practices. Further, each area (as discussed below) had a specific set of evaluation criteria or tests that the Team evaluated to determine if the specific

function is operating effectively, efficiently, and where necessary coordinates well with other functions to accomplish broader External Relations objectives.

External Relations for SCG has no responsibilities regarding Investor Relations. SCG is a wholly owned subsidiary of UIL Holdings, operating under the Avangrid Networks brand, a component of AVANGRID, Inc. (NYSE symbol: AGR) and shared ownership with Iberdrola. SCG's financing is derived from equity contributions from the parent, a revolving credit facility, intercompany loans/payments, and long term debt agreements. Investor Relations on behalf of SCG concentrates on maintaining access to the financial markets for commercial paper and the placement of long term debt and is, therefore, largely focused on the rating agencies. The Finance chapter of this report addresses the Treasury group's relationship with rating agencies. Other than the shares owned by the parent, SCG has no other investors with whom it must maintain solid investor relations.

Overall Assessment

SCG DEMONSTRATES EFFECTIVE MANAGEMENT OF TIMELY MESSAGE DEVELOPMENT, ADMINISTRATION, AND DISTRIBUTION BOTH EXTERNALLY AND TO EMPLOYEES.

Evaluation Criteria

RCG SGC/LLC applied the following evaluation criteria to the external relations review:

- Does the media strategy address all channels of communications and are they tied to specific external stakeholders?
- Does the Company make adequate use of social media tools to keep its investors, customers, and policy makers informed?
- How are non external relations business operations incorporated into the external relations strategic plan?
- Are employees fully aware of the significance of providing near real time information and properly incented to do this as part of their jobs?

AVANGRID's **Corporate Communications** organization supports each of the operating companies within Avangrid Networks (electric and gas) and Renewables from a corporate group of approximately 18 people. This team was brought together from the operating companies and was undergoing transition planning while RCG/SCG LLC was conducting the 2016 audit. Corporate Communications manages message distribution across many of the traditional channels of communications, such as the call center, physical documents, and mass media. Through coordination, participating in standing meetings with various groups, such as Marketing and Conservation & Load Management (e.g. managing the EnergizeCT conservation program),

messages are crafted and Corporate Communications take the message to the targeted channel for distribution.

They are organized around functions including graphic design, digital strategy, brand protection, media relations, and employee and customer communications. Going forward, they will be consolidating activities and gaining efficiencies. One example: the team conducted an internal employee contest for a newsletter name and consolidated all employee newsletters and regular magazines.⁴⁹⁴ They have also made the decision to maintain individual brands for operating companies, while at the same time gaining more recognition of the AVANGRID brand.

Corporate Communications creates and delivers messages or campaigns to multiple external constituents via traditional channels including, print, TV, radio, billing inserts, special mailers, monthly customer newsletters, and through media partnerships (web banner ads and digital messages on TV). Most of the company's social media have been focused on the electric operating companies as leadership believes it is more relevant for the electric industry to communicate in situations like outages. The group expects to put in place a new social media plan in the second half of 2016.

Messages include traditional ones about safety, call before you dig, company trucks in the area, and that gas is domestic, cost effective, and clean.⁴⁹⁵ Messages are planned throughout the year in an editorial calendar in coordination with other company departments.⁴⁹⁶ During major outages, the team also works as part of the emergency response team to craft and place messages based on what the situation demands.⁴⁹⁷

The **Sales and Marketing** team manages the new business program and is part of the Client & Business Services organization. The team has responsibility for generating qualified and quality leads to expand the use of the gas distribution system and maximize system profitability⁴⁹⁸ for the four former UIL operating companies: UI, CNG, SCG, and Berkshire Gas. There are approximately 68 employees in the organization that provides sales, marketing, and business development to residential and business customers in the operating territories of the companies.

⁴⁹⁴ Interview M. West 05/18/16

⁴⁹⁵ Interview M. West 05/18/16

⁴⁹⁶ Response to Data Request Com010.

⁴⁹⁷ Response to Data Request Com003

⁴⁹⁸ Response to Data Request Com006

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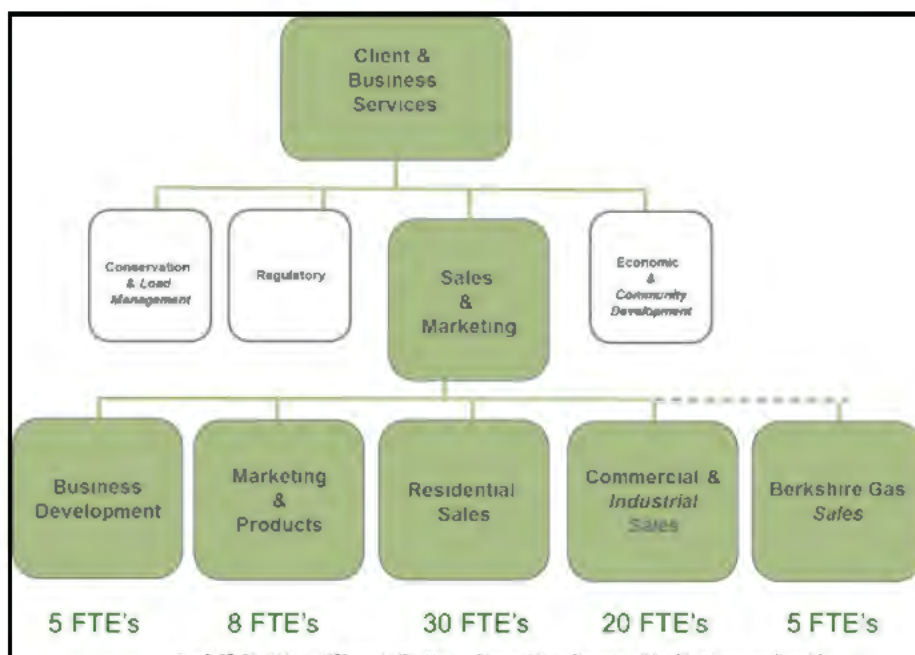


Exhibit 66 - Client & Services Business Unit Organization

The two gas companies in Connecticut, SCG, and their sister company, CNG, prepare a joint marketing plan on an annual basis to optimize results based on market conditions and historical results. The budget associated with the annual marketing plan is supported by both recoverable Comprehensive Energy Strategy (CES) spending and below the line shareholder dollars.⁴⁹⁹ The CES plan states:

*"It is important to make customers who can cost effectively switch to natural gas aware of both the opportunity to reduce heating costs by converting to natural gas and financing options for doing so for those that don't have sufficient capital to cover the upfront costs. Greater Customer awareness will help customers plan for conversion, rather than waiting until a furnace failure when a conversion is unlikely to be feasible."*⁵⁰⁰

To plan for building awareness, the team conducted customer research in 2015 to better understand how customers think and what the key drivers are for making decisions.⁵⁰¹ Prospects were asked the top three benefits of heating with natural gas. They indicated price factors 70%, environmentally friendly/cleaner 53%, easy to maintain 49%, and reliability of the supply was chosen 31% of the time.⁵⁰² New homeowners and homeowners with a furnace at the end of its

⁴⁹⁹ Response to Data Request Com007.

⁵⁰⁰ CES Plan, page 149.

⁵⁰¹ Interview J Lano, 07/13/16

⁵⁰² Response to Data Request Com007.

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life are the best candidates for conversion from an oil furnace to natural gas. The team has segmented their customers into three segments:

- Segment A: customers “on main,”
- Segment B: pipeline in the customer’s vicinity, and
- Segment C: not close, refer them to energy efficiency programs.⁵⁰³

Within the top two segments above, there are a variety of messages that are constructed and delivered focusing on topics such as cleaner fuel, lower cost fuel, and/or the timing of furnace replacement. Focus for Segment B would also be predicated on geographic investments to expand the pipeline as well.

The 2016 marketing budget is \$600,000 mostly for residential, and an additional \$229,400 is budgeted to cover expansion opportunism via CES funds. Proactive marketing is to build awareness and to solicit commitments from customers to convert to natural gas. In 2015 tests were conducted using various messages and channels in different targeted neighborhoods. Channels included robotic telemarketing, direct mail, sales canvassing, and community meetings for larger projects. As of October 2015, those campaigns involved nearly 3,000 prospective customers and resulted in over 1,100 signed sales contracts for 2015.⁵⁰⁴ In the last year, they have deployed a new CRM system, Salesforce.com, to capture prospect information for continuous marketing, set up future milestones, and track campaign effectiveness.

As part of the CRM deployment, they have nearly completed the digitization of documents and inter departmental notifications to cover the entire new business process from marketing through planning and installation to billing. These have been and continue to be collaborative efforts across the Company beginning with a CES steering committee that meets monthly to make decisions about direction and to focus on various anchors and/or municipal relationships.⁵⁰⁵

The 2016 marketing plan includes these tactics as well as radio, web banner advertisements, and door hangers. Incentives are available through CES funding, Conservation & Load Management (C&LM) incentives, manufacturers’ rebates and even low rate of interest financing. These are important mechanisms to fund the biggest barrier to conversion: the upfront cost of a new furnace. They have also put up a gas locator on the corporate web site for customers to enter their address and identify whether they are on the main or close to one.⁵⁰⁶ Through research, the team has discovered that 30% of the non customers on the main are not

⁵⁰³ Interview T. Marone and R. Diotalevi, 05/10/16

⁵⁰⁴ Response to Data Request Com007, Attachment 3.

⁵⁰⁵ Interview Marone/Diotelvi 05/10/16.

⁵⁰⁶ Interview R Diotalevi 06/06/16.

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yet aware of natural gas availability. This provides a great deal of near term opportunity as demonstrated in the table below.

CNG CONVERSION PROSPECTS 2015	Within 150 Feet	151 Feet to Quarter Mile	Quarter Mile to Half Mile	Half Mile to One Mile	One Mile +	LOW USE
	41,210	35,822	11,912	10,002	16,091	11,764*
SCG CONVERSION PROSPECTS 2015	Within 150 Feet	151 Feet to Quarter Mile	Quarter Mile to Half Mile	Half Mile to One Mile	One Mile +	LOW USE
	61,502	60,678	13,694	11,550	22,130	19,647*

*Low use data per SAP customers on RSG rate as of July 2015.

Exhibit 67 - Overall Market Potential for Gas Conversion⁵⁰⁷

Results for the first two years of the program have been solid, exceeding or meeting targets. For 2016 and going forward these targets will be harder to achieve as the price of oil has dropped. The price of oil has moved from \$4 to \$2, causing the customer breakeven point for a natural gas furnace over oil to elongate and go from roughly four years to ten years.⁵⁰⁸

SCG manages their relationships with C&I, small and mid sized businesses, and municipalities across Connecticut gas and electric companies through dedicated Strategic Account Managers (SAMs). There are 12 SAMs that focus on sales, selling of franchise jobs, and serving as liaisons with municipalities during storms or focus on the expansion of gas or electric capacity.⁵⁰⁹

SCG's **Governmental Relations** resources are shared across the three Connecticut companies (CNG, SCG, and UIL). There is a single full time employee that also directs three contract lobbyists in the state. There is ongoing coordination (weekly meetings, annual planning events, ongoing reports of activities across the state in the Legislature⁵¹⁰) with Regulatory Affairs, Sales & Marketing (predominantly about the CES program), Conservation & Load Management, Community Relations, and Corporate Communications. The team coordinates state legislative matters and changes, monitors legislative elections, works with the energy & technology committee in Connecticut on behalf of SCG business groups, and keeps legislators in the loop as Company complaints are lodged through them. The Review Officer concept recently put in place by the Customer Service organization has been very well received.⁵¹¹

Energy has been a bi partisan issue in the state collaborating on moving to cleaner cheaper, more reliable energy across all groups of the population. Since the AVANGRID

⁵⁰⁷ Response to Data Request Com007, Attachment 3.

⁵⁰⁸ Interview R Diotalevi 05/25/16.

⁵⁰⁹ Interview R Diotalevi 06/06/16.

⁵¹⁰ Response to Data Requests Com011, Com012, Com013.

⁵¹¹ Interview A Carbone, 06/06/16.

acquisition, there has been little change in the team's methods or operations. The team is getting exposed to more state proceedings and changes from New York and Maine offering a broader perspective of what may or may not be working. After the 2016 legislative session ended for elections later this year, the team is preparing for 2017 and working with Avangrid Networks to understand if there are any broader issues that need to be included in the Connecticut plans.

SCG receives **Regulatory Affairs** support from a shared organization across the Avangrid Network's Connecticut operating companies. They have responsibility in four areas:

- Traditional regulatory services (coordination of filings, maintaining compliance, dockets, audits, etc. , and load forecasting),
- Electric pricing rate design,
- Wholesale power procurement on electric side, and
- Retail supplier choice/relations, and ISO settlement.⁵¹²

There are no distinctions between electric and gas, and key metrics include compliance deadlines (of which they have not missed any). Tracking is done through a shared software system, CS10. The group also participates in and supplies input into proposals that might come from elsewhere. Their major work efforts for 2016 and 2017 are the management audit and the UIL rate case. The team is a very effective and collaborative senior group that doesn't appear to have any backfill as team members may retire in the future.

Conservation and Load Management (C&LM) is the final organization reviewed within the External Relations chapter. It is also a shared group across the Connecticut operating companies within the Avangrid Network's company. They have 36 FTE's and spend most of their time managing many energy efficiency vendors for leads, intakes, performance, etc., across multiple operating companies⁵¹³ The team administers energy efficiency programs for gas and electric ratepayers based on the same C&LM plan issued by the state in conjunction with other Connecticut utilities, such as Eversource Energy. The key targets are to spend the budget and make the CCF gas savings targets. They work well with other SCG groups to coordinate messaging and capture leads, including Sales & Marketing and Corporate Communications, to promote the Energize CT.com brand for residential, business, and C&I customers. According to the American Council for an Energy Efficient Economy (ACEEE), in the most recent *State Energy Efficiency Scorecard*, Connecticut was tied for fifth place with New York.⁵¹⁴

⁵¹² Interview M Coretto, 06/08/16.

⁵¹³ Interview P McDonnell, 06/06/16.

⁵¹⁴ ACEEE State Energy Efficiency Scorecard, <http://aceee.org/state-policy/scorecard>

Conclusions

Conclusion 8.1.1: *RCG/SCG-LLC concluded that SCG has met the intent of the 2010 management audit recommendation. One recommendation was made in the Marketing area of the audit.*

Analysis

The auditing firm that conducted the 2010 Audit for SCG stated that:

“The objective of the Marketing and Sales organization is to expand the use of Southern Connecticut Gas’ (SCG) existing gas distribution system and maximize system profitability through additions and conversions. This is accomplished through the following:

- Conversions of non customers on mains,*
- Low use residential heating conversions,*
- New/construction/builders,*
- Franchise expansion,*
- C&I/key account firm load additions,*
- Addition of distributed generation load, and*
- Converting interruptible customers to firm rate tariffs.”⁵¹⁵*

VII 1: Evaluate the cost effectiveness of the newer conservation programs based on installed measures and actual program results. (Refer to Finding VII 5)

Company Response as of 4Q 2010: Complete. A Combined Electric and Natural Gas Conservation Plan was filed with the DPUC on October 1, 2010. The Plan, and DPUC's final decision, took into consideration the actual results of the two new residential programs that began in 2009. DPUC approved the Plan with modifications on March 17, 2010.

Conclusion 8.1.2: *RCG/SCG LLC found the groups comprising the External Affairs function (Sales & Marketing, Regulatory Affairs, Governmental Relations, Corporate Communications, and C&LM) for the Company work in close conjunction with each other and other customer facing organizations preparing focused and effective messages, developing forward thinking messaging and promotions strategies, and delivering them through diverse mediums.*

Analysis

On an ongoing and regular basis, teams gather for weekly, monthly, or annual meetings to coordinate messaging to the company’s external constituents as well as employees. Leverage is provided for media investments and coordination of messages is conducted to ensure there

⁵¹⁵ Response to Data Request Gen012, Attachment 2.

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are no conflicting messages or unnecessary duplication. These topics range from traditional ones (such as safety, don't dig, and gas as a clean and reliable source of energy) to more actionable messages about conservation activities/investments or converting from oil to gas. The collective organizations continuously learn more about where their targeted customers go for information and what the best buy is for the invested dollars.

Conclusion 8.1.3: *RCG/SCG LLC found sales and marketing efforts around CES are outstanding and continue to influence results in the Company's gas territory and across the state through regulatory and legislative influence.*

Analysis

Sales and Marketing within regulated utilities are generally a contradiction in terms. While the term sales might be used and marketing has gone on for years to promote programs, very seldom does a utility actually influence change in a customer's buying habits. The Sales & Marketing team for SCG has successfully influenced the State's CES program, continuing to influence it as the market has changed with the price of oil dropping. They have also developed effective sales and marketing competencies within the Company and even integrated a leading edge CRM system that will go end to end when finished from identifying a prospect through billing a new customer in a completely digital format. The greatest challenge may be avoiding diluting this resource and their success as Avangrid Networks wants them to engage to bring the New York and Maine utility teams up to the same standard.

Conclusion 8.1.4: *RCG/SCG LLC has concluded that even though many of the External Affairs' organizations are focused across Avangrid Network companies, little negative impact will be experienced by local customers and in fact, by leveraging deeper subject matter expertise across a larger group, such as corporate communications, the customer experience will be better and communications more effective.*

Analysis

In many discussions with the heads of each of the departments that make up External Relations, RCG/SCG LLC has determined that cost allocations will be done in the same manner as prior to the merger, that access to specialized skills will continue, and important local decisions will still be made locally for each operating company. There will always be a conflict in managing the pull for efficiency versus the desire to personalize or localize messages or programs, but leadership is aware of this and we expect them to continue making fair decisions. On top of this, the exposure by individual groups to other U.S. states regulatory environments, programs, or conservation activities, as well as exposure to Spanish or English technology deployments or other programs should be a strong net positive.

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Recommendations

Recommendation 8.1.1: *RCG/SCG LLC recommends that the Company expand efforts to leverage more digital channels in the future. This includes more personalized messaging for Sales & Marketing to residential prospects or customers. It also includes expanding social media to increase the number of followers from hundreds to multiple thousands. This will provide more consistent and timelier communications to those customers choosing to follow, as this population continues to grow. This will also contribute to the improved awareness of what SCG and Avangrid Networks are doing in the community, and of conservation programs offered, and should contribute to overall customer satisfaction. This will require further analysis on how to and when to promote these channels to heighten adoption rates.*

9. SUPPORT SERVICES

Objectives and Scope

In any major corporation, sound and effective business practices dictate that duplicated functions across various organizations should be centralized to minimize costs and redundancy. This centralization allows the organization to take advantage of shared synergies, buying power from vendors/suppliers, standardization of processes and practices, and other efficiencies. These support services form an essential core group of functions that can produce efficiencies on a large scale in a streamlined, centralized approach. But in providing these services care must be taken that the efficiencies are achieved, that the effectiveness of the service delivery is not impacted by the distance to the internal client (both in physical and organizational terms), and that service to either this client or the external customer (ratepayer) is not degraded.

RCG/SCG LLC's reviewed the Support Services functional area in the following sub categories:

- Risk Management,
- Legal,
- General Services,
 - Facilities Management,
 - Fleet,
 - Document Management,
- Materials Management, including procurement/supply chain and warehouse operations,
- Information Technology, and
- Security.

The RCG/SCG LLC team reviewed whether each of the above functions listed have clearly defined roles and responsibilities and includes well documented policies and procedures that are consistent with current practices. Further, each area (as discussed below) had a specific set of evaluation criteria guiding the evaluation to determine if the specific function is operating effectively and efficiently.

Overall Assessment

RCG/SCG LLC found that the AVANGRID's Support Services organizations generally provide support services in an appropriate manner consistent with utility practices, manage functions through policies and procedures, ensure knowledgeable management and personnel are assigned, and develop and implements plans coordinated with Company goals and needs.

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AVANGRID (the parent company) and AVANGRID Networks (or Networks) are doing a very credible job to facilitate the oversight of risk management within SCG. Senior executives are actively involved in risk management through risk committees, detailed procedures are in place to drive the steps to manage and mitigate risks, and metrics are in place to monitor performance in key risk areas. One missing component our team identified as critical to gas system safety risk mitigation was a Geospatial Information System (GIS) system for SCG. Especially given the extensive construction investments in new and replaced pipeline over the next ten years, accurately capturing system attributes is critically important. The business continuity process is well planned and executed and the SCG's portion is reviewed and updated annually.

RCG/SCG LLC found that the Legal Department is generally well managed and serves SCG properly with a large portion of their activities outsourced. But it could be further strengthened with expansion of their written procedures, enhanced goal setting and the use of a periodic audit of outside counsel's guideline adherence.

The new UIL Environmental and General Services organization is responsible for delivery of Facility Management, Fleet, and Records Management services to AVANGRID. Facilities Management is well organized and has comprehensive operational documentation, experienced management, and appropriately uses contract services to meet the needs of SCG.

Based on our review of the Fleet services' guiding documentation, goals, objectives, and performance measurement, RCG/SCG LLC believes that AVANGRID manages its transportation services to meet the needs of SCG. Its management of inventory and maintenance records, however, needs improvement.

The Document Management responsibility is currently decentralized, but the responsibility is being centralized under the AVANGRID Environmental General Services organization. The current Records Management Policy will be aligned with AVANGRID Document Management requirement by the end of 2017.

The Materials Management (Purchasing and Stores) organization has established policies and procedures, and metrics that are consistent with industry norms, and warehouse operations that are well laid out and with appropriate controlled access. Some automation of current processes is warranted and continued evolution of the Purchasing function should be encouraged.

Information Technology (I/T) is organized appropriately and consistent with its strategy. It has access to senior leadership to ensure I/T solutions are consistent with corporate strategies, and the strategic needs are receiving an appropriate priority of resources. However, the SCG I/T user community's I/T expectations and current I/T needs are

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different than those expressed by the I/T organization and this has resulted in a level of dissatisfaction in the delivery of I/T services.

Security at AVANGRID comprises physical security and cyber security. The responsibility for Security at AVANGRID is centralized. Leading cyber security measures have been implemented to protect against unauthorized access to sensitive information and/or systems. Periodic internal and external audits are performed to confirm the adequacy of the cyber security measures. Physical Security is consistent with industry best practices. However, termination of access control for former employees and contractors needs improvement.

Evaluation Criteria

RCG/SCG LLC identified three main criteria for the evaluation of each of the Support Services area subcategories:

- Does AVANGRID have adequate departmental policies and procedures for each area?
- Are departmental goals and objectives clear, measureable, and realistic?
- Does AVANGRID review performance metrics for each of the departments within Support Services?

Conclusions regarding these criteria are noted in each of the sections that follow.

9.1 Risk Management

Objective and Scope

This section covers our assessment of the SCG Risk Management functions. It includes an assessment of the roles and responsibilities of the Risk Management organization and more generally the efforts undertaken by the companies to actively assess risks, develop mitigation strategies, and measure and monitor progress associated with those mitigation efforts.

Overall Assessment

AVANGRID AND AVANGRID NETWORKS (OR NETWORKS) IS DOING A VERY CREDIBLE JOB TO FACILITATE THE OVERSIGHT OF RISK MANAGEMENT WITHIN SCG. SENIOR EXECUTIVES ARE ACTIVELY INVOLVED IN RISK MANAGEMENT THROUGH RISK COMMITTEES, DETAILED PROCEDURES ARE IN PLACE TO DRIVE THE STEPS TO MANAGE AND MITIGATE RISKS, AND METRICS ARE IN PLACE TO MONITOR PERFORMANCE IN KEY RISK AREAS. ONE MISSING COMPONENT OUR TEAM IDENTIFIED AS CRITICAL TO GAS SYSTEM SAFETY RISK MITIGATION WAS A GEOSPATIAL INFORMATION SYSTEM (GIS) SYSTEM FOR SCG. ESPECIALLY GIVEN THE EXTENSIVE CONSTRUCTION INVESTMENTS IN NEW AND REPLACED PIPELINE OVER THE NEXT TEN YEARS, ACCURATELY CAPTURING SYSTEM ATTRIBUTES IS CRITICALLY IMPORTANT.

Evaluation Criteria

Risk Management as a corporate function is an evolving group across utility companies. Many organizations are “finding their ways” on the appropriate roles and responsibilities for the function. Risk Management personnel are likewise trying to determine how to best “embed” risk management thinking within the business units. It is under this evolving framework that we will assess the SCG Risk Management functions. The evaluation criteria for assessing Risk Management include:

- Development of risk management associated policies and procedures,
- Appropriate senior executive level attention to risk management,
- A formal process to identify risks,
- Development of steps to mitigate risks,
- Methodology to measure and monitor efforts to manage risks,
- Specific identification of risk thresholds to define the “risk appetites for business decisions,” and
- Reasonable efforts to “embed” risk management philosophies within the business units.

Conclusions:

Conclusion 9.1.1: *RCG/SCG LLC found that the Risk Management group is organized to provide senior management attention to Risk Management.*

Analysis

Risk Management is an AVANGRID Networks function. It is managed by a VP of Risk that reports to the Networks CFO. Reporting to the VP of Risk are two direct reports responsible for Risk Management Networks and Business Continuity. One individual is responsible for supporting the Connecticut gas companies while the other individual is responsible for the New York Networks companies.

Regarding the attention to risk by senior management, there is a Risk Oversight Committee comprised of the utility presidents and legal, regulatory, and other key executive leadership. AVANGRID has its own risk oversight committee that includes AVANGRID Networks and other groups. AVANGRID Networks meets as a group as well just prior to the AVANGRID meetings.⁵¹⁶

⁵¹⁶ Interview with VP of Risk and Manager responsible for CT Gas Utilities Risk Management on May 25, 2016

Conclusion 9.1.2: *RCG/SCG LLC found that the Risk Management group has established extensive policies and procedures to support Risk Management for the AVANGRID companies. Further, the company has an excellent process for measuring and monitoring risk.*

Analysis

Our understanding is Iberdrola brought a more robust risk management framework to the UIL companies. This is evident when reviewing the policies, procedures, and structure associated with managing risk. First the policies provide direction of which parts of the business require risk management policies, including corporate entities and operating units.⁵¹⁷ Then there are very specific guiding principles providing threshold level risks permitted within the business, including required metrics to support risk management. As the document is confidential, the details will not be provided in this report.⁵¹⁸

One of the tools used to manage and assess risk is the Risk Register. The Risk Register contains a list of the risks and includes:⁵¹⁹

- Priority (numerical),
- Class (Recurring or Singular),
- Evolution (Risk has increased, decreased, same, or new),
- Short term and long term impacts to financials and cash flow (H, M, L),
- Impact on Reputation (Yes or No),
- Likelihood of event (H, M, L),
- A description of the required mitigation action, and
- A listing of the business unit entity responsible for the action steps.

As a companion to the Risk Register, a Key Risk Reporting Framework document defines the criteria to be used to selecting H, M, or L or the numerical rankings for the items listed above.⁵²⁰ Further, the document defines some level of specificity to documenting action steps and defining responsibilities for those actions in Mitigation Plans. For example, the procedure calls for:

⁵¹⁷ Response to Data Request RM005 CNG-SCG Attachments 1, 2 and 3

⁵¹⁸ CONFIDENTIAL

⁵¹⁹ CONFIDENTIAL

⁵²⁰ Response to Data Request RM012 CNG-SCG Attachment 1

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The Risk Mitigation Plan should contain the following components:

- ✓ Risk Name, Risk Owner, Summary Description and ID as it appears on the Key Risk Register
- ✓ Scope of Mitigation Plan
- ✓ Major Activities, Project or Programs Mitigating the risk, include Historic and Forward looking activities with Timeline and Milestones
- ✓ Stakeholder Impacts
- ✓ Costs (incremental and non-incremental) and if fully budgeted
- ✓ Resources (personnel and other) and if fully committed
- ✓ Status of Mitigation Efforts

Exhibit 68 - Risk Mitigation Plan Components

We were told, however, that SCG has not yet taken their processes to the steps to providing more granularity to the action steps and action step assignments. They recognize this is a next step.⁵²¹

Further, the procedures refer to additional risk categories such as Public/Environmental Impact, Employee/Contractor Impact, Reliability/Expectation of Service Impact, state of Risk Mitigation strategy, Legal and Compliance risk, and Controllability. We have not seen any evidence that the risk analysis has been carried yet to this level, but we agree with the direction of the companies.

Finally, there is a formula for determining risk scores based upon severity of risk and likelihood of occurrence. We have not seen risk scoring of this nature yet in place. We have seen this type of risk scoring mechanism used with other utilities but mostly for specific projects and programs. As part of the justification packages for discrete projects and programs, a risk score using this type of formula would be used to rank projects and be considered, at least as one factor, in prioritizing capital projects.

The risk committee's review designated metrics for risk management. Some of the metrics are in common with the overall corporate scorecard metrics. The selected metrics are focused particularly on risk issues such as Customer Service, Gas Safety, Employee Safety, Financial Risks, and Corporate Security.

As appropriate Gas Safety, there are metrics associated with leak management, emergency response, and third party damages to gas service and main. However, there is another risk mitigation strategy we recommend that does not appear in the company risk registers or metrics. Gas Safety is clearly one of the most important risks for a gas distribution company – due to the potential impacts to employees and the general public. These risks are largely what have driven the current Distribution Integrity Management Programs (DIMP). To support DIMP (and Transmission Integrity Management Programs for companies that have transmission pipe), of prime importance is an understanding of which assets are where and

⁵²¹ Interview with VP of Risk & Manager responsible for CT Gas Utilities Risk Management on May 25, 2016

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capturing all of the required asset attributes. For leading utility companies, this role is assumed by the GIS, displacing paper records which attempt to achieve the same.

Currently CNG has a GIS system, although it is expected to be upgraded. At this time, SCG does not have a GIS system in place to track asset attributes. Especially considering the extensive investments incurring to install new pipe (New Business and Gas Expansion programs) and to replace old pipe (Pipeline Replacement programs) it is especially important to capture accurate asset attributes now, including precise (preferably GPS) locational data, and pipe asset descriptions including pipe type, sizes, and manufacturer information. Pipe type and manufacturer are often important to look for trends when there are failures. If there is a defect, it could exist everywhere this particular asset was installed.

We are told the GIS for SCG is slated for 2020. We recommend to both the companies and to the PURA that these investments in our opinion are prudent for acceleration and are in the best interests to CNG and SCG customers.

Conclusion 9.1.3: *RCG/SCG LLC determined that Risk Management is doing a good job in efforts to “embed” itself within the business units to help them manage risks.*

Analysis

Already described is how Risk Management works closely with the business units to help them manage and mitigate their risks. As a further role, and one we often recommend to our other clients, Risk Management participates in the business case justifications for large capital projects. In particular, Risk Management is part of the workflow and approval steps required for sign off before the project is approved to be included in the budget. One such example is with the Rocky Hill LNG Liquefaction Replacement.⁵²² Risk Management was required to review and sign off on this project.

Conclusion 9.1.4: *RCG/SCG LLC determined that the AVANGRID Business Continuity Planning (BCP) has adequate policies, procedures, and processes. These policies and procedures are implemented and followed by the Companies.*

Analysis

The RCG/SCG LLC team reviewed the Business Continuity Planning policies and procedures.⁵²³ The Business Continuity Plan is maintained in a corporate directory with each area having its own document. The BCP is updated annually based on the annual Business Impact Analysis (BIA) each business area completes. The BCP development is based on the Disaster

⁵²² CONFIDENTIAL [REDACTED]

⁵²³ Response to Data Request FIN099 CNG-SCG Attachment 1

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Recovery Institute International (DRII) methodology All Hazard Approach. What is necessary to recover each area of responsibility is focused on four losses:

- Access to personnel,
- Access to facilities,
- Access to systems and data, and
- Access to vendors (recently added to recognize the critical nature of the supply chain).

There is a BCP process lead for Gas Operations. Each area has a BCP Representative. The BCP process lead maintains a process flow chart of the BCP development and keeps it updated. Each Area's Plan, including the plan of CT Gas Companies, contains:

- Name of the Area's BCP Representative,
- Checklist for recovery,
- Summary of the overall approach to recovery, and
- Recovery structure.

The Area BCP has a limited amount of detail, since the details are determined by the specific disaster that drives the needed recovery.⁵²⁴

SCG annually prepares a BIA that forms the basis for the 2016 update. The planning for the CT Gas Companies was last reviewed and updated in June 2015 as required by the BCP process.⁵²⁵

Recommendations:

Recommendation 9.1.1: *RCG/SCG LLC recommends* SCG provide more detailed risk mitigation action steps and assignments in its risk register tracking mechanism, consistent with company policy.

9.2 Legal

Scope and Objective

The legal function for SCG is the responsibility of a newly appointed UIL Holdings General Counsel Leonard Rodriguez; he covers CNG and UI as well. He also meets frequently with Scott Mahoney, the AVANGRID General Counsel. Most of the actual legal activities are outsourced to a number of outside legal firms. The utility's legal function supports a wide range of the regulatory and business functions of the utility. These functions include General Counsel and

⁵²⁴ Interview C. Jones 07/13/16

⁵²⁵ **CONFIDENTIAL** [REDACTED]

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Siting Council work; regulatory filings and issues at the local, state, and federal levels for the approval of rates; litigation for claims against the utility or against outside parties, collections, environmental permitting and compliance; construction support, financing support and financial reporting; business functions such as purchasing, contracting, union negotiations, human resources, corporate governance and compliance; and other issues as they may evolve.

Overall Assessment

THE LEGAL DEPARTMENT IS GENERALLY WELL MANAGED AND SERVES SCG PROPERLY WITH A LARGE PORTION OF THEIR ACTIVITIES OUTSOURCED. BUT IT COULD BE FURTHER STRENGTHED WITH EXPANSION OF THEIR WRITTEN PROCEDURES, ENHANCED GOAL-SETTING, AND THE USE OF A PERIODIC AUDIT OF OUTSIDE COUNSEL'S GUIDELINE ADHERENCE.

Evaluation Criteria

RCG/SCG LLC's evaluation of the Legal function as it applies to SCG focused on the Legal Department's organizational structure and policies and procedures, responsibilities, experience, and its ability to manage outside legal entities. Our criteria for the Legal function are as follows:

- Does the Company have adequate departmental policies and procedures for each area?
- Are departmental goals and objectives clear, measurable, and realistic?
- Are costs controlled effectively and are outsourced services managed appropriately?

Conclusions:

Conclusion 9.2.1: *RCG/SCG LLC found that, based on a review of the limited number of departmental policies and procedures, the legal process, and their outside counsel retention and billing guidelines, SCG's legal affairs are managed reasonably. But additional policies and procedures appear to be necessary to ensure the fundamental legal, ethical, and company supportable requirements are followed.*

Analysis

The UIL Holdings Legal Department has several reasonable procedures for use in support of SCG. These include:⁵²⁶

1. Legal Department Orientation Plan,
2. UIL Legal Department Data Breach Response Policy – (12/2015),

⁵²⁶ Response to Data Request SSL001

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3. Notification Procedure Regarding Subpoena, Notice of Investigation or Violation, and other Legal or Administrative Documents, Processes or Requests Rev 2013,*
4. UIL “Traffic Light” Summary regarding Contract Review (2011),
5. First Point of Contact (2016),
6. Procedure LS 01: Legal Services (2016),
7. Insider Trading Policy (2014),
8. Policy for Disclosure of Material Information (2011), and
9. Records Management Policy (12/2015).

*An AVANGRID Procedure

There is also a UIL Holdings Retention and Billing Guidelines for Outside Counsel,⁵²⁷ developed in 2015 because of the volume of legal activities covered by outsourcing to outside law firms.

While updates and new procedures are under review,⁵²⁸ RCG/SCG LLC found that several procedures were apparently not available in written form, and there is only a limited current program to assess the completeness of their current procedures and policies. We acknowledge that some required procedures are available within other departments (e.g.: Procurement) but the Legal Department’s Legal Policies and Procedures need to be written and consolidated as an anytime reference. Some needed procedures or policies could include:

- Intellectual Property,
- Patent Policy,
- Problem or Dispute Resolution,
- Compliance related Policies,
- Personal Data Security Procedure,
- Privacy Policy,
- Business Ethics Policy,
- Business Interruption Policy,
- Procedure regarding ongoing notification to Key executives about the Status of Material litigation,
- Contracting Policies,
- Supplier Contract Management Policy,

⁵²⁷ Response to Data Request SSL005

⁵²⁸ Response to Data Request SSL001 Attachments 1 through 9

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- Vendor Selection Policy,
- Vendor/Contractor Bankruptcy Procedure,
- Brand Usage Policy,
- Foreign Transfer of Information and Assets Policy & Procedure,
- Ring Fence Requirements and other PURA Commitments Policy,
- And potentially others.

Several of the currently used procedures and policies appeared to have been recently revised but others require revision especially because SCG is newly acquired and the adjustments to the entire organization.

RCG/SCG LLC believes that policies and procedures should be easily referenced, such as on a company intranet or a well written manual. For Legal they are fundamental to the functioning of the Legal and Company organization. They provide a ready reference guideline with requirements clearly provided on how to conduct business in a legal, ethical, and company supported fashion.

Conclusion 9.2.2: *RCG/SCG LLC concluded that while clear goals were available in the past that were measurable and part of the balanced scorecard, they were not always challenging and often based on essentially doing their routine job and resulting in positive but easily achievable stretch targets even with a shortage of staff. In addition, because of the merger of UIL Holdings Corporation and Iberdrola USA (Now AVANGRID), the 2016 goals, objectives, and performance metrics still remain under development.*

Analysis

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

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These balanced scorecards, however, result in payments that are not overly significant to the measured members. The payment percentage, while said to be small, is based on the level of the employee. In addition, it does appear to provide a reasonable return for the utility. The details behind the categories and the specific goals are clear and reasonable. Each year the Objectives change in support of the same perspective categories: Financial, Customer, Operations, and Capabilities.

In addition, with the level of legal activity, there is only one in house attorney, in addition to the General Counsel, and a paralegal available to support the UIL Connecticut companies. Hence a vast amount of the actual work is outsourced. Further, most of the Division's time is devoted to the electric company UI. Two positions are vacant: a senior in house regulatory attorney and, within Networks, a FERC attorney.

Beyond the annual objectives covered in the balanced scorecards, there are no formal performance metrics enabling the Legal Department to know how it is doing and keeping its management well informed about actual results. These metrics are necessary to support corporate strategies, provide the ability to re evaluate its course of action and are easily changed when they are no longer valid or worthy of the data collection and tracking time investment. There is however, though SAP, a Performance Evaluation program that is used throughout the company, including the legal department, where each employee enters goals into the system and then is evaluated at the end of the year. No management reports were produced in years 2013 to 2015.

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Conclusion 9.2.3: RCG/SCG LLC found that with the significant amount of legal outsourcing, the need to control outside firms is critical and the Legal department uses reasonable systems, guidelines, contracts, and oversight to effectively manage the outsourced services and control costs.

Analysis

Legal is a shared business unit. The internal costs (payroll only since benefit costs are not charged to the department budget) are shared by UIL subsidiaries based on the accepted Massachusetts formula. These internal costs incurred in 2013, 2014, and 2015 are shown in the Exhibit below:⁵³⁰

Year	Description	Total Spending
2013	Total Internal Costs	\$3,612,015.39
	Board of Directors Expense	\$1,925,387.22
	Internal Costs less BOD	\$1,686,628.17
2014	Total Internal Costs	\$3,519,556.90
	Board of Directors Expense	\$2,022,561.43
	Internal Costs less BOD	\$1,496,995.47
2015	Total Internal Costs	\$7,008,856.46
	Board of Directors Expense	\$5,270,374.35
	Internal Costs less BOD	\$1,738,482.11

Exhibit 69 - Internal Legal Costs Incurred in 2013, 2014, and 2015

While the merger caused the BOD costs to be higher than normal in 2015, UIL will no longer incur these costs in the future. There were payouts to directors pursuant to the dissolution of this UIL Board.

The allocation of these internal costs to SCG and its sister CNG are shown in the following Exhibit:⁵³¹

Year	SCG	CNG
2013	16.75%	13.66%
2014	17.50%	14.33%
2015	18.14%	14.48%

⁵³⁰ Response to Data Request SSL007 Attachment 1

⁵³¹ Response to Data Request SSL007 Attachment 1

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Exhibit 70 - Internal Legal Cost Allocation

Outside counsel spending has been reasonably significant but necessary. Among the areas that are currently outsourced are:⁵³²

- Litigation,
- Collections,
- FERC,
- Contracting (Complicated ones are outsourced),
- Construction, LNG,
- Union Negotiations,
- Claims: mostly outside,
- There still is work done in house with:
 - Most regulatory work stays in house,
 - Most Contracting work stays in house, and
 - SEC Filings stays in house.

For SCG itself the outside Counsel Fees and Expenses Incurred in 2013, 2014, and 2015 are shown in the following Exhibit:⁵³³

⁵³² Interviews with L Rodriguez and C Gill

⁵³³ Response to Data Request SSL007

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SUMMARY of SPENDING			
Area of Law - SCG	2015	2014	2013
Bankruptcy	\$0.00 USD	\$0.00 USD	\$0.00 USD
Total Collections	\$434,309.62 USD	\$181,943.45 USD	\$21,654.37 USD
Total Contracts	\$4,347.50 USD	\$45,940.05 USD	\$47,681.34 USD
Total Corporate	\$5,384.88 USD	\$0.00 USD	\$0.00 USD
Total Debtor/Creditor	\$711.70 USD	\$1,230.00 USD	\$360.00 USD
Total Gas Easements	\$29,457.09 USD	\$10,066.00 USD	\$450.00 USD
Total Environmental	\$3,151.20 USD	\$1,470.00 USD	\$11,235.18 USD
Total Human Resources	\$7,482.02 USD	\$22,962.39 USD	\$20,506.91 USD
Total Intellectual Property	\$480.24 USD	\$0.00 USD	\$0.00 USD
Total Litigation	\$52,038.44 USD	\$33,260.99 USD	\$9,866.96 USD
Total HR Litigation	\$0.00 USD	\$0.00 USD	\$0.00 USD
Total Pension & Benefits	\$22,624.36 USD	\$7,109.68 USD	\$13,834.79 USD
Total Real Estate	\$12,474.00 USD	\$1,918.00 USD	\$27,553.24 USD
Total Regulatory > FERC	\$29,845.69 USD	\$34,989.21 USD	\$23,879.04 USD
Total Regulatory > State	\$0.00 USD	\$0.00 USD	\$0.00 USD
Total Tax	<u>\$0.00 USD</u>	<u>\$0.00 USD</u>	<u>\$18,685.09 USD</u>
Total SCG	\$602,306.74 USD	\$340,889.77 USD	\$195,706.92 USD

Exhibit 71 - SCG Outside Counsel Fees 2013 to 2015

UIL also incurs outside counsel expenditures, which, in addition to the direct charges shown above, are also partially allocated to the Connecticut Gas Utilities using the Massachusetts formula.⁵³⁴

For UIL the Outside Counsel Fees and Expenses Incurred in 2013, 2014, and 2015 are provided in the following Exhibit:⁵³⁵

⁵³⁴ Response to Data Request SSL007

⁵³⁵ Response to Data Request SSL007

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SUMMARY of SPENDING			
Area of Law - UIL	2015	2014	2013
Total Contracts	\$82,147.20 USD	\$147,713.66 USD	\$33,255.50 USD
Total Corporate	\$49,747.34 USD	\$39,470.37 USD	\$190,463.78 USD
Total Corporate less BOD	\$45,202.02 USD	\$35,093.40 USD	\$180,598.65 USD
Total Corporate Compliance	\$0.00 USD	\$226.04 USD	\$0.00 USD
Total Human Resources	\$47,591.64 USD	\$22,821.85 USD	\$60,926.71 USD
Total Immigration	\$8,206.71 USD	\$2,849.25 USD	\$27,843.73 USD
Total Intellectual Property	\$1,120.56 USD	\$0.00 USD	\$0.00 USD
Total Litigation/Claims	\$65,358.38 USD	\$149,371.01 USD	\$265,836.67 USD
Total HR Litigation	\$3,862.50 USD	\$16,098.85 USD	\$0.00 USD
Total Lobbying	\$269.27 USD	\$5,594.98 USD	\$0.00 USD
Total Pension & Benefits	\$9,740.09 USD	\$2,202.50 USD	\$3,134.20 USD
Total Real Estate	\$0.00 USD	\$0.00 USD	\$422.50 USD
Total Strategic Opportunities	\$6,071,130.54 USD	\$2,407,024.46 USD	\$0.00 USD
Total Tax	\$0.00 USD	\$0.00 USD	\$2,385.00 USD
Total Workers Compensation	\$155,204.59 USD	\$130,807.14 USD	\$50,914.96 USD
Total UIL	\$6,494,378.82 USD	\$2,924,180.11 USD	\$635,183.05 USD
Total UIL less BOD	\$6,489,833.50 USD	\$2,919,803.14 USD	\$625,317.92 USD
Total UIL less BOD and Strategic	\$418,702.96 USD	\$512,778.68 USD	\$625,317.92 USD

Exhibit 72 - UIL the Outside Counsel Fees and Expenses Incurred in 2013 to 2015

As with the Internal Costs, the UIL costs are allocated among the UIL Connecticut companies according to the same Massachusetts as shown in the exhibit below.⁵³⁶

Year	CNG	SCG
2013	13.66%	16.75%
2014	14.33%	17.50%
2015	14.48%	18.14%

Exhibit 73 - UIL Legal Cost Allocation of Outside Counsel Fees and Expenses

⁵³⁶ Response to Data Request SSL007

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[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

UIL Holdings has and applies Retention and Billing Guidelines for Outside Counsel that are designed to guide outside counsel firms and these guidelines supersede any terms contained in engagement letters that conflict with these guidelines except on a rare exception basis. Hence these guidelines form the basis for the engagement of outside counsel. They cover:

- Roles and responsibilities,
- Staffing,
- Communications,
- Charges,

⁵³⁷ **CONFIDENTIAL** [REDACTED]

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- Billing Administration,
- Items not compensable,
- Budgets,
- Travel,
- Litigation,
- Pretension of experts and local counsel,
- Cyber security and data privacy,
- Business conduct guidelines,
- Conflict of interest,
- Media coverage, and
- Value added services.

Finally, a Paralegal is part of the UIL Holdings Legal Department. Her responsibilities⁵³⁸ include the oversight, approval, and processing of outside counsel using the Serengeti Tracker ebilling software (currently called Thomson Reuters Legal Tracker).

RCG/SCG LLC found that the level of legal expenditures both internally and for outside counsel were reasonable. In addition, the use of the Massachusetts formula to allocate costs is appropriate. The final revised budgets for outside legal work for years 2014 and 2014 closely matched the original budget.⁵³⁹

The Legal Department makes use of the Legal Tracker ebilling software. This is the legal professions most widely used and highest rated ebilling and matter management platform with more than 950 leading corporate law departments and 250,000 users worldwide. Legal Tracker provides instant access to every aspect of every matter, automates tasks, increases visibility, reduces risk, and integrates seamlessly with the utilities outside firms. Legal Tracker also holds live rate analytics information, with detailed data on attorney performance that includes costs, staffing, duration, predictive accuracy, and evaluations by clients.

RCG/SCG LLC found the Retention and Billing Guidelines for Outside Counsel to be both comprehensive and well designed, providing adequate rules and direction for all outside counsel firms, strengthening control of time billing, and lessening the need for micro managing the outside firms especially when coupled with periodic internal audits of the outside counsel firm's adherence to the guidelines.

The use of a paralegal to focus on outside counsel oversight and cost reduction has been effective. The Paralegal prepares periodic reporting and analysis regarding outside counsel spending, develops the department budgets and compares spending to actuals, and prepares a

⁵³⁸ Response to Data Request SSL008 Position Description

⁵³⁹ Response to Data Request and Extrapolated from SSL011, 0% deviation in 2014, +2.6% deviation in 2015

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detailed analysis on Collection invoices. In addition, recently the Paralegal negotiated WestlawNext contract⁵⁴⁰ which resulted in 33% savings from original quote; incorporated Practical Law into the agreement and negotiated 2015 renewal down to 15% from 24%; locked in 3% increase for ensuing two years for both WestlawNext and Practical Law, substantially reducing UIL's exposure. The prior 2014 Practical Law renewal had resulted in increase of 30%. The paralegal and the in house lawyers appear to work hard to reduce rates charged by outside counsel.

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[REDACTED] Instead they rely on their knowledge of the work and of the firm itself. The paralegal was very positive of her internal lawyer's efforts to reduce rates.

Typically, their contracts are man hour based without time estimates. Some contracts use blended rates and there are no monthly retention contracts. If an effort needs another law firm (e.g., need for a local counsel firm), the newly needed counsel contracts with UIL separately and directly so that they do not get an added mark up charge. Some contracts, such as easements, are not to exceed or on a cap fee basis, providing a limit on the total fee paid.

Over the past five years there has not been an audit of the actual application of the Retention and Billing Guidelines for Outside Counsel.⁵⁴¹ While the Guidelines are well done and comprehensive, the actual use of these Guidelines has not been formerly tested.

Recommendations:

Recommendation 9.2.1: *RCG/SCG LLC recommends that the Legal Department conduct a comprehensive needs analysis to determine the need and appropriate wording for a comprehensive set of written procedures and policies, serving as a ready reference, reflecting today's requirements and providing clear legal, ethical, and company supported direction to the entire UIL organization and ensuring appropriate consistency throughout AVANGRID itself.*

Recommendation 9.2.2: *RCG/SCG LLC recommends that the Legal Department work to develop a set of performance metrics with executive buy in to trend and measure using a SMART (specific, measurable, achievable, relevant, and time based) methodology. These metrics can feed into the Balanced Scorecard program which will encourage continual performance improvement, progress reviews and management reporting.*

⁵⁴⁰ Response to Data Request SSL011

⁵⁴¹ Response to Data Request IA005

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Recommendation 9.2.3: RCG/SCG LLC recommends that in light of the Legal Department's dependency on outside legal counsel and its reliance on the Retention and Billing Guidelines for Outside Counsel, consideration be given to having an audit of the actual application of the Guidelines by at least two currently contracted firms.

General Services

Background

Facilities Management, Fleet, and Records Management are now part of the Environmental and UIL General Services organization. This organization reports up to AVANGRID General Services organization, see the following Exhibit.⁵⁴²

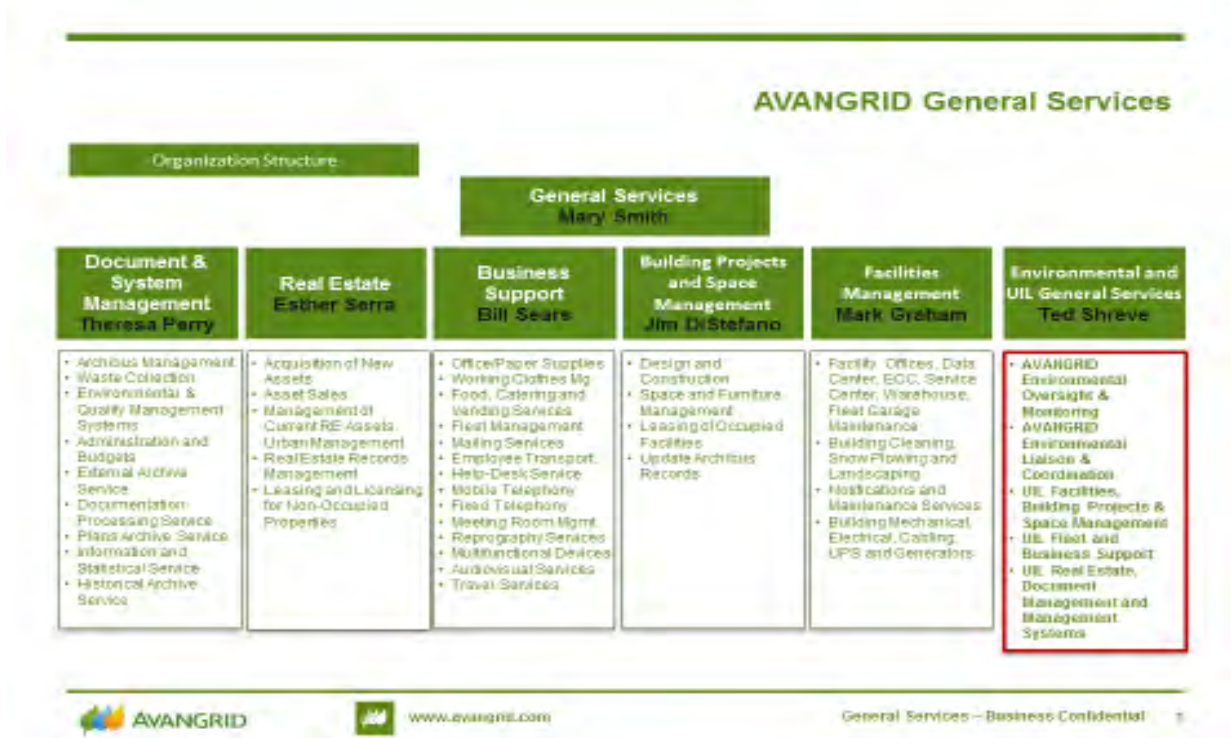


Exhibit 74 - General Services Organization

⁵⁴² Response to Data Request SST011 CNG-SCG Attachment 1

9.3 Facilities Management

Objectives and Scope

An effective facilities management process includes strategy development (focused on customer satisfaction and continuous improvement), the documenting of services, a resource plan to deliver the services, a system to monitor service delivery against expectations, and a customer feedback process. The RCG/SCG LLC team reviewed the AVANGRID's Facility management and its impact on SCG's operation and facility needs.

Overall Assessment

BASED ON OUR REVIEW OF THE FACILITIES MANAGEMENT GUIDING DOCUMENTATION, GOALS, OBJECTIVES, AND PERFORMANCE MEASUREMENT, RCG/SCG-LLC BELIEVES THAT AVANGRID MANAGES ITS FACILITIES ADEQUATELY.

Conclusions

Conclusion 9.3.1: *RCG/SCG LLC found that the AVANGRID Facility organization is well qualified and appropriately organized to meet AVANGRID's facilities management needs.*

Analysis

Facility Management is part of the Environmental and UIL General Services organization. The Facility Manager is responsible for monitoring and maintenance of the AVANGRID's service center and administration facilities. Two supervisors report to the Manager. One is responsible for UIL facilities and the other for the CT Gas (CNG and SCG) facilities. Three union employees with tech level skills maintain the SCG facilities. The supervisor deals directly with the SCG management and regularly attends their meetings to stay abreast of the current and future facility needs. Since they recently negotiated bringing the maintenance function in house, they have no current union barriers to getting their work completed.

They contract out landscaping, janitorial and specialized services. They use contract day porters to maintain and freshen up bathrooms during the day. They use in house personnel for all other facility maintenance and repair. The supervisors are also responsible for quality control of all maintenance contractors. They have developed a checklist to use for this quality review.

Recent additions of full generator back ups SCG's headquarters has resolved the major emergency issue.⁵⁴³

⁵⁴³ Interview T. Shreve 06/02/16

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Company Facilities are secured and monitored 24/7. Reference the Security Section, below.

Conclusion 9.3.2: *RCG/SCG LLC found that the AVANGRID Facility Management organization has adequate departmental policies and procedures, goals, objectives, and space planning guidelines, and regular internal client feedback to meet the facilities management needs of the SCG.*

Analysis

The facilities management organization has specific list of goals and objectives⁵⁴⁴ by which realization of its organizational goal could be reached:

- Improve internal customer satisfaction,
- Improve reactive vs. proactive work order ratio,
- Manage O&M expenditure to 2016 Budget, and
- Manage capital expenditure to 2016 Budget.

RCG/SCG LLC found that the goals and objectives adequately framed the facilities management responsibilities.

RCG/SCG LLC found that specific Building operating protocols are in place to guide facility management personnel. They also use a building management system to monitor in real time building HVAC and other critical systems.⁵⁴⁵

RCG/SCG LLC found their space planning process consistent with industry practices.⁵⁴⁶ All office up fitting designs are standardized based on the type of occupancy. They have bi weekly meeting with I/T regarding space planning. They also meet with Security on an as needed basis to coordinate security requirements with future space planning. All facility project teams include I/T, Security, and Business Unit representatives.⁵⁴⁷

All facility budgets are targeted to rate base and rate case requirements. Charges are carefully assigned to the appropriate business unit.⁵⁴⁸

Conclusion 9.3.3: *RCG/SCG LLC found that AVANGRID has taken steps to reduce substantially its environmental impact at its facilities.*

⁵⁴⁴ Response to Data Requests SSF002 and SSF003 CNG-SCG Attachment 1, SSF005 CNG-SCG Attachment 1

⁵⁴⁵ Response to Data Requests SSF001 and SSF006

⁵⁴⁶ Response to Data Requests SSF008 and SSF009.

⁵⁴⁷ Interview T. Shreve 06/02/06

⁵⁴⁸ Response to Data Request SSF010

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Analysis

No environmental issues for SCG facilities were identified. The number and scope of incidents were all minor. Several environmental compliance programs in place are audited periodically.⁵⁴⁹

The facilities do not have any fuel tanks or underground storage tanks, and they use city water and sewerage. Additionally, since the State of CT does not have any landfills, all refuse is recycled. New CT regulations require each headquarters to become a licensed recycling facility, which is in process.⁵⁵⁰

Recommendations

RCG/SCG LLC has no recommendations for the Facility Management area of this audit.

9.4 Fleet Management

Objectives and Scope

The objective of Fleet review is to evaluate the overall effectiveness of the management of fleet vehicles and equipment to ensure: minimum capital costs, minimum operating costs, maximum fleet utilization, maximum effectiveness of maintenance and repair, including preventive maintenance programs, and minimum impact on the SCG's operations.

Overall Assessment

BASED ON OUR REVIEW OF THE FLEET OPERATIONS' STATED STRATEGY, GOALS, OBJECTIVES, AND PERFORMANCE MEASUREMENT, RCG/SCG-LLC BELIEVES THAT AVANGRID, FOR THE MOST PART, APPROPRIATELY MANAGES ITS TRANSPORTATION SERVICES AND EFFECTIVELY ADDRESSES THE SCG'S FLEET NEEDS. THE MANAGEMENT OF INVENTORY AND MAINTENANCE RECORDS, HOWEVER, NEEDS IMPROVEMENT.

Conclusions

Conclusion 9.4.1: *RCG/SCG LLC found that the Fleet operations have adequate policies and procedures. However, adherence to these procedures in the area of accounting control and data maintenance is lacking.*

Analysis

⁵⁴⁹ Response to Data Requests SSF011 and SSF012.

⁵⁵⁰ Interview T. Shreve 06/02/06

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AVANGRID provided documentation of the Fleet strategic direction, policies and procedures, and preventive maintenance programs. RCG/SCG LLC found these are consistent with industry standards.⁵⁵¹

A March 2016 Audit Services report found that Fleet's implementation of some of their policies and procedures were lacking. These areas related to internal controls, data reconciliation, and accounting related matters. Fleet management has put in place an action plan to address these deficiencies.⁵⁵²

Conclusion 9.4.2: *RCG/SCG LLC determined that Fleet is appropriately organized and logically located to meet SCG's requirements. However, Fleet does not use any workload driven staffing analysis.*

Analysis

Fleet is part of the Environmental and UIL General Services organization. The Manager of Fleet Operations for Connecticut is responsible for the Fleet services provided to AVANGRID. Fleet has a garage facility at each gas company location. Each garage is managed by a supervisor and staffed by five union mechanics at CNG and six union mechanics at SCG. Additionally, there is an Administrative Assistant at SCG that handles all the Fleet clerical responsibilities.⁵⁵³

The staffing has not varied over the past several years. No workload analysis has been completed to tie staffing to work volumes. However, the other AVANGRID companies are using a work analysis tool to justify staffing levels and future staffing requirements.⁵⁵⁴ RCG/SCG LLC believes staffing analysis based on workload projections is consistent with industry practices.

RCG/SCG LLC found that Fleet is looking to take advantage of the synergies of AVANGRID integration by AVANGRID having a person handle the light duty (LD) fleet and the procurement and services for the LD vehicles. AVANGRID has been transferring all maintenance and repair of LD vehicles to a Fleet Services Provider. They currently have an RFP out for a five year contract that covers just over 1300 vehicles. UIL Fleet will look at this model. However current staffing levels in the UIL garages include all the light duty work done by the incumbent bargaining unit employees.⁵⁵⁵

⁵⁵¹ Response to Data Requests SST001 CNG-SCG Attachments 1-4 and SST002

⁵⁵² CONFIDENTIAL [REDACTED]

⁵⁵³ Response to Data Request SST 005 CNG-SCG Attachment 1 and Interview M. Smith 06/02/16

⁵⁵⁴ Interview M. Smith 06/02/16

⁵⁵⁵ Response to Data Request SST012 CNG-SCG Attachment 1

Conclusion 9.4.3: *RCG/SCG LLC found that the Fleet has adequate departmental goals and objectives. However, cost per fleet unit and vehicle utilization additionally needs to be tracked and reported out to management.*

Analysis

RCG/SCG LLC found that Fleet has implemented a Scorecard of Fleet metrics that in 2016 focuses on Fleet Availability, PM vs. Demand Repairs, PM % Completed on Time, Quality of Repair, and Fleet Composition.⁵⁵⁶ However, as recommended in the 2010 CNG Management Audit, cost per fleet unit is still not being tracked. Additionally, fleet utilization is not being measured. Both of these metrics are consistent with industry practices and require that capital and expense budgets are used efficiently.

Recommendations

Recommendation 9.4.1: *RCG/SCG LLC recommends that Fleet implement the AVANGRID staffing analysis process that calculates staffing requirement based on project work volumes.*

Recommendation 9.4.2: *RCG/SCG LLC recommends that Fleet add to their metrics a cost per unit measure and vehicle utilization measure.*

9.5 Document Management

Objectives and Scope

In the area of Document Management, RCG/SCG LLC reviewed AVANGRID's policies, procedures, and practices related to the protection of the critical documents and records. We will determine, consistent with the Evaluation Criteria below, whether SCG's document practices are consistent with industry practices and AVANGRID requirements.

Overall Assessment

RCG/SCG-LLC HAS FOUND THAT AVANGRID'S DOCUMENT MANAGEMENT PRACTICES ARE CONSISTENT WITH THEIR CURRENT POLICY. HOWEVER, THE CURRENT POLICY AND PRACTICES ARE NOT IN ALIGNMENT WITH AVANGRID'S CENTRALIZED GOVERNANCE APPROACH.

Evaluation Criteria

As mentioned at the beginning of this chapter, the evaluation criteria for all Support Services areas included the following:

- Does AVANGRID have adequate departmental policies and procedures for each area?

⁵⁵⁶ **CONFIDENTIAL** [REDACTED]

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- Are departmental goals and objectives clear, measurable, and realistic?
- Does AVANGRID review performance metrics for each of the departments within Support Services?

Conclusions

Conclusion 9.5.1: *RCG/SCG LLC concluded that Records Management's policies and procedures are adequate.*

Analysis

UIL Holdings Corporation maintains a Records Management and Vault Storage Policy ("Policy")⁵⁵⁷ to ensure the prudent maintenance and efficient disposition of records created, received, or transmitted by employees, its operating companies, and other subsidiaries during the normal course of business. The goal of the Policy is to provide specific guidance and detailed operating procedures for the proper management of records from their creation through their active use, retention, and disposition.

Proper records management requires a formalized retention system, which is set forth in the Record Retention Schedule. The Record Retention Schedule applies to all business units, and provides detailed procedures on how long a specific record should be retained in the office, when a record should be transferred to the corporate vault or an off site storage facility, and when an employee may nominate the Record for disposal.

Conclusion 9.5.2 *RCG/SCG LLC concluded that Records Management policies and procedures are inconsistent with the AVANGRID centralized governance approach, and do not address electronic record creation and electronic conversion of paper records.*

Analysis

Records Management is now the responsibility of the General Manager of Environmental and UIL General Services within the Avangrid General Services organization. However, the policy controlling document management at AVANGRID continues to be the "UIL Holding Corporation Records Management and Vault Storage Policy."⁵⁵⁸ This Policy still states that the responsibility for Records Management is the "General Counsel or his or her designee."

General Services, as part of their integration assessment, has concluded that records management activities at UIL "follow a different approach with functions and roles embedded

⁵⁵⁷ Response to Data Request SSF021

⁵⁵⁸ Response to Data Request SSF021 Attachment 1

in different areas of the organization.”⁵⁵⁹ RCG/SCG LLC’s review of the above noted Policy supports this conclusion.

RCG/SCG LLC did not find any policy governing the electronic documents or the requirements to electronically scan existing paper documents.⁵⁶⁰

Recommendations

Recommendation 9.5.1: *RCG/SCG LLC recommends that AVANGRID develop a policy to govern the maintenance of electronic documents and the electronic scanning of critical paper documents not housed in fire retardant waterproof storage within the AVANGRID facilities.*

9.6 Materials Management

Objectives and Scope

An integral part of a natural gas utility’s ability to provide safe and reliable service to its customers in an effective and efficient manner resides in its maintenance and capital programs. Additionally, SCG must respond promptly to and repair effectively gas odor complaints and customer requests for appliance service. Finally, AVANGRID must have in place a supply chain to support its natural gas system expansion programs.

In order to accomplish these objectives, Materials Management (Purchasing and Stores functions) process must procure the necessary materials and services, store, pre package, and issue the materials when needed and accurately process the associated transactions with all these steps following a controlled process. Customers, regulators, and shareholders expect a utility to cost effectively procure needed materials and services and stock only those materials that are of the type and quantity appropriate for the business needs. In order to adequately address all the key Material Management functions, AVANGRID must have formal policies and procedures to procure goods and services, manage strategic inventory and availability of materials, and ensure adequate stocking levels consistent with emergency response and future demands.

In this section, based on AVANGRID’s organizational structure, it is appropriate to break down the Materials Management process into its two key component functions: Purchasing (or Procurement) and Logistics Supply Chain (Warehouse/Stores), including inventory management. Each area is reviewed below.

⁵⁵⁹ Response to Data Request GEN016 CNG-SCG Attachment 1, p69

⁵⁶⁰ J. Vicidomino Interview 06/02/2016

Overall Assessment

OVERALL, AVANGRID'S MATERIAL MANAGEMENT ORGANIZATION (PURCHASING AND LOGISTICS) EFFECTIVELY AND EFFICIENTLY MANAGES ITS PURCHASING PROCESS. LOGISTICS EFFECTIVELY STORES AND MOVES MATERIALS AND SUPPLIES TO MEET THE CURRENT AND FUTURE EMERGENCY, MAINTENANCE, AND CAPITAL NEEDS OF GAS OPERATIONS AND THE CONTRACTORS SUPPORTING THE GAS SYSTEM EXPANSION EFFORT. THE KEY OPPORTUNITY FOR IMPROVEMENT AND COST-REDUCTION IS IN THE STANDARDIZATION OF STOCK CODES AND MATERIAL STANDARDS ACROSS SCG AND CNG AND THE AUTOMATION OF STOCK-OUT TRACKING AND REPORTING. ADDITIONALLY, SINCE NEITHER SCG NOR CNG USES BAR CODING AND/OR RFID TO IDENTIFY AND TRACK ITS MATERIALS, RCG/SCG-LLC BELIEVES A STUDY OF THIS TECHNOLOGY SHOULD BE UNDERTAKEN TO DETERMINE IT IF CAN BE COST-BENEFICIAL TO BE ADOPTED.

Evaluation Criteria

As mentioned at the outset of this chapter, three overall evaluation criteria exist for all sections of Support Services:

- Does AVANGRID have adequate departmental policies and procedures for each area?
- Are departmental goals and objectives clear, measurable, and realistic?
- Does AVANGRID review performance metrics for each of the departments within Support Services?

Materials Management review includes two additional evaluation criteria:

- Are purchasing approval levels, documentation, vendor selection and performance, and bid process compliant to established policies and procedures?
- Are the materials management warehouse facilities and space utilization, inventory turnover and stock levels, and reorder point determination, within expected norms?

Conclusions

Conclusion 9.6.1: *RCG/SCG LLC found that the AVANGRID has adequate policies and procedures for its procurement and materials processes. However, several IT opportunities have yet to be addressed.*

Analysis

Purchasing

SCG interacts with AVANGRID or its affiliates for inter company purchases and/or contract administration, whenever possible. Since they were purchased by UIL Holdings, Purchasing used this leverage to negotiate better pricing and services. Certain commodities that do not require unique specifications are perfect examples (i.e. landscaping, cleaning services, and some inventory parts). For contracts, although utilizing the aforementioned leveraging opportunities, SCG has been kept independent of the other operating companies to limit liability. Some others (i.e. IT items) were purchased by UIL and allocated back to the businesses proportionally.⁵⁶¹

The RCG/SCG LLC team reviewed AVANGRID's Procurement Policy.⁵⁶² Since the Purchasing organization procures all materials and services for AVANGRID, the Policy covers the purchasing for SCG. This Policy is reviewed periodically and was last updated on July 24, 2015.

The Policy includes the procedures and approval responsibilities covering procurement methods, procurement requirements, bid deviation requests, purchase order changes, purchasing agreements or contracts, and compliance. Additionally, they have in place process flow charts for the purchasing processes. The permitted procurement methods are purchase orders, P cards, and check requests. Procurement requirements set forth the need for a bid for all purchases over \$25,000. Where more than \$25,000 of goods or services is being procured from the same vendor in a given calendar year on a no bid basis, a bid deviation request must be submitted and approved.⁵⁶³ The bid deviation approval procedures, also establish the categories of exemptions from this procedure's requirements. RCG/SCG LLC reviewed the list of no bid for the past five years⁵⁶⁴ and did not find any inconsistencies with the procedures.

The above contract procedures are further defined through the RFP Process Map, the Professional Services Agreements (PSAs) for SCG, the UIL Master Construction Agreement (MCA), and the Product Purchase Agreement.⁵⁶⁵ Additionally, all potential contracts must complete three additional contractor requirement documents:⁵⁶⁶ Pre qualification Documents, Contractor Safety Work Rules, and Recommended Standard Guidelines Minimum General Insurance Requirements. The Pre Qualifications Documents include the Safety & Health Questionnaire.

⁵⁶¹ Response to Data Request SC018 CNG-SCG Attachment 1

⁵⁶² Response to Data Request SC003 CNG-SCG Attachment 1

⁵⁶³ Response to Data Request SC019

⁵⁶⁴ Response to Data Request SC006

⁵⁶⁵ Response to Data Requests SC009 CNG-SCG Attachments 1- 7 and SC016

⁵⁶⁶ Response to Data Request SC015 CNG-SCG Attachments 1- 3

Requisition and contract approvals are made in accordance with the Grants of Authority maintained by the Legal organizations.⁵⁶⁷ These authorizations are hardcoded into SAP, so there isn't any process path available to circumvent these requirements.

Periodic and regular training is provided to the purchasing staff through conference attendance, training courses, webinars, and seminars.⁵⁶⁸

Once a contract is awarded, the individual contract is monitored by the business and invoice verification is performed by the Accounts Payable organization following the Vendor Invoice management system (VIM).⁵⁶⁹

Several I/T initiatives and/or opportunities have been identified by purchasing management. The on line bidding tool is currently being rolled out as part of the Supply Relationship Management (SRM) module in SAP. Electronic facing EDI ordering, notice of potential stock outs, and automated lead time calculations has yet to be addressed in SAP.

Logistics Supply Chain

RCG/SCG LLC requested and reviewed AVANGRID Logistics function controlling Procedure Number OP L26: "SAP Materials Management Movement for all Material Types – Receipt, Issue, Credit, Transfer, Adjustment – Logistics," issued 05/19/2014. The stated purpose of this Procedure "is to sequentially describe the steps necessary to receive, issue, credit, and transfer any inventory material in SAP."⁵⁷⁰

These procedures provide detailed work steps the employee should take to complete the specific task in SAP. For example, with respect to Receiving Material, the procedures specify the following steps:

"PROCEDURE DESCRIPTION:

A. RECEIPTS

1. Goods Receipt with Purchase Order (*See attachment*)

MIGO transaction using movement 101

2. Goods Receipt without Purchase Order (*See attachment*)

MIGO transaction using movement 501

3. Cancel Goods Receipt (*See attachment*)

⁵⁶⁷ Response to Data Requests SC013 and SC017

⁵⁶⁸ Response to Data Request SC011 CNG-SCG Attachment 1

⁵⁶⁹ Response to Data Request SC010 CNG-SCG Attachment 1

⁵⁷⁰ Response to Data Request SSM001 CNG-SCG Attachment

MIGO transaction using movement 102”⁵⁷¹

Other areas within the procedures are equally detailed. RCG/SCG LLC found these procedures to be adequate to identify and stipulate what actions should be taken within the Logistics function.

Conclusion 9.6.2: *RCG/SCG LLC found that the AVANGRID Materials Management has appropriate department planning and uses appropriate means to monitor success in meeting the needs of SCG and performing beyond industry performance. However, there was little evidence of commitment to move beyond industry level performance.*

Analysis

Purchasing

The RCG/SCG LLC team reviewed the planning Purchasing uses to anticipate SCG’s future constructions needs. Once SCG completes their planning and budgets for the yearly construction, materials are forecasted by the Materials Planners in the Logistics group. If there is a new demand for a product/service that is not already under contract, the business will contact the Buyer to begin the RFP Process. If it applies to contracted services or materials, the business will work with a material planner to schedule the Purchase Requisition that is submitted into SAP and approved through the UIL Grants of Authority. The Buyer meets periodically with contracted suppliers to understand market conditions including lead times, trends, and Supplier capabilities. The Buyers keep a running list of lead times for all materials.⁵⁷² Purchasing also meets to align resources with the internal customer on regular intervals and attends Gas Operations staff meetings and project reviews to assess the changes/increase in future demand.

AVANGRID Purchasing has extensively studied and benchmarked their processes over the past year. Gartner completed the United Illuminating Supply Management Maturity Self Assessment Study in July 2015. This study covered Focus, Organization and Talent Management, Capability, Technology, Management, Process, and Outcomes. The results showed that they are at the initial maturity level able to anticipate needs, but not yet reached corporate level supply management collaboration. The study recommends pursuing five key initiatives:⁵⁷³

1. Establish processes and governance that drive corporate level supply management collaboration, including use of centers of excellence (COEs).
2. Integrate source to settle (S2S) modules with your ERP supplier portal, including

⁵⁷¹ Response to Data Request SSM001 CNG-SCG Attachment

⁵⁷² Response to Data Request SC014 CNG-SCG Attachments 1 - 3

⁵⁷³ Response to Data Request SC012 CNG-SCG Attachment 2

advanced shipment notification (ASN), evaluated receipt settlement/electronic fund transfers (ERS/EFTs), and contract life cycle management (CLM).

3. Focus on cost models that support lowest total cost of ownership (TCO).
4. Implement supplier segmentation with focus on criticality versus spending (and profit impact).
5. Expand supplier risk reduction efforts by increasing upstream visibility.

RCG/SCG LLC concurs with the study's next step, which is to "create a draft Roadmap" for the future direction of Supply Management.

Additionally, in January 2016, they completed the CEB Ignition Diagnostic for Procurement study in conjunction with the CEB Procurement Leadership Council.⁵⁷⁴ CEB Ignition™ Diagnostic enables organizations to improve functional performance by assessing their performance across a broad set of functional activities. The diagnostic measures two primary dimensions: maturity and importance. It covers 24 functional activities across six functional objectives. AVANGRID's purchasing maturing was between two and three out of a scale of five and at the average for the 47 companies in the survey. It can be noted that this result is consistent with the Gartner self assessment discussed above.

The Diagnostic for Procurement study identified three high priority areas of below average maturity and high importance:

- Identify and prioritize risk,
- Segment suppliers, and
- Monitor and report levels of risk exposure.

Each area has specific attributes that must be achieved to move average maturity (industry practices) up to High Maturity (best in class).

RCG/SCG LLC did not find any plans to address the recommendations of these two studies.

Logistics Supply Chain

RCG/SCG LLC found the Logistics Supply Chain followed a structured materials process from material receipt to material issue.⁵⁷⁵

⁵⁷⁴ Response to Data Request SC012 CNG-SCG Attachment 1

⁵⁷⁵ Response to Data Request SSM008

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Similar to its request for goals and objectives related to the purchasing functions, the RCG/SCG LLC team requested and reviewed the goals and objectives related to the Logistics Supply Chain function to determine if they are clear, measurable, and realistic.

AVANGRID provided a list of the goals and objectives and performance metrics. The 2016 goals, which are typical for the materials management function, include the following:⁵⁷⁶

I. Financial Operate to Budget

- A. Maintain target inventory turn ratio of (2 per year)
- B. Complete 100% of assigned Cycle Counts
- C. Perform yearly Obsolescence Analysis

II. Participate in various Customer Focused Activities

- A. Timely resolution of audit issues
- B. Visit other Utilities / Companies to participate in best practice sharing
- C. Conduct / participate in Monthly Operations meetings

III. Improve Safety and Operational Efficiencies

- A. Conduct Monthly Safety Meetings & Audits
- B. Complete Safety E Learnings
- C. Complete First Aid Course

IV. Staff Capabilities Improvements

- A. Participate in Employee Engagement Initiatives
- B. Conduct Monthly Staff Meetings and Team Building Event
- C. Complete Company and Off Site Skill Set Improvement Trainings

RCG/SCG LLC reviewed several performance reports provided by AVANGRID, including inventory value,⁵⁷⁷ inventory turns,⁵⁷⁸ and inventory accuracy counts.⁵⁷⁹ In addition, the Logistics

⁵⁷⁶ Response to Data Request SSM002

⁵⁷⁷ Response to Data Request SSM007

⁵⁷⁸ Response to Data Request SSM003

⁵⁷⁹ Response to Data Request SC002

Supply Chain management team demonstrated in interviews that they regularly monitor performance of materials management.⁵⁸⁰

RCG/SCG LLC's review of these performance metrics showed that AVANGRID has made certain improvements in these metrics (i.e., expanding metrics to go beyond inventory control). However, the metrics do not include a "stock out" metric which is typically tracked and is consistent with industry practices. At AVANGRID, they do track stock outs manually. This should be part of the SAP ECC system.

Inventory accuracy has been in the 90% range for the past four years.⁵⁸¹ Based on this, management believes they can cost justify the installation a bar coding or RFID system to track inventory.⁵⁸² Industry practice has demonstrated that these systems can be cost justified and add value beyond inventory accuracy, such as reduced labor cost associated with material picking and record keeping.

Conclusion 9.6.3: *RCG/SCG LLC found that materials management warehouse facilities and space utilization are within expected norms.*

Analysis

The RCG/SCG LLC team reviewed SCG warehouses/storerooms operations and layout. Stock handlers have easy access to the areas and the process for completing pick lists for jobs is conveniently located within the space. There is adequate space for pre packaging without compromising access control to the store area. Finally, the field personnel did not spend any significant time in the morning waiting to obtain their material requirements.

Recommendations

Recommendation 9.6.1: *RCG/SCG LLC recommends that AVANGRID standardizing the gas material stock codes for similar materials and move to one stock code list for all gas materials.*

Recommendation 9.6.2: *RCG/SCG LLC recommends that AVANGRID automate the stock out tracking of gas materials.*

Recommendation 9.6.3: *RCG/SCG LLC recommends that AVANGRID re assess the cost benefit of implementing either Bar Coding or RFID material tracking for all gas materials.*

⁵⁸⁰ Interview D. Hall 06/03/2016

⁵⁸¹ Response to Data Request SC002

⁵⁸² Interview D. Hall 06/03/2016

Recommendation 9.6.4: *RCG/SCG LLC recommends that AVANGRID take the recommended next steps to move its Purchasing function maturity, specifically with regard to risk identification and communication, towards the best in class maturity level.*

9.7 Information Technology

Objectives and Scope

RCG/SCG LLC examined AVANGRID's information technology (I/T) function and its ability to meet the I/T needs of SCG. Additionally, this audit reviewed the I/T strategies, organization structure, policies, procedures, practices, and its project management of I/T systems impacting SCG to determine whether they were consistent with the business needs and industry practices.

Overall Assessment

AVANGRID'S I/T IS ORGANIZED APPROPRIATELY AND CONSISTENT WITH ITS STRATEGY. I/T HAS ACCESS TO SENIOR LEADERSHIP TO ENSURE I/T SOLUTIONS ARE CONSISTENT WITH CORPORATE STRATEGIES AND THE STRATEGIC NEEDS ARE RECEIVING APPROPRIATE PRIORITY OF RESOURCES. HOWEVER, THE SCG I/T USER COMMUNITY'S I/T EXPECTATIONS AND CURRENT I/T NEEDS ARE DIFFERENT THAN THOSE EXPRESSED BY THE I/T ORGANIZATION AND HAVE RESULTED IN A LEVEL OF DISSATISFACTION IN THE DELIVERY OF I/T SERVICES.

Evaluation Criteria

The I/T review examined whether current systems applications allow AVANGRID to implement its strategic objectives effectively, whether AVANGRID's cyber security has been effective, and whether I/T systems are meeting the SARBOX general computer control requirements.

Besides the three major evaluation criteria for all sections of Support Services, one additional criterion relates to information technology:

- Are AVANGRID's I/T technology and major systems effective?

Conclusions

Conclusion 9.7.1: *RCG/SCG LLC concluded that the AVANGRID I/T organization's policies, systems, and procedures are consistent with industry practices and address the appropriate aspects of the business's I/T.*

Analysis

AVANGRID's I/T strategy is focused exclusively on the I/T needs associated with the integration of the UIL companies into AVANGRID. The I/T Strategic Roadmap has been developed,⁵⁸³ but requires updating to incorporate the integration requirements. This update will identify I/T hardware and software system changes that need to be completed to address the needs of the integration project.⁵⁸⁴ A plan and schedule for the expected completion of these changes has been developed and is being worked currently.⁵⁸⁵ Senior management is provided periodic status reports on progress against schedules.⁵⁸⁶

AVANGRID's I/T general computer control practices are consistent with SARBOX and no issues have been found by the external auditor.⁵⁸⁷

AVANGRID's I/T SAP Disaster Recovery Plan is consistent with industry standards,⁵⁸⁸ is reviewed annually, and updated as needed. Disaster drills are also conducted periodically, last on April 19, 2016.

Conclusion 9.7.2: *RCG/SCG LLC concluded that I/T has in place operational KPIs and project management tracking consistent with industry practices. However, they do not periodically survey the satisfaction of their end users.*

Analysis

AVANGRID's I/T operations has a system of dashboards monitoring various operational KPIs. I/T tracks the following KPIs on a monthly basis:⁵⁸⁹

- Customer Satisfaction,
- Support Center Calls,
- Application and Service Incidents,
- Critical System Availability,
- Standard System Availability, and
- Created vs. Closed Incidents.

⁵⁸³ Response to Data Request IT016

⁵⁸⁴ Response to Data Request GEN016 CNG-SCG Attachment 1

⁵⁸⁵ Response to Data Request IT021

⁵⁸⁶ Response to Data Requests IT011 and IT012

⁵⁸⁷ Response to Data Request IT007

⁵⁸⁸ Response to Data Request IT008

⁵⁸⁹ Response to Data Request IT018

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The project management monitoring is done on individual project basis against plans, schedules, and cost, consistent with industry practices.

I/T does not perform a periodic end user satisfaction survey. This is a practice consistent with industry best practices.

Conclusion 9.7.3: *RCG/SCG LLC concluded that the newly implemented AVANGRID I/T organizational structure is consistent with industry best practices and should improve I/T's ability to address project management needs associated with the long term projects while continuing to service the short term needs of current end users. However, the role of the I/T Business Relationship Manager for SCG needs to be better defined and his reporting location changed to better meet the needs of the gas businesses.*

Analysis

The I/T organization is now part of the AVANGRID's HR & Administration organization. As such, all SCG's I/T services are provided through this organization. The new AVANGRID I/T organizational structure was implemented mid year 2016, see the Exhibit below.

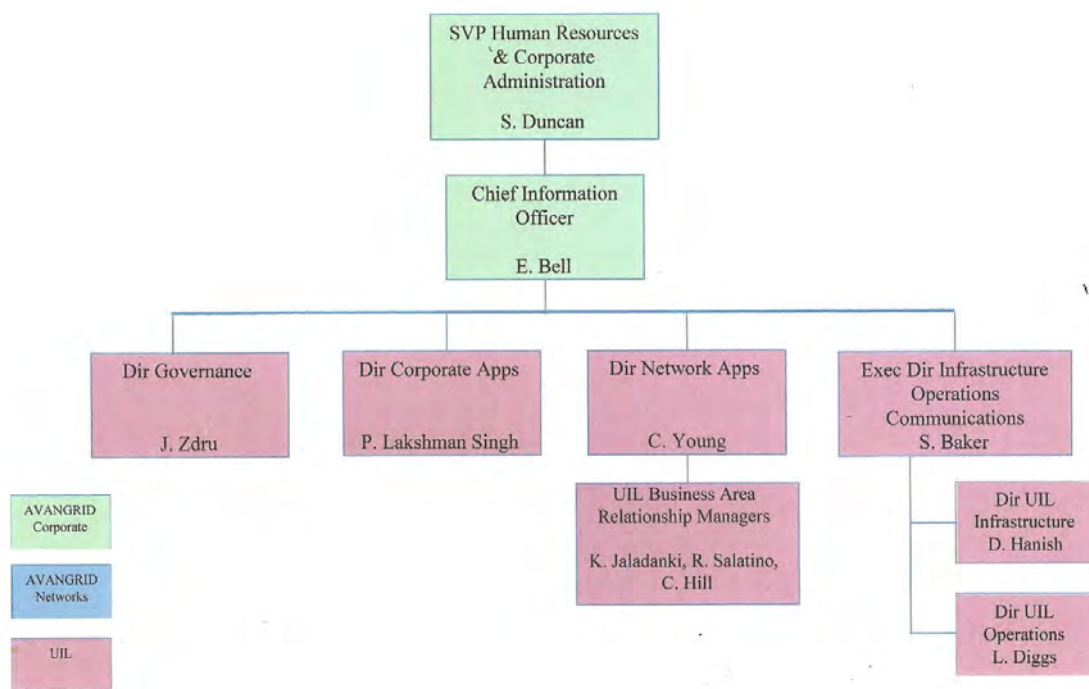


Exhibit 75 - AVANGRID's I/T Organization⁵⁹⁰

The responsibility of each area has been scoped out at a high level. Governance is nearly complete, but they are still working on budgeting and contracts, such as: Who are their common

⁵⁹⁰ Response to Data Requests GEN019 CNG-SCG Attachment 1 and IT013

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suppliers? For Applications, short term projects are defined, i.e., standard procurement tool rolled out. There are now weekly reports for project status updates. On the Networks side, AVANGRID just launched a deeper analysis to develop the roadmap of applications with a schedule driven by the pace at which business wants to move. Infrastructure and Operations is responsible for the AVANGRID's I/T system operations.⁵⁹¹

SCG's I/T Business Relationship Manager⁵⁹² is in the Networks Applications organization. He resides at Berkshire Gas headquarters. The Manager's role as an interface between I/T and SCG's management team to identify and clarify the businesses' I/T needs is consistent with industry practices. However, RCG/SCG LLC found that the Manager does not play an active role in ongoing project rollouts and their post implementation utilization. Additionally, we found that, due to the Manager's assigned reporting location, his availability to be more proactive in this regard is limited.⁵⁹³

Conclusion 9.7.4: *RCG/SCG LLC concluded that the AVANGRID's I/T technology and major systems in place and under development/rollout should be effective in addressing the strategic needs of SCG. However, the post rollout support from the user's perspective has been limited and affects the full utilization of the applications.*

Analysis

There are several Tier 1 software applications used by the SCG, reference see the Exhibit immediately below. These applications are delivered through an interconnection of key operational systems, see the second Exhibit two pages down.

⁵⁹¹ Interview E. Bell and J. Zdru 05/11/2016

⁵⁹² Response to Data Request IT017

⁵⁹³ Interview R. Salatino 06/21/2016

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Application Name	Business Use	BU Served
Service Suite	Utility Computer Aided Dispatch System.	CNG, SCG - Gas Operations
Automated Meter - (MVRS Itron)	SCG and CNG	SCG & CNG - Gas Operations
Graphical Information Systems (GIS)	Spatial asset data This suite of applications allows for editing, viewing, managing, configuring and analyzing this data.	CNG/UI (SCG under assessment)
Interactive Intelligence	Call center	SCG, CNG -Customer Care
SAP Business Warehouse (BW)	Historical financial data	SCG, CNG
Telephone System	Cisco Call Manager, Cisco Voicemail, Cisco Emergency Responder, and Cisco Meeting Place	SCG, CNG
TM1	Reporting/budgeting application	SCG, CNG - Finance
TrackStar	Tracking automated vehicle location System (UI, SCG, and CNG system)	SCG, CNG - Gas Operations
Web Portal (PureApp)	External websites	SCG, CNG - Corporate Communications
Workforce (Time and Labor)	Base salary can be processed manually from SAP payroll. Detailed payroll calculations require this Workforce Management system.	CNG, SCG – Time Entry
Microsoft Office 365	Hosted: Active Directory is the only UIL on-site element.	SCG, CNG
SAP: Human Capital Management	E-Recruitment Performance Learning solutions Nakisa (organization management) OM/PA (<u>O</u> rganization <u>M</u> anagement / <u>P</u> ersonnel <u>A</u> ssessment) Payroll	SCG, CNG Human Resources
SAP: Finance and Controlling (FICO)	Project systems Open text vendor invoice management Consolidation (budget, planning, and consolidation)	SCG, CNG - Finance
SAP: Supply Chain Management	Procurement and purchasing Fleet Inventory management Contract lifecycle	SCG, CNG - Supply Chain
SAP: Work Management	Plant maintenance	SCG, CNG

Exhibit 76 - Tier 1 Applications⁵⁹⁴

⁵⁹⁴ Response to Data Request IT001

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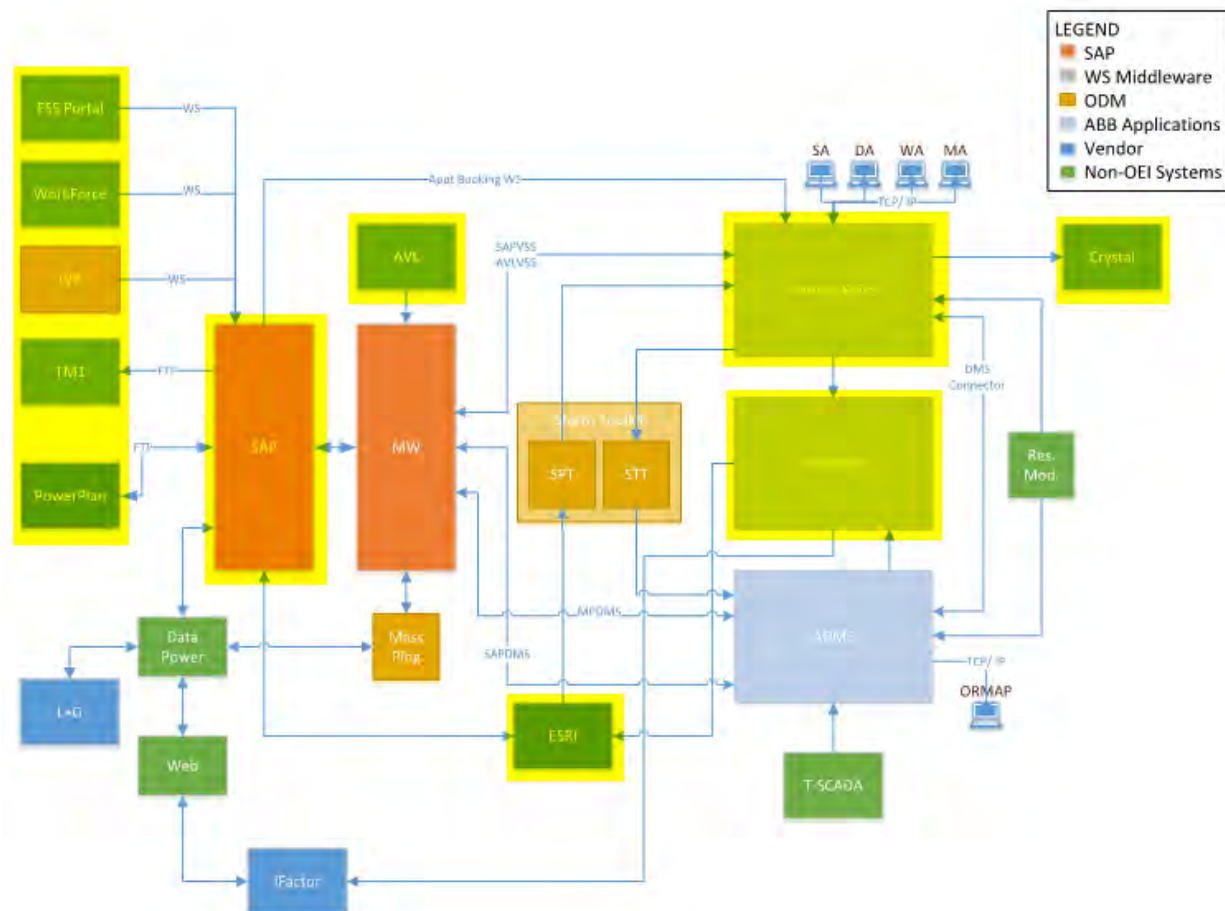


Exhibit 77 - I/T System Map⁵⁹⁵

Note: The systems that are used by SCG are highlighted in yellow.

Since the rollout of the latest OEI systems,⁵⁹⁶ including Service Suite for short cycle work⁵⁹⁷ and Focal Point, the gas operations organization's understanding of the future opportunities these systems will provide is very limited. As an example, Focal Point system, a Business Intelligence (BI) tool,⁵⁹⁸ was rolled out to gas operations and the training completed by the end of June.⁵⁹⁹ However, operations management did not express any awareness that this tool was available to them to monitor their organizations productivity.⁶⁰⁰ There does not appear to have been an effective education of the operational units' user community. Additionally, operations requests for additional operational reports beyond those developed in the initial

595 Response to Data Request IT014

⁵⁹⁶ Response to Data Request IT020 and IT026

597 Response to Data Request IT025

598 Response to Data Request IT024

⁵⁹⁹ Interview J. Rivard 08/09/2016 and Response to Data Request IT027

⁶⁰⁰ Interviews SCG management 06/8/16

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design have been difficult to obtain through the I/T organizational unit writing Crystal Reports.⁶⁰¹ The requirement for this type of reports to be generated by I/T is inconsistent with industry practices. Typically, such reports are generated by a “super user” in the organizational unit requesting the report.

Conclusion 9.7.5: *RCG/SCG LLC concluded that the SCG has access to I/T project funding and support.*

Analysis

In the past, UIL’s Integrated Ten Year I/T Plan⁶⁰² included SCG’s future I/T needs. The AVANGRID’s I/T annual demand planning cycle, adopted in 2016 for application in 2017, will continue to provide SCG equal opportunity and access to I/T project funding as with any AVANGRID company.⁶⁰³ This planning process includes VP prioritization by each area to limit the number of projects to the top five recommended by I/T. Projects submissions should include known integration projects, including best practice initiatives, roadmap initiatives, and should be submitted by the Project Sponsor/Owner. This process is depicted below.⁶⁰⁴

⁶⁰¹ Interview J. Zdru 06/21/2016, Interview P. Dunigan and N. Kant 07/12/2016, J. Curley 06/08/2016 and Response to Data Request IT019

⁶⁰² Response to Data Request IT009

⁶⁰³ Interview E. Bell and J. Zdru 05/11/2016

⁶⁰⁴ Response to Data Request IT015

Demand planning process 2017

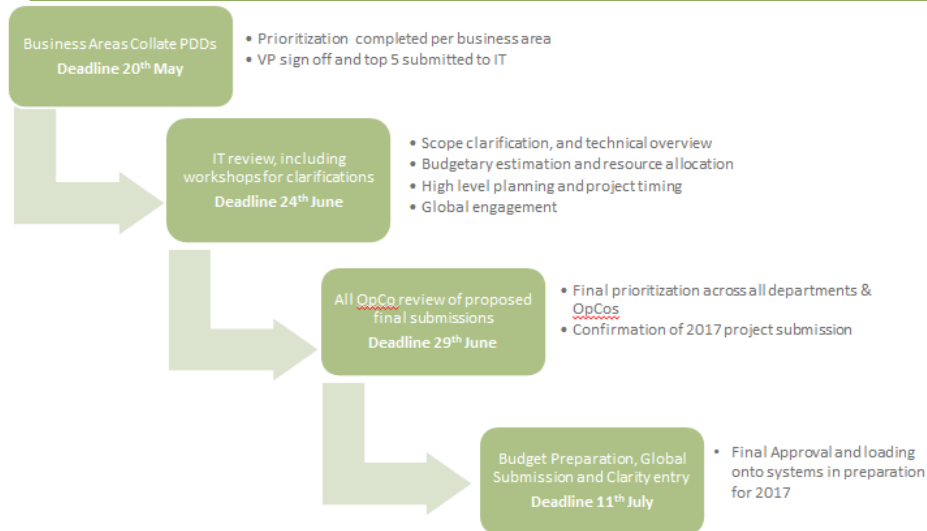


Exhibit 78 - Demand Planning Process

SCG follows the I/T project prioritization and approval process as presented above. The I/T Business Relationship Manager brings the SCG's I/T needs to the attention of the appropriate area of I/T.⁶⁰⁵ Then a project charter is developed. This includes a high level summary and includes the authorizations required for the project to be considered.⁶⁰⁶

SCG's I/T expenses and capital expenditures appropriately reflect the costs associated with the roll out of the OEI project beginning in 2015. The expenditures and the associated allocations factors are reflected in the following Exhibit:⁶⁰⁷

OPEX (Expense)					
	2011	2012	2013	2014	2015
CNG	\$2,768,077	\$4,326,396	\$4,556,365	\$5,097,594	\$4,467,815
SCG	\$2,542,670	\$5,031,408	\$5,318,317	\$6,007,131	\$6,012,370
Capital					
	2011	2012	2013	2014	2015
CNG	\$895,797	\$59,941	\$180,690	\$0	\$1,065,501
SCG	\$895,797	\$59,941	\$199,262	\$0	\$1,029,835

*Cap ta assoc ated w th hardware assets 100% owned by the gas compan es, typ ca y PC Purchases.

Exhibit 79 – IT Expense and Capital

Standard Allocation Factor for OPEX and Corporate Capital Charge

⁶⁰⁵ Interview R. Salatino 06/21/2016

⁶⁰⁶ Response to Data Request IT010

⁶⁰⁷ Response to Data Request IT005

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To provide a standard allocation factor, AVANGRID uses the Massachusetts Formula. The MA formula factors are based on each operating company's relative salaries, revenues, and net plant including Construction Work In Progress. This allocation is used for OPEX for UI Distribution, UI Transmission, SCG, and CNG.

The Corporate Capital Charge uses the Massachusetts formula, but also includes BGC (Berkshire Gas) in the allocation. The corporate capital charge is the method of recovering the revenue requirements for UIL Shared Services capital projects, mostly I/T projects, which benefit all the operating companies. The corporate capital charge is an OPEX charge to UI Distribution, UI Transmission, CNG, SCG, and BGC.

Company	OPEX	Capital charge
CNG	14.96%	14.35%
SCG	18.02%	17.28%

Exhibit 80 - CNG/SCG's OPEX / Capital Charge allocations

Conclusion 9.7.6: *RCG/SCG LLC concluded that SCG use of mobile devices is inconsistent with industry practices and AVANGRID's Mobile Device Rule.*

Analysis

RCG/SCG LLC observed SCG's management employees utilizing non company issued smart phone devices in lieu of the company issued Blackberry device.⁶⁰⁸ They explained that AVANGRID had standardized on this older technology. This practice is inconsistent with industry practices. Additionally, it is inconsistent with AVANGRID's Mobile Device Rule.⁶⁰⁹

The responsibility for mobile device management is planned to be transferred from I/T to General Services by the end of 2016. It is expected that following this transfer, SCG's mobile device practices will be brought in line with this Rule statement.

Recommendations

Recommendation 9.7.1: *RCG/SCG LLC recommends that AVANGRID's I/T organization perform a periodic (bi annual) end user satisfaction survey.*

Recommendation 9.7.2: *RCG/SCG LLC recommends that the role of the I/T Business Relationship Manager for SCG be better defined and that his reporting location be changed to meet the I/T needs of the gas businesses.*

⁶⁰⁸ Headquarter visits: SCG 06/8/16

⁶⁰⁹ Response to Data Request SSF018

Recommendation 9.7.3: *RCG/SCG LLC recommends that each software system implemented at SCG have a designated super user to support the day to day utilization of the systems including the production of Crystal reports against the systems' database.*

Recommendation 9.7.4: *RCG/SCG LLC recommends SCG adopt the AVANGRID Mobile Device Rule.*

9.8 Security

Objectives and Scope

RCG/SCG LLC examined AVANGRID's Security function, which comprises physical security and cyber security. Security, including cyber security, at AVANGRID is centralized under the VP of Corporate Security. As such, all SCG's security services are provided through this organization.

Overall Assessment

AVANGRID'S SECURITY IS ORGANIZED APPROPRIATELY AND CONSISTENT WITH ITS STRATEGY. IT HAS ACCESS TO SENIOR LEADERSHIP TO ENSURE SECURITY SOLUTIONS ARE CONSISTENT WITH CORPORATE STRATEGIES AND THE STRATEGIC NEEDS ARE RECEIVING APPROPRIATE PRIORITY OF RESOURCES. LEADING I/T CYBER SECURITY MEASURES HAVE BEEN IMPLEMENTED TO PROTECT AGAINST UNAUTHORIZED ACCESS TO SENSITIVE INFORMATION AND/OR SYSTEMS. PERIODIC INTERNAL AND EXTERNAL AUDITS ARE PERFORMED TO CONFIRM THE ADEQUACY OF THE CYBER SECURITY AND PHYSICAL SECURITY MEASURES. REMOVAL OF PHYSICAL ACCESS FOR TERMINATED EMPLOYEES IS AN IMPROVEMENT OPPORTUNITY.

Evaluation Criteria

The Security review examined whether current security plans and procedures allow AVANGRID to implement its security strategic objectives effectively, whether AVANGRID's cyber security has been effective, and whether the physical security implementation at the SCG is effective.

Conclusions

Conclusion 9.8.1: *RCG/SCG LLC concluded that AVANGRID Security function has adequate departmental policies and procedures. These policies and procedures address the appropriate aspects of security, including extensive information on cyber security, physical security, and fire safety.*

Analysis

Cyber security at AVANGRID includes the industry leading components. They use multiple levels of firewall protection, providing isolation from Internet access to vital data. They limit internal access to data based on level in organization and job related needs. They require complex passwords and periodic password changes. They perform regularly scheduled penetration testing. Additionally, as a result of the integration with AVANGRID, SCG benefits from the additional NERC required cyber security. Lastly, AVANGRID reviewed the recently issued Privacy Shield certification requirements to meet the EU data security specifications and found that they do not have saved data that would trigger these new requirements.⁶¹⁰

AVANGRID has 24/7 monitoring in place using a security service provider. SCG's systems are monitored as part of this effort. AVANGRID and SCG have not experienced any data breaches or compromise of their systems. Additionally, a third party does cyber penetration testing from the Internet annually. No issues have been identified.

AVANGRID's I/T systems have various hardware and software systems in place to monitor activity control and/or block access to sensitive information and the policies and procedures to guide daily I/T system operations use.

Conclusion 9.8.2: *RCG/SCG LLC concluded that AVANGRID Physical Security function is well planned and executed at SCG. However, the timely termination of access control for terminated employees needs improvement.*

Analysis

RCG/SCG LLC found that the Physical Security at the SCG operating headquarters and facilities included 24/7 contract guard services and/or security camera monitoring, key card access control, periodic penetration testing, and on site security audits. All of these actions are consistent with industry best practices.

Security Policy requires an employee and contractor access control to be terminated upon notification of their termination, retirement, or resignation. Security has the responsibility to crosscheck the HR's monthly termination list against the access control employee/contractor list and identify any discrepancies. There were 15 instances over the past three years where the supervisors did not request this access be terminated within the one week period.⁶¹¹ RCG/SCG LLC believes this access control crosscheck needs to be completed weekly to limit unauthorized access risk and be consistent with Best and Class performance..⁶¹²

⁶¹⁰ Response to Data Request IT028.

⁶¹¹ Response to Data Request SSF015

⁶¹² Interview W. Wynne 06/06/16 and K. Glitch 06/24/16.

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Recommendations

Recommendation 9.8.1: *RCG/SCG LLC recommends AVANGRID Security compare the HR list of terminated employees/contractors regularly against the active access control listing to ensure the terminated employees/contractors do not have access control.*

10. SPECIAL TOPICS

Objectives and Scope

As mentioned in the Introduction chapter to this report, the RFP identified twenty seven special topics as special areas of focus to be examined in this audit. Of these, most were included in the seven chapters (report chapters 3 through 9) evaluating the interconnected study areas of Executive Management, System Operations, Finance, Human Resources, Customer Services, External Relations, and Support Services. However, RCG/SCG LLC selected several of the twenty seven special topics, grouped into two categories based on the correlation of their activity and assessment, to discuss separately in this chapter.

Further, the additional work regarding the treatment of CES and non CES customers coming on the SCG system is addressed in section 10.3.

10.1 Affiliate Transactions & Cost Allocation (8-1)

Objectives and Scope

SCG is an indirect subsidiary of AVANGRID, Inc. (AVANGRID). AVANGRID has a complicated structure as shown in the diagram below (which depicts AVANGRID's structure as of April 2016).⁶¹³ Costs for certain services provided at the UIL Holdings Corporation level and at United Illuminating Company (UI) are allocated from UIL Holdings Corporation and United Illuminating Company to SCG. There are also a few charges from AVANGRID back to SCG.⁶¹⁴ This section addresses whether there are appropriate controls governing costs from affiliates that are allocated to SCG.

⁶¹³ AVANGRID, Inc. 2015 Form 10-K.

⁶¹⁴ Interview with Adam Danner and James Earley on July 13, 2016.

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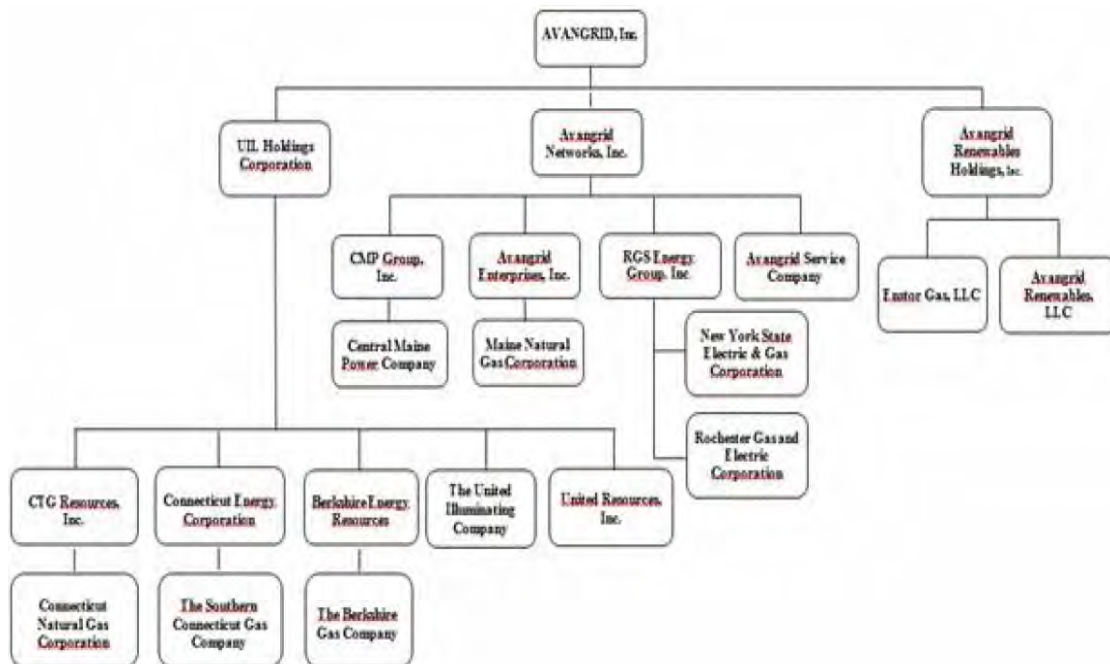


Exhibit 81 - AVANGRID, Inc. Corporate Structure⁶¹⁵

Overall Assessment

THE COMPANY USES AN APPROPRIATE COST ALLOCATION PROCESS THAT EMPHASIZES DIRECT CHARGING BUT INCLUDES A COST ALLOCATION WHERE DIRECT CHARGING IS IMPRACTICAL.⁶¹⁶

Based on our review of affiliate transactions, including cost allocation, RCG/SCG LLC believes that UIL Holdings Corporation, AVANGRID, Inc., and other affiliates properly charge for services provided to SCG.

Nevertheless, we believe that certain enhancements to the current cost allocation mechanism should be considered that may offer a more accurate allocation of certain costs.

Evaluation Criteria

RCG/SCG LLC identified criteria for the evaluation of affiliate transactions and cost allocation:

⁶¹⁵ According to AVANGRID's 2015 Form 10-K, the company expects "that UIL and its subsidiaries will be moved under Networks in the first half of 2016."

⁶¹⁶ EXE012 CNG-SCG Attachment 1.

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- Does the Company have a cost allocation manual and does it comport with PURA rules and regulations?⁶¹⁷
- Does the Company maintain formal and effective cost allocation policies, procedures, and related manuals that apply approved costing principles for transactions?
- What is the policy regarding the use of direct charges versus allocation for services obtained from or provided to affiliates?
- Are there adequate controls in place to prevent affiliate transaction abuses?
- What kind of affiliate transactions does AVANGRID, Inc., UIL Holdings Corporation, and other affiliates engage in with SCG, and are these cost allocation factors reasonable and is associated pricing reasonable?
- Are methods of allocating overhead costs appropriate and reasonable?
- Do overhead charges align with the business unit's use of the service function?
- Are controls regarding cost allocation and assignment, and other affiliate transactions, effective?

Conclusions

Conclusion 10.1.1: *RCG/SCG LLC determined that the Company has an adequate cost allocation system and policies and procedures for affiliate transactions.*

Analysis

Percentage cost allocations to SCG from affiliates are shown in the pie chart Exhibit⁶¹⁸ below. Note that there is a significant 2015 cost allocation – \$7.0 million – from another affiliate, CNE Peaking, LLC., which owns and operates the liquefied natural gas facility that provides peaking service to SCG. See the Gas Supply chapter for more detail on this arrangement.

⁶¹⁷ Chapter 277, Section 16-47a of the Connecticut General Statutes addresses the required code of conduct for gas company transactions with affiliate.

⁶¹⁸ Response to Data Request EXE015 CNG-SCG Attachment 1. In 2015, costs were allocated to SCG from UIL Holdings Corporation (UIL), United Illuminating Company (UI), Connecticut Natural Gas Company (CNG), CNE Peaking, LLC (CNEP), and an immaterial allocation from Berkshire Gas Company (BGC) which is not shown in the pie chart.

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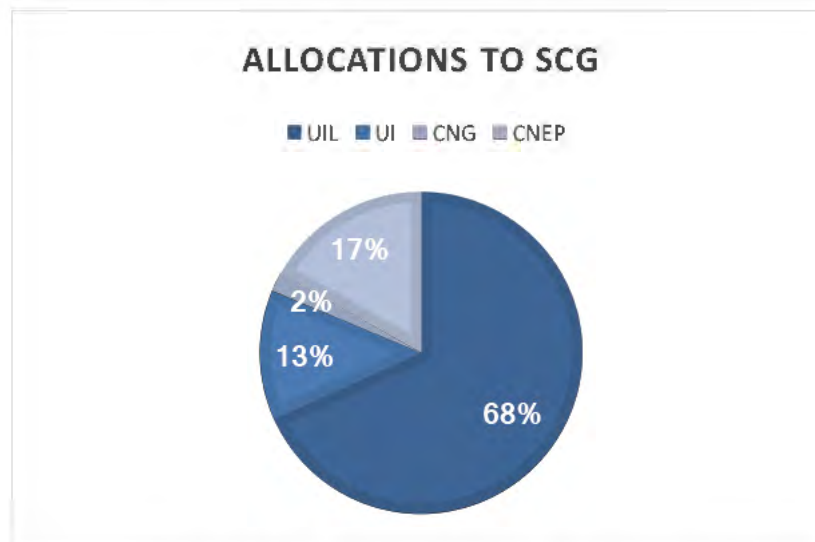


Exhibit 82 – 2015 Cost Allocations to SCG

The following Exhibit shows the magnitude and trend of costs allocated by UIL Holdings Corporation to SCG.

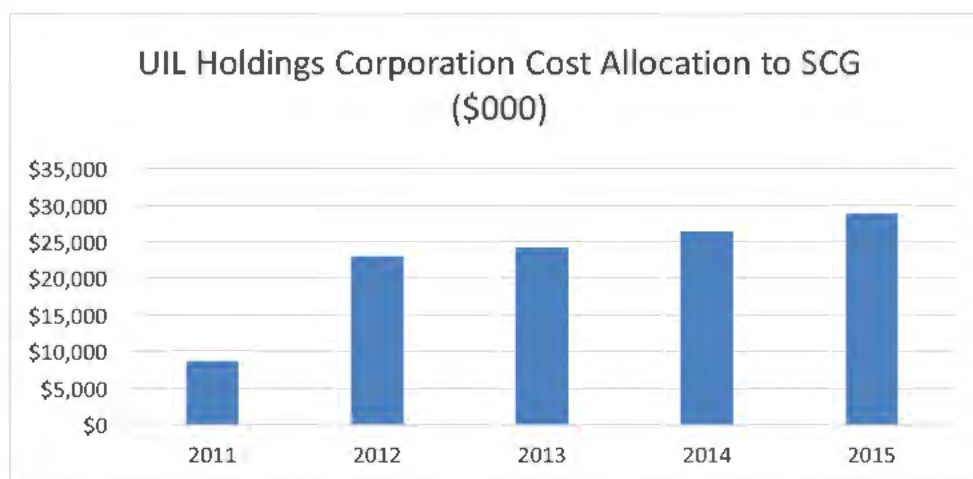


Exhibit 83 - UIL Holdings Corporation Cost Allocations to SCG⁶¹⁹

UIL Holdings Corporation acquired SCG on November 16, 2010.⁶²⁰ Accordingly, 2011 expenses did not reflect steady state conditions. From 2012 through 2015, shared services

⁶¹⁹ Response to Data Request BUD006 CNG-SCG Attachment 1 provides the sum of all UIL Holdings Corporation costs allocated to SCG from 2011 to 2015.

⁶²⁰ See Stamford Advocate article titled "UIL Holdings becomes parent of CNG, SCG," November 17, 2010.

allocations from UIL Holdings Corporation to SCG have increased from \$22.9 million to \$28.9 million, a compound annual growth rate (CAGR) of 7.9%, which is far greater than the rate of inflation. However, the annual shared services cost per customer is shown in the following Exhibit.



Exhibit 84 - UIL Holdings Corporation Cost Allocations per SCG Customer⁶²¹

Even when adjusting for customer growth, UIL Holdings Corporation's allocated costs to SCG grew at 6.0% CAGR between 2012 and 2015. This is significantly faster than the rate of inflation and suggests that UIL Holdings Corporation shared services costs are:

- 1) Rising significantly,
- 2) The cost allocation mechanism is reacting to greater relative capital spending and revenue from SCG,
- 3) More services have been consolidated centrally to extract scale economies, or
- 4) More probably, some combination of the first three.

As an example, Section 3.6 of this report, which contains a review of the capital budgeting process, clearly shows an increase in capital spending since 2012 for SCG. Accordingly, Plant in Service would increase which would drive higher shared service cost allocations. Additional revenue derived from SCG's new main extensions would also help drive the shared service allocation higher.

⁶²¹ UIL Holdings Corporation allocated costs per customer were derived by dividing the total amount allocated to SCG in BUD006 CNG-SCG Attachment 1, and dividing by the yearend total SCG customer count provided in GS035 CNG-SCG Attachment 1. December SCG customer counts were deemed to be the same as yearend customer counts.

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UIL Holdings Corporation is the service company of the UIL operating subsidiaries⁶²² that provides shared services to the various business units. Shared services include certain administrative, legal, accounting, purchasing, and other services for the benefit of the operating companies of UIL.⁶²³

The UIL Holding Corporation Cost Accounting Methodology Manual⁶²⁴ provides the “methodology for cost accounting.” It assigns “costs on a direct, indirect, or overhead basis dependent on cost causation.” The following Exhibit summarizes the approach.

Cost Category	General Approach
Direct	<ul style="list-style-type: none">• Costs are charged on a project basis wherever possible.• Costs that are related solely to an operating subsidiary are charged to that subsidiary.• Used wherever practical.⁶²⁵• In UIL’s approach, a project number is unique to a single subsidiary.• Labor costs are charged to projects directly via a time sheet. Time can be charged to a project on an hours or percentage basis.
Indirect	<ul style="list-style-type: none">• Costs that are impractical to track on a direct basis.• Costs are indirectly assigned based on historical activity.
Shared Services Overhead Costs	<ul style="list-style-type: none">• Overhead costs that are incurred that benefit all operating companies and are allocated on a percentage basis.• These remaining costs are allocated “based on each operating company’s pro rata weighted average share of total revenue, payroll, and net plant in service plus CWIP.”⁶²⁶

Exhibit 85 - Cost Allocation Methodology

⁶²² The former UIL operating utility subsidiaries were Connecticut Natural Gas Corporation, The Berkshire Natural Gas Company, The Southern Connecticut Gas Company and The United Illuminating Company. AVANGRID, Inc. plans to move these operating companies underneath its Networks subsidiary in 2016.

⁶²³ See footnote 7.

⁶²⁴ Response to Data Request EXE012 CNG-SCH Attachment 1.

⁶²⁵ Interview with Adam Danner and James Earley on July 13, 2016.

⁶²⁶ Response to Data Request EXE012 CNG-SCG Attachment 1. CWIP is an acronym for construction work in progress.

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The following shared services functions provided generally by UIL Holdings Corporation are allocated to SCG.⁶²⁷

- **Finance:** Treasury, General Accounting, Audit Services and Compliance, Corporate Insurance, Corporate Tax, Investor Relations, Strategic Planning, and Budget and Financial Forecast.
- **Administration:** Purchasing, Fleet Services, Customer Services, and Credit and Collections.
- **General Counsel:** Legal.
- **Human Resources:** Human Resources, Facilities, Environmental, Real Estate, Safety, Security, Payroll, and Employee Benefits.
- **Corporate Charges:** Corporate capital charges, UIL Deferred Compensation and Long term Incentive Plans, Office of UIL CEO, and Office of Gas President.
- **Information Technology (IT):** All IT related departments such as Applications, Operations and Support, Infrastructure and Support, SCADA Systems Support, and Cyber Security.
- **Government Relations & Communications:** Corporate Communications, Public Affairs, and Federal Affairs.
- **Conservation Load Management:** Conservation. Note that certain of these services are provided by United Illuminating Company.⁶²⁸
- **Operations:** All gas operations related departments such as Construction and Maintenance, Gas Engineering, Meter Operations, and Dispatch.
- **Customer Services:** Customer Services and Credit and Collections.
- **Business Services:** Marketing and Business Development, Regulatory and Tariffs, Cost and Pricing, Regulatory Compliance, Economic Development, and Community Relations.
- **Transportation and Gas Supply:** Gas Supply, Supplier Services, and LNG.

The Exhibit below shows the total cost allocations from various affiliates to SCG in 2015. Transportation and Gas Supply (primarily from CNE Peaking, LLC), Information Technology, Corporate Charges, Business Services, Human Resources, and Finance represent the largest categories. The Conservation allocation of about \$4.7 million was from United Illuminating Company (UI). Most of the Transportation and Gas Supply allocation was from the CNE Peaking, Inc. affiliate.

⁶²⁷ Response to Data Request Fin102 CNG-SCG.

⁶²⁸ Response to Data Request EXE015 CNG-SCG Attachment 1.

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Function	UIL	UI	CNG	BCG	CNEP	Total
Finance	\$2,644	\$ 604	\$280	\$1		\$3,529
General Counsel	1,817					\$1,817
Human Resources	5,101					\$5,101
Corporate Charges	6,026					\$6,026
Information Technology	6,506					\$6,506
Conservation		4,704				\$4,074
Business Services	5,157					\$5,157
Transportation, Gas Supply			374		7,027	\$7,401
Other	1,292	141	152	2		\$1,587
Total	\$28,543	\$5,449	\$806	\$4	\$7,027	\$41,828

Exhibit 86 - 2015 Cost Allocations to SCG (\$000)⁶²⁹

Conclusion 10.1.2: RCG/SCG LLC determined that the Company's cost allocation methodology is appropriate for assigning shared services costs from UIL Holdings Corporation to the operating utilities.

Analysis

UIL Holdings Corporation uses the Massachusetts Formula to allocate shared services costs to its operating subsidiaries.⁶³⁰ The Massachusetts Formula is a cost allocation mechanism that is used and accepted in many different regulatory jurisdictions across the U.S.⁶³¹

As used by SCG, the Massachusetts Formula uses three factors:

1. Net utility plant in service (plus construction work in progress (CWIP))
2. Revenue (excluding natural gas commodity costs), and

⁶²⁹ Response to Data Request EXE015 CNG-SCG Attachment 1.

⁶³⁰ Interview with Adam Danner and James Earley on July 13, 2016.

⁶³¹ The Massachusetts Formula is sometimes modified in different regulatory proceedings, but it is nevertheless widespread in its use including Colorado, Connecticut, Massachusetts, Michigan, Missouri, and Utah, among other states. It has also been accepted by the Federal Energy Regulatory Commission for oil and gas pipeline proceedings. It has even been used in certain Canadian rate case proceedings.

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3. Direct labor.

Each one is equally weighted. Note that fuel, purchased power (not applicable to SCG), and purchased gas costs are excluded from revenues to avoid anomalies during periods of high commodity costs.

These factors are then used in the calculation. As an example, consider utility plant in service. For this factor, the sum of the utility plant in service (plus CWIP) for each operating company becomes the denominator. The numerator is the utility plant in service (plus CWIP) of the operating company under consideration.

The other two factors are treated in the same way. The final step is to then take the weighted average of all three factors, and then use this result to allocate all shared services costs that were not able to be directly charged to a specific operating company.

The example below illustrates how the Massachusetts Formula would be applied to a hypothetical company that had electric, water, and communications operations.⁶³² The example is illustrative.

Each of the three factors is a reasonable cost allocation basis. Direct labor costs, for example, are highly correlated with human resources and certain other shared services cost centers. Similarly, revenue is typically a good proxy for operating company size, which is a reasonable way to allocate certain costs.

⁶³² The example is excerpted from a Baker Tilly brochure titled “Shared services utility accounting – How using a service company can help with cost allocations for multiple utility departments.” Baker Tilly is a full service accounting and advisory firm that is headquartered in Chicago, IL.

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Common Admin and General Cost Allocations		
<u>Administrative and General Allocation</u>		
Utility Plant in Service:	<u>12.31.xx</u>	<u>%</u>
Electric	389,064,233	89.32
Water	20,577,617	4.72
Communications	25,954,952	5.96
Total	\$435,596,802	
Revenues:	<u>12.31xx</u>	<u>%</u>
Electric	43,002,531	75.71
Water	4,197,084	7.39
Communications	9,601,605	16.9
Total	\$56,801,220	
Direct Labor Distribution:	<u>12.31xx</u>	<u>%</u>
Electric	12,164,149	85.2
Water	870,336	6.1
Communications	1,242,348	8.7
Total	\$14,276,833	
<u>Administrative and General Allocation:</u>		
<u>Based on weighted average of above</u>		
		<u>%</u>
Electric	83.41	
Water	6.07	
Communications	10.52	

Exhibit 87 - Illustrative Example of Massachusetts Formula

However, RCG/SCG LLC has concluded that SCG could further develop the cost allocation process without much more work. There are allocation bases that can provide better correlation with actual cost causation as shown in the table below.

Function	Alternative Cost Allocation Basis	Rationale
Human Resources	Headcount	HR costs correlate closely with employee count
Accounts Payable	Invoices Processed	Invoices processed would be expected to correlate with accounts payables costs
Supply Chain	Purchase Order Line Items	Purchase order line items would be representative of costs to source and supply goods and services

Exhibit 88 - Other Potential Cost Allocation Bases

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By gradually adopting this type of allocation methodology where practical, the overall amount of costs that needed to be allocated according to the Massachusetts formula would be lower and overall allocation would be more accurate. In addition, unit cost data can be developed and facilitate benchmarking with other gas distribution utilities as explained elsewhere in the report. A good place to start would be the larger of the cost categories currently covered under the Massachusetts Formula allocation.

Conclusion 10.1.3: *RCG/SCG LLC found that SCG does not have unregulated operations. Accordingly, there is no concern that ratepayers are unduly subsidizing an unregulated subsidiary.*

Analysis

SCG does not have unregulated subsidiaries.⁶³³ As such, the company's ratepayers are not subsidizing an unregulated business.

SCG has a unit that services its customers' gas appliances. SCG offers both annual service plans as well as diagnostic and repair service at hourly rates.⁶³⁴

SCG offer four different annual maintenance plans for residential customers:

- *Basic Assurance* – Coverage for one furnace or boiler and one standard thermostat.
- *Water Heater Plan* – coverage for one water heater.
- *Natural Gas Piping Systems* – Covers exposed and accessible natural gas piping, flexible appliance connectors and natural gas shut off valves
- *Select Comfort* – Provides the same coverage as Basic Assurance Plan plus it includes a tune up of furnace or boiler and a visual inspection of natural gas equipment.⁶³⁵

The company does not install new gas appliances.⁶³⁶

All revenue derived from offering these diagnostic and repair services to SCG customers are applied as an offset to SCG's operation and maintenance (O&M) expenses. The graph below shows the revenue derived from this service over the past five years.

⁶³³ Interview with Adam Danner and James Earley on July 13, 2016.

⁶³⁴ See www.soconngas.com for additional detail. SCG provides such services to both residential and business customers.

⁶³⁵ See www.soconngas.com.

⁶³⁶ SCG does not compete with local private sector heating, ventilation, and air conditioning (HVAC) companies for either new construction or replacement work.

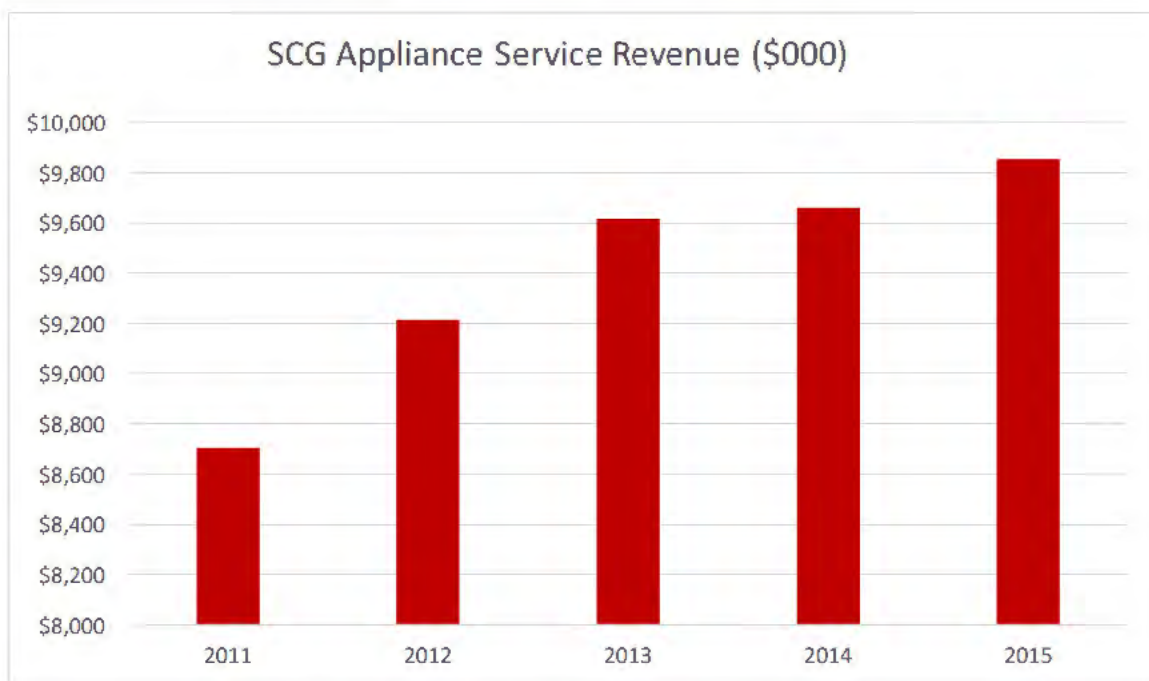


Exhibit 89 - SCG Appliance Service Revenue⁶³⁷

Conclusion 10.1.4: RCG/SCG LLC found that SCG has employee codes of conduct that oblige employees to adhere to company affiliate transaction and cost allocation policies.

Analysis

SCG has a written Code of Business Conduct. This code addresses:

- **Compliance with Other Laws and Regulations**
- **Regulatory Codes of Conduct** (specifically the Gas Code of Conduct derived from Sections 16 47a 1 to 16 47a 12 of the Connecticut statute. The code “sets forth the standard of conduct for transactions, direct or indirect, between gas distribution companies and their affiliates.”⁶³⁸
- **Affiliate Transactions** which protect “against a regulated utility showing favoritism toward its affiliates, sharing certain information with affiliates, or applying inappropriate affiliate costs to the regulated utility.”⁶³⁹

In addition, there is a specific ethics line telephone number and website for additional information or questions.

⁶³⁷ Response to Data Request BUD006 CNG-SCG Attachment 1.

⁶³⁸ Response to Data Request CA005 CNG-SCG Attachment 1.

⁶³⁹ Ibid.

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Conclusion 10.1.5: RCG/SCG LLC found that *Internal Audit periodically reviews adherence to UIL Holdings Corporation Cost Accounting Methodology Manual.*

Analysis

Internal Audit periodically reviews cost allocations. It audited the UIL Holdings Corporation Cost Allocation Methodology Manual (CAMM) in January 2013 and again in March 2015.^{640,641} These audits were done on a UIL Holdings Corporation wide basis.⁶⁴²

Accounting also reviews the cost allocations every six months. According to several interviews, very few issues are ever noted because the process is mechanistic and applied appropriately.

Conclusion 10.1.6: RCG/SCG LLC concluded that *the Company applies reasonable costs for services.*

Analysis

UIL Holdings Corporation and AVANGRID, Inc. allocate shared services and overhead expenses at cost. No margin or profit is added.⁶⁴³ Accordingly, SCG is not channeling extra margin to a parent company at the expense of ratepayers.

RCG/SCG LLC did not examine the cost of shared services UIL Holdings Corporation provided to SCG, relative to the market rates of similar services. However, it is important to note that:

- The salaries and employee benefit packages of UIL Holdings Corporation employees are based on market conditions and evaluated periodically by outside compensation studies.
- Certain of the services provided feature economies of scale (e.g., an attorney that evaluates a new legal or regulatory requirement on the behalf of four operating utilities instead of only one) in the service company. Accordingly, all operating companies share in this scale economy.
- Outsourcing doesn't necessarily provide the expected savings when contract development and administrative costs are fully considered. In addition, complicated outsourcing arrangements are very time consuming to develop and administer effectively.

⁶⁴⁰ Interview with Paul Rossi of Internal Audit.

⁶⁴¹ Interview with Sandra Boisvert.

⁶⁴² Response to Data Request IA005 CNG-SCG

⁶⁴³ Interview with Adam Danner and James Earley on July 13, 2016.

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- Certain of the services provided reflect the cost of large enterprise wide information technology (IT) applications that aren't practical to deliver within a single operating company or by an outside provider.

Recommendations

Recommendation 10.1.1: *RCG/SCG LLC recommends that the internal audit group schedule an audit every two years to review the cost allocation manual and process and other affiliate transactions to ensure (1) that actual practice does comply with the governing documentation and (2) that the governing documentation does indeed cover all current activity. In addition, the biennial internal audit should determine whether SCG has developed new cost allocation bases for certain shared service functions that are more accurate than the Massachusetts formula.*

Recommendation 10.1.2: *RCG/SCG LLC recommends that the Company continue to participate in additional industry studies or develop their own peer group analysis of shared services costs to ensure appropriate levels of service costs.*

Recommendation 10.1.3: *RCG/SCG LLC recommends SCG consider, where practical, other cost allocation bases besides the Massachusetts Formula to distribute certain costs more effectively.*

10.2 Hurdle Rate and CIAC

Background

This section addresses the effectiveness of efforts by SCG in managing its new business and gas expansion programs in compliance with state and PURA rules and mandates. Included in the assessment are the efforts by SCG to acquire customers under these programs, evaluate the economic feasibility of providing services to the new customers, execute projects under the programs, and provide the proper reports as mandated by the PURA. Our assessment of economic feasibility will incorporate the consideration of the hurdle rate models used by the companies, as well as a review of how Contributions in Aid of Construction (CIAC), are determined.

Overall Assessment

NEW BUSINESS AND GAS EXPANSION PROGRAMS ARE GENERALLY WELL MANAGED. ECONOMIC ANALYSIS MODELS AND THE ASSIGNMENT OF NON-FIRM MARGIN FUNDS TO SUPPORT THE PROGRAMS ARE ALSO APPROPRIATELY APPLIED. HOWEVER, DIFFICULTIES IN ESTIMATION OF CUSTOMER GAS USAGE AND CONSTRUCTION COSTS CREATE PROGRAM CHALLENGES.

The Marketing Group supporting the SCG New Business and Gas Expansion Programs is very credible and very capable in managing these programs. They are further compelled to manage these programs well as they are under PURA scrutiny to comply with Comprehensive Energy Strategy related mandates. Economic analysis models (known as Hurdle Rate models) are appropriately designed and appropriately applied. Further enabling the goals of the gas expansion programs is the use of Non Firm Margin funds to help offset customer contribution requirements derived from the Hurdle Rate models. The management and application of NFM funds are also appropriate. Of concern is the estimation of customer gas usage and construction cost estimates used in the Hurdle Rate models. Difficulties estimating both of these factors lead to the possible acceptance of projects that would and should have been rejected. SCG should continue to monitor these results, identify root causes, and consider some of the recommendations provided in this section of the report and the Capital Budgeting Process section of the report.

Evaluation Criteria

The evaluation criteria for assessing New Business and Gas Expansion Program Management include:

- Reasonableness of the efforts to forecast new business customer growth,

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- Appropriate marketing programs to engage customers and partner vendor service providers to acquire new customers (covered in the External Relations portion of this audit report),
- Reasonableness of tools used to evaluate project feasibility including hurdle rate models and model assumptions,
- Effectiveness of estimation for project cost and customer usage as part of the economic modeling,
- Appropriate determination of CIAC and collection of CIAC at a time in the process that allows as close to full recovery of actual costs as possible, and
- Relevant for SCG, the proper application of Non Firm Margin (NFM) to offset CIAC requirements consistent with state and PURA mandates, including the determination of eligibility for NFM funding.

Conclusion 10.2.1: RCG/SCG LLC found that *SCG efforts to forecast new customer growth are reasonable considering the conditions of market prices for oil and natural gas.*

Analysis

Overall historical budgets for the New Business program were provided in Section 3.6, Capital Budgeting Process. That section of the report discussed the challenges associated with budgeting overall dollars in New Business, especially considering a dramatic drop in the price of oil and the gaps in pricing between these two fuel sources.

The company provided the following graphic to PURA in discussions to revise programmatic goals for gas conversion:⁶⁴⁴

⁶⁴⁴ Response to Data Request CS017 CNG-SCG Attachment 1 Page 8

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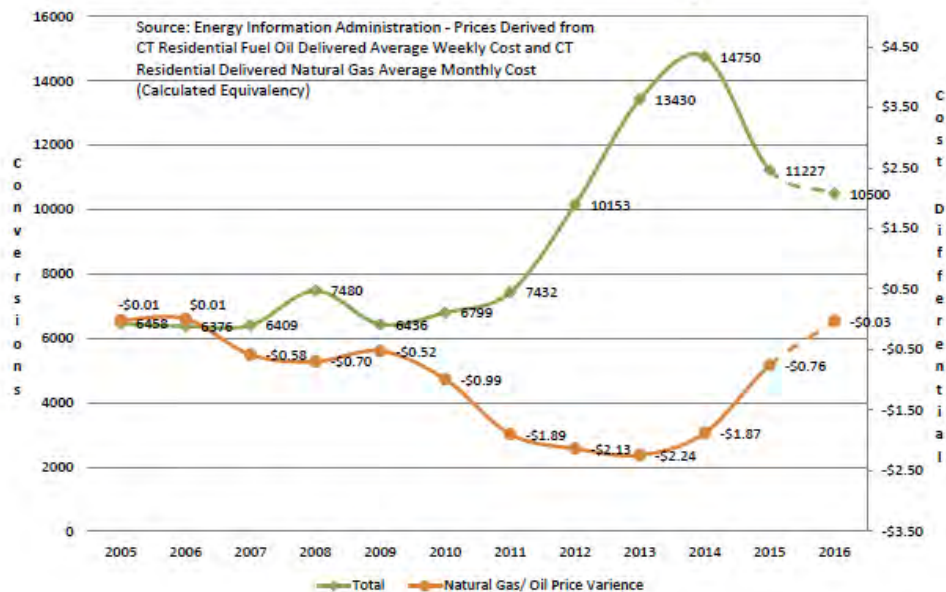


Exhibit 90 - Gas Conversion/Oil Price Relationship

As can be seen from this data, the variance in natural gas vs. oil prices has narrowed from over \$2 per gallon (on price equivalency basis) in 2012 and 2013 to \$0.76 in 2015, with even narrower gaps projected for 2016.

The New Business and Natural Gas Conversion programs are now driven by a state energy policy known as the Comprehensive Energy Strategy (CES). The Strategy was designed to encourage customers to switch from oil to natural gas. CNG and SCG filed their plans for complying with CES in 2013. In that plan the companies, CNG and SCG, committed to a 10 year goal of 197,000 new customers⁶⁴⁵ out of the state wide 300,000 new customer goal.

As a result of the drop in oil prices and narrowing of the gap with natural gas prices, CNG and SCG requested a revision to the forecast for gas conversions and overall new customer growth as compared to the original commitments. The original forecast along with near term revisions to the forecast as requested by CNG and SCG is provided in the following Exhibit:⁶⁴⁶

⁶⁴⁵ As summarized in CS017 CNG-SCG Attachment 1 Page 5

⁶⁴⁶ Response to Data Request COM007 CNG-SCG Attachment 2

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Sales Results			
Year	2013 CES Goal	Revised Goal	Actual
2014	14,200	n/a	14,750
2015	16,900	10,900	11,227
2016	20,100	10,300	2,583*
2017	20,100		
2018	20,100		
2019	20,100		
2020	20,100		
2021	22,000		
2022	22,000		
2023	22,000		

Exhibit 91 - CES Growth Goals

The original forecast called for 20,100 new customers per year by 2016 through 2020 and rising to 22,000 new customers per year through the end of the 10 year plan.

The new forecast is presented below, through 2020:⁶⁴⁷

Year	2014 Forecast	2014 Actual	2015 Forecast	2015 Actual	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast
On Man Res dent a	8,500	7,812	6,156	5,507	5,953	6,850	7,000	7,150	6,900
Off Ma n Res dent a	3,800	1,818	1,444	2,318	1,397	5,000	6,750	8,750	11,445
Res dent a Sub Tota	12 300	9 630	7 600	7 825	7 350	11 850	13 750	15 900	18 345
On Ma n C&I	1,800	4,954	2,757	2,653	2,632	1,980	1,430	1,280	1,180
Off Ma n C&I	100	166	543	749	518	400	420	485	575
C&I Sub Tota	1 900	5 120	3 300	3 402	3 150	2 380	1 850	1 765	1 755
Tota	14,200	14,750	10,900	11,227	10,500	14,230	15,600	17,665	20,100

Exhibit 92 - Revised CES Growth Goals

The forecast has been tapered to reflect a more moderate widening in the oil/natural gas price gap and thereby a more gradual growth in new customers.

The company has indicated their commitment to the overall CES goals but expect the conversion goals to require more than 10 years to meet.

The process used by SCG to forecast new customer growth, including conversions, is based upon historical benchmarks and an analysis of specific customer segments. Historical sales are compared to the relative prices of oil and gas as part of the benchmarking effort. In the segment analysis, the companies review specific customer segments, conduct market research, and develop targeted forecasts.⁶⁴⁸

⁶⁴⁷ Response to Data Request FIN086 CNG-SCG Attachment 1

⁶⁴⁸ Response to Data Request FIN071

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Conclusion 10.2.2: *RCG/SCG LLC determined the tool used by SCG to evaluate economic feasibility of new business projects (the Hurdle Rate Model) is reasonable and it is applied appropriately.*

Analysis

At its core, the Hurdle Rate model used by SCG to evaluate the economic viability of new business projects is a discounted cash flow model. It incorporates the input of revenue, based upon estimated new customers and average customer usage, along with cost components, primarily constructions costs but also including income and other taxes.

A 25 year evaluation period is used to conduct the analysis, as approved by the PURA. The outcome of the analysis is a project Net Present Value based upon the appropriate discount rate based upon the firm's after tax cost of capital. The company uses the allowed rate of return as approved by the PURA, for each company.⁶⁴⁹ The after tax return is appropriate for this analysis as after tax cash flows are considered in the hurdle rate model. The discount rates for SCG, as compared to CNG, are as follows:

- CNG – 6.64%
- SCG – 6.76%

The net present value results derived from the analysis indicates whether a customer contribution is required to render the project feasible. The results of such an analysis are carefully reviewed by the Marketing group, recognizing as well that the results of the analyses are heavily scrutinized by the PURA in required filings known as Order 11 and Order 21 reports, to be discussed later. Our review of the model, as well as model outputs, indicate to us that the model is appropriate and is applied appropriately by the company.⁶⁵⁰ While the application of the model is appropriate, the projections of construction cost and customer gas usage are and have been a problem, as will be discussed shortly.

Conclusion 10.2.3: *RCG/SCG LLC concluded that the application of the Non Firm Margin (NFM) program to encourage oil to gas conversion by CNG and SCG is appropriate including the selection process undertaken by the companies.*

Analysis

In response to the Comprehensive Energy Strategy, and as outlined in agreements with state legislation and PURA, CNG, and SCG are authorized to apply Non Firm Margin to offset customer requirements to contribute to a gas expansion project to render such a project economically feasible. The company procedures outline the specific rules under which NFM can

⁶⁴⁹ Response to Data Request FIN061 and FIN062

⁶⁵⁰ The model is contained in FIN090 CNG-SCG Attachment 1

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be applied to gas expansion projects.⁶⁵¹ Under the plan, the companies are permitted to apply 50% of NFM funds each year to the gas expansion program, subject to annual limits. The maximum allowed amounts for 2015 were as follows:⁶⁵²

- CNG \$4,605,000
- SCG \$4,440,000

According to the rules and outlined in the procedures, for any given project, up to 30% percent of construction costs can be covered by NFM funds if the project is less than \$1 million. For projects over \$1 million, NFM funds can be used to cover up to 50% of project costs.

The marketing teams for residential and commercial customers closely evaluate each of the prospect projects for eligibility for NFM funds. The company practices are not to apply the funds for “one off” customers, but rather to consider larger projects or areas where additional growth is anticipated. Many of these projects are associated with new franchise agreements working with municipalities. At times, municipalities offer community contributions to help defray some of the project costs to facilitate project feasibility, such as a \$500,000 contribution from the Town of East Hampton in 2015, or \$250,000 from the Town of Deep River.⁶⁵³

SCG has found that many projects are rejected when CIAC is requested from the customer. For example, the companies cite an analysis of customer initiated requests for service from January through April of 2013 for SCG. Out of 609 such projects, 43 were rejected as unfeasible due to CIAC costs or no customer response.⁶⁵⁴ The NFM funding has allowed many of these types of projects to be built. As shown below, a very small percentage of New Business spending, less than 2%, is funded through customer contributions:

	CNG	SCG
2015 Estimated New Business Budget	\$24,414,050	\$33,941,600
2015 Actual New Business Capital	\$18,356,135	\$23,699,442
2015 Non-Firm Margin Capital Offset	\$4,770,000	\$4,446,448
2015 Estimated Customer Contribution	\$488,281	\$678,832
2015 Actual Customer Contribution	\$168,438	\$700,767

Exhibit 93 - Customer Contributions to New Business Projects

Due to the small number of projects involving CIAC, potential concerns over the timing of commitments made to customers on project cost is mitigated.

⁶⁵¹ Response to Data Request FIN065 CNG-SCG Attachment 1

⁶⁵² Response to Data Request FIN104

⁶⁵³ Response to Data Request FIN069

⁶⁵⁴ Response to Data Request COM007 CNG-SCG Attachment 1

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The marketing strategies associated with the gas conversion program are extensively outlined in the Joint Natural Gas Infrastructure Expansion Plans filed with the Department of Energy and Environment Projection in 2013 and later approved by PURA. Based upon a community by community plan, SCG has developed reactive and proactive strategies to meet the new customer goals. The plans are extensive and detailed. Aside from customer segment analysis and strategy development, programs are included related to contractor partner arrangements to encourage vendors to promote gas conversion.

We believe the marketing organization is led by very capable leaders and the strategies are appropriate for the company efforts to meet programmatic goals.

Conclusion 10.2.4: *RCG/SCG LLC reasoned that economic feasibility analyses for new business projects should be considered with caution due to estimating accuracy issues associated with customer gas usage and construction costs. As a consequence, there are risks that certain projects would have been rejected if estimates were more accurately reflected in the models.*

Analysis

CNG and SCG are required to file monthly reports on the progress associated with the gas expansion program and specifically associated with off main projects. Order 11 reports provide an indication to the PURA of planned projects or projects underway and indicate primary assumptions associated with those projects including estimating customer gas usage, projected construction costs, and any projected NFM funds to be applied.

Order 21 reports provide actual results for projects completed and at least one year after gas is flowing through the meter. While a number of projects demonstrate gas usage and construction cost actuals consistent with forecasts in Order 11 reports, there are likewise many cases, after the one year mark, where actual customer gas usage is below estimates and/or construction costs exceed estimates.

An example from the July 1, 2016 Order 21 filing is provided in the following Exhibit:⁶⁵⁵

⁶⁵⁵See <http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/483e6b961ac22dad85257fe30049a9d7?OpenDocument> website

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Order 21 CNG-SCG Attachment 3				
Company: Connecticut Natural Gas Corporation Southern Connecticut Gas Company			Page 1 of 1	
Docket No. 13-06-02				
Date Submitted: July 1, 2016				
Apple Tree Ln. Hurdle Rate Comparison				
	Order 11 (2014)	Order 21 (2016)	Variance	Percentage
Number of Customers (Meters)	22	22	0	0%
Ccf Usage Per Meter	575	381	-194	-34%
Total Project Usage (Ccf)	12,650	8,391	-4,259	-34%
Total Project Revenue	\$14,855	\$12,743	-\$2,112	-14%
Main Cost	\$80,642	\$163,527	\$82,885	103%
Service Cost ¹	\$69,565	\$59,775	-\$9,790	-14%
Meter Cost	\$4,290	\$4,290	\$0	0%
Interim Project Cost Variance ²	\$154,497	\$227,592	\$73,095	47%
Additional Project NFM ³		\$56,937		
Adjusted Project Cost Variance	\$154,497	\$170,655	\$16,158	10%
Note 1: Actual number of services installed may be greater than the actual number of meters with gas flow.				
Note 2: Pursuant to Section VI. B. of the Settlement Agreement, which requires a root cause analysis of the Interim Project Cost Variance; SCG has performed such analysis and found that restoration costs for this project were higher than expected.				
Note 3: SCG originally applied 21.79% of the Estimated Project Cost or \$33,664 in Project NFM to this project. Based on the Actual Project Cost, the 30% NFM treatment is \$68,278. Less the original \$33,664 of Project NFM applied, SCG is applying an additional \$34,614 of Project NFM to offset the negative Project Cost Variance pursuant to Section VII. B. 1. of the Settlement Agreement. Also pursuant to Section VII. B. 1. of the Settlement Agreement, SCG is applying an additional \$22,323 of prioritized and subsequent allocations of Project NFM to cover the residual variance. The amount of NFM being applied is equal to the Actual Hurdle Rate CIAC.				

Exhibit 94 - Order 21 Filing

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This project, known as Apple Tree Lane, shows total project Ccf usage at 34% below that estimated in the Order 11 filing. Further, construction costs exceeded estimates by 47%. To meet the difference in cost, additional NFM funds were provided to the project. The issues associated with this practice will be discussed shortly.

Very typically in these reports explanations are provided for construction cost estimate variances, as can be seen in Note 2 above. In this case, the explanation was that restoration costs exceeded estimates. This is also a common theme, and is discussed further in Section 3.6 of this report on Capital Budgeting Processes.

Regarding the underestimate on customer gas usage, the company indicated that customer adoption rates are not fully realized. In some cases, while certain customers have gas flowing through their meters for at least one year, other customers started their gas service less than a year ago. Therefore, the actual usage has not been fully realized. This explanation can be assessed to accuracy after another 6 to 12 months have passed. While notations are provided in Order 21 reports for construction cost variances, no such notations are provided for customer usage variances. We recommend these notations be added to Order 21 reports. Importantly, according to program requirements, the final test of estimating accuracy is made at the end of five years. Project feasibility must be affirmed at the five year mark otherwise certain funds may be required to be returned to customers.

A detailed discussion of issues associated with construction cost estimating accuracy was provided in the Capital Budgeting Processes section of this report. The PURA not only has recognized the problems associated with SCG construction cost estimation processes but has also noted the same issues for estimation of customer gas usage.

The Capital Budgeting Processes section of the report discussed how SCG was instructed to engage a consultant to help evaluate reasons for poor construction cost estimating practices. The consultant was also asked to look at estimating problems associated with customer gas usage. Concentric Energy Advisors conducted the study.

The Concentric report found significant overestimates of customer usage on a project basis as shown in the following Exhibit.⁶⁵⁶

⁶⁵⁶ Response to Data Request GS085 CNG-SCG Attachment 1

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Figure 9: Residential Project Usage Accuracy Distribution

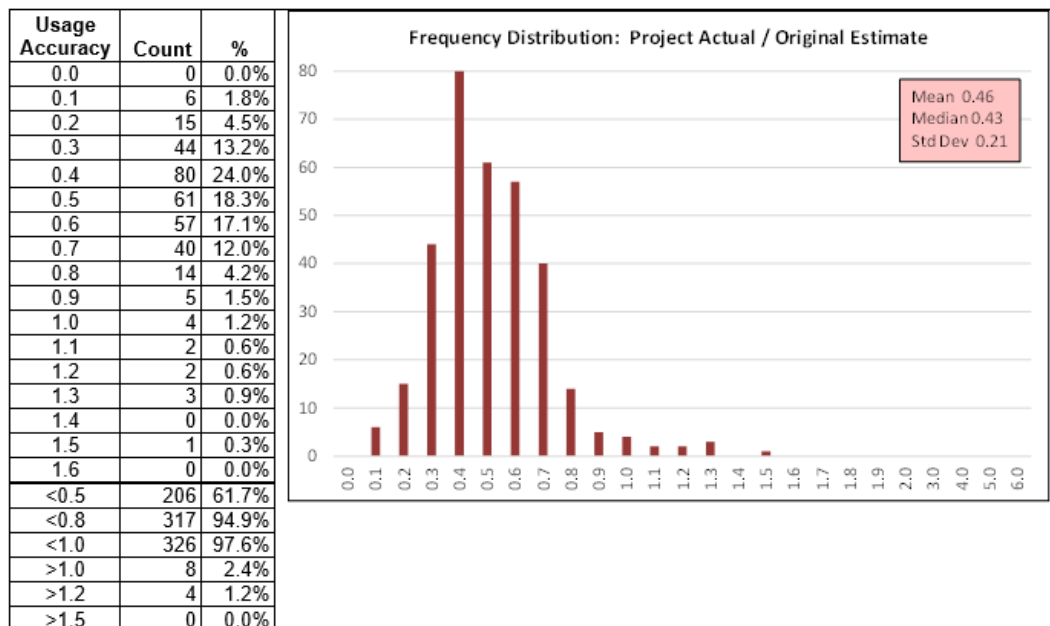


Exhibit 95 - Concentric Customer Usage Estimation Analysis on Project Basis

Similar results are found when viewed on a premise basis, again from the Concentric report:

Figure 10: Residential Premise Usage Accuracy Distribution

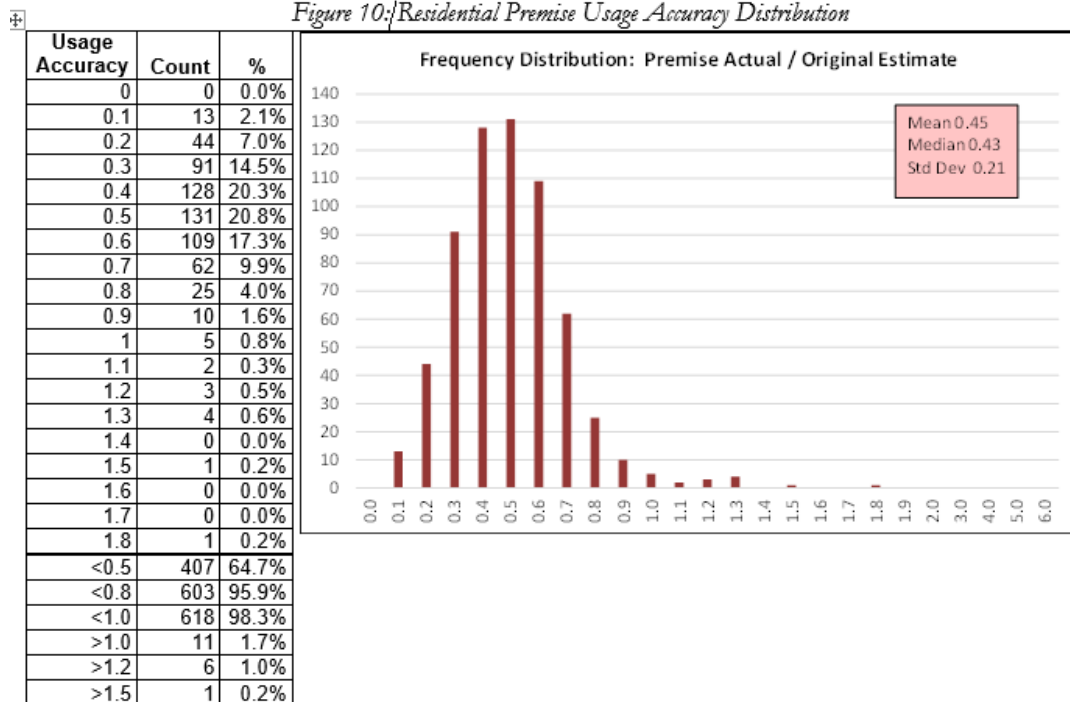


Exhibit 96 - Concentric Customer Usage Estimation Analysis on Premise Basis

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Therefore, historical results indicate the issues associated with overestimation of gas usage may be more than simply a matter of waiting for customer adoption to be realized.

The Concentric report provides an explanation of some of the practices the company was taking to address the overestimation of customer gas usage. This includes a conservative approach to only consider heating and gas water heater usage for residential customers, and no other possible gas uses such as gas cooking, clothes drying, and fireplaces. From the Concentric report:⁶⁵⁷

The revised residential consumption methodology is more formulaic, and based only on the expected consumption of heating and hot water equipment. The Companies' revised residential consumption estimate procedure is as follows:

- Hot water use is estimated to be 185 Therms per year.
- Heating consumption (for furnaces and boilers separately) is calculated based on the age and square footage of the home using the assumptions and calculations contained in the Connecticut Programs Savings Document: 8th Edition for 2013 Program Year (February 21, 2013).
- Furnaces are assumed to have a 0.90 annual fuel utilization efficiency ("AFUE"), and boilers are assumed to have a 0.82 AFUE.
- The consumption calculation is locked; only managers can override the results.

Concentric found when they applied the new rules to the historical database in their analysis, there was a reduction in the number of projects overestimated for gas usage. However, while the distribution of overestimates and underestimates was more balanced, the estimating variances on both sides were still fairly large leading to distortions on the application of CIAC, NFM funds, or the rejection of projects that should have been adopted.

Similar variations occur at the C&I level according to Concentric, especially as there is more of a dependence on customer indications of the equipment that will be used to support their businesses. However, Concentric found the variations to be less dramatic than those found for residential customers.

In the end, Concentric recommended continuing attempts to revise the gas usage estimating algorithms to reduce the variations in estimates. On the C&I side, Concentric recommended:

⁶⁵⁷ Response to Data Request OPS036 CNG-SCG Attachment 1

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- Modifications to sales contracts requesting enhanced details from customers on equipment and associated usage, and having CNG and SCG verify that proposed equipment was in fact installed by the customer;
- Gathering additional information from customers to better translate historical use with oil to estimates of gas consumption;
- Enhance database systems to gather actual customer usage across business types based upon billing system data to help improve future estimates; and
- Additional root cause analyses to further improve estimating practices.

Importantly, and of additional concern, is how estimating challenges for SCG impact hurdle rate analyses and the application of NFM funds. Referring again to the Apple Tree Lane project provided as an example above, in order to address the construction cost overruns additional NFM funds were applied, in particular \$56,937. As stated earlier, according to the rules, NFM funding is limited to 30% of project costs for projects under \$1 million and 50% of project costs for projects over \$5 million. Under this rule, the 30% limit for the Apple Tree Lane project was \$22,323 short of the required CIAC for this project to be economical, as described in Note 3.

Again, according to the rules, this application of NFM funds to cover the overrun, even if over the 30% and 50% limits, are permitted as long as the revenues by year five are high enough to overcome the higher construction costs bringing the economic analysis back in compliance with the rules.

As shown in the following Exhibit, there are several projects where NFM has been applied exceeding the 5 year allowed threshold:⁶⁵⁸

⁶⁵⁸ Response to Data Request FIN108 CNG-SCG Attachment 1

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Projects with a Year 1 Order 21 Filing Reflecting Final NFM as a Percentage of Actual Cost Greater than the Year 5 Allowed Threshold				
Order 21 Filing Date	Project Name	Total NFM Applied	Article IV, Section C Maximum NFM in Year 5	Final NFM Percent Based on Actual Cost
Q1 2016	CNG Cu ver Street - New ngton	\$28,023	30%	48%
Q1 2016	CNG Harvard Street - Wethersf e d	\$18,392	30%	33%
Q1 2016	CNG Westmont Street - West Hartford	\$112,789	30%	43%
Q4 2015	SCG Ca v n Leete - Gu ford	\$377,058	30%	53%
Q1 2016	SCG Broad R ver Lane - Southport	\$21,831	30%	35%
Q1 2016	SCG Caccamo Lane - Westport	\$40,727	30%	44%
Q1 2016	SCG Sy van Road - Mad son	\$17,938	30%	33%
Q1 2016	SCG Woodcock Lane - Westport	\$91,662	30%	45%
Q2 2016	SCG Hyatt - Westport	\$29,350	30%	36%
Q2 2016	SCG L ac - M ford	\$52,063	30%	51%
Q2 2016	SCG Pemburn - Fa rf e d	\$101,216	30%	43%
Q2 2016	SCG Spr ng - M ford	\$71,359	30%	50%
Q2 2016	SCG W ow - Branford	\$24,515	30%	44%

Exhibit 97 - NFM Funds Applied as Percentage of Actual Cost

According to company practice, and as permitted by the program, NFM funds accumulated from one year can be applied to another year. For example, NFM funds earned in 2014 were primarily applied to 2015 projects. NFM funds earned in 2015 were applied to some 2015 projects and are supporting some 2016 projects.⁶⁵⁹ The company is expected to spend or allocate the entire earned 2015 NFM funds on eligible projects or to cover interim cost variances.

At the end of year five, if the final NFM percentage exceeds the maximum percentage (either 30% or 50%), then funds would be returned to customers through a credit in the next System Expansion Rate reconciliation hearing. There are several consequences associated with the cost estimation related issues. First, depending upon whether the construction cost variances are due to estimating problems or project execution issues, it is possible for some projects to be

⁶⁵⁹Response to Data Request FIN104

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rejected because of unavailable NFM funds. We recognize that situation has not yet occurred. Further, if accurate construction cost estimates, and customer gas usage estimates were applied at the start of the analysis, perhaps some projects would and should have been rejected. These projects would not have passed the hurdle rate model, and customers very likely would have rejected the required CIAC. Since the beginning of the gas expansion program, a number of projects were rejected either because the necessary demand needed to construct the project was not obtained or the customer rejected the required CIAC. In particular, six commercial and industrial projects and 155 of 347 residential projects were rejected for these reasons.⁶⁶⁰

In summary, by the second or third interim year SCG should be able to see whether the customer gas usage estimates will begin to recover. While customer adoption into each project will progress each year, the accuracy of the per customer gas usage should be apparent by the second or third interim year. The impact of partial year new entrants should be mitigated. Therefore, the companies and PURA are sure to look closely at these second and third year Order 21 reports.

Recommendations

Recommendation 10.2.1: RCG/SCG LLC recommends as *suggested by Concentric Energy Advisors, SCG should continue to pursue root cause analyses to determine reasons for missing estimates both on the customer gas usage side and on construction cost estimates. On the latter, recommendations were provided in the Capital Budgeting Processes section of this report. Regarding the estimation of customer gas usage, we recommend the consideration of using a professional econometrician, perhaps a professor at a local college, to explore other models and algorithms to better predict customer gas usage. While the focus would be on the residential side, perhaps additional modeling can be done as well on the C&I side.*

⁶⁶⁰ Response to Data Request FIN105

10.3 Treatment of New Customers for System Expansion Programs

Background

This section provides an assessment by RCG/SCG LLC of the policies and procedures used by SCG to measure progress towards committed goals to make gas service more available to SCG customers and applying appropriate rate schedules to customers in compliance with PURA Orders implementing the Comprehensive Energy Strategy (CES). The original plan was implemented as defined in the Decision of November 2013 in Docket 13 06 02, as well as in follow up settlement agreements. A subsequent docket (16 04 10) was opened to specifically address how these policies were implemented by CNG and SCG including the consideration of customers that began discussions with the companies prior to the implementation of the new program on January 1, 2014 but had their services installed subsequent to that date. RCG/SCG LLC's assessment will only focus on the reasonableness of the "going forward" policies and practices of SCG to implement these plans. Since we are rendering our opinion on SCG's interpretation of the requirements outlined in the PURA Orders and subsequent agreements, the evaluation criteria is simply:

- Has SCG developed and applied reasonable policies and procedures to implement the CES program to appropriately determine applicable rates, and count customers relative to the SCG performance goals, with proper regard to the *intent* of the CES to encourage the conversion of oil fired equipment to gas and otherwise make gas service more readily available to new customers?

Overall Assessment

THE POLICIES IMPLEMENTED BY SCG IN SELECTING THE SERVICE RATES FOR NEW CUSTOMERS UNDER THE SYSTEM EXPANSION PROGRAM ARE APPROPRIATE. WE BELIEVE CLARITY SHOULD BE PROVIDED FOR COMPANY EMPLOYEES AND THROUGH SALESFORCE SYSTEM ENHANCEMENTS TO ADEQUATELY CAPTURE THE VARIOUS SCENARIOS UNDER WHICH A CUSTOMER MAY CHANGE THEIR SERVICE REQUIREMENTS.

The policies implemented by SCG in selecting the service rates for new customers under the system expansion program are appropriate. We believe clarity should be provided for company employees and through salesforce system enhancements to adequately capture the various scenarios under which customers may change their service requirements. SCG responses to the PURA eleven scenarios do not adequately cover all of the nuances, especially with regard to customer changes in load requirements, capital investments being incurred by SCG to serve the new customer requirements, and services being inactive for more than a year. Distinctions

between “organic growth”⁶⁶¹ and new customer service requirements driven by CES programs should be made clear.

We believe the classification of customers as “system expansion” customers for the purposes of measuring progress by SCG in meeting the ten year goals under CES should follow similar policies to those used to determine the appropriate rate schedule for the customer, which is not current company practice. We recognize, however, that this designation has no impact to the converted customer or to SCG ratepayers as a whole.

Conclusion 10.3.1: *RCG/SCG LLC concluded that SCG company policies and procedures to select the appropriate rate schedules for gas expansion customers and classifying those customers for meeting ten year gas conversion goals are mostly appropriate, but we recommend clarity and change of policy in a few instances.*

Analysis

The PURA opened Docket No. 16 04 10 as a “Review of the 2014 and 2015 System Expansion Reconciliation Mechanisms filed by: Connecticut Natural Gas Corporation, The Southern Connecticut Gas Company and Yankee Gas Services Company.” Among the issues considered within Docket No. 16 04 10 were how customer projects were treated during the transition to the new System Expansion program and whether rate schedules were assigned properly. While this docket examined how **actual** projects were treated in 2014 and 2015, our focus as expressed in this report is on the **going forward** policies. Our review began with two primary documents from Docket 16 04 10, describing company policy for new and existing customers:

- The response to PURA information request EN 001, and
- A transcript of the hearings associated with Docket 16 04 10 on June 22, 2016.

For information request EN 001, the PURA identified 11 scenarios for new customer additions. For each scenario, the information requested of SCG was to explain if:⁶⁶²

- A new customer Service Agreement or Construction Agreement would be executed,
- A new account number would be created,
- A standard rate or System Expansion Rate SE (Rate SE) would be applied, and if
- A new/existing customer is counted/reported as an expansion customer.

⁶⁶¹ “Organic growth” is defined in this Section to represent customer or gas usage growth that would likely have occurred absent the CES programs.

⁶⁶² Response to information request EN-001 in Docket No. 16-04-10

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The scenarios are described below:⁶⁶³

- **Age change:** A meter change out for an existing customer because of a meter age change requirement.
- **Leak repair:** A new meter/bar/riser installed as a part of a partial service renewal motivated by a leak investigation/repair.
- **Third-party damage:** A new meter/bar/riser installed as a result of third party damage when a vehicle backs into the meter.
- **Move-in/out – existing meter:** An existing meter is turned on after a move in move out of a residential or commercial space to accommodate a new customer.
- **Move-in/out - new meter:** A new meter is installed or “hung” at an existing riser/bar after a move in move out of a residential or commercial space to accommodate a new customer.
- **Added load – existing meter:** An existing meter measures more consumption as a result of increased gas use or additional gas equipment is connected by an existing commercial or multi family residential customer.
- **Added load – new meter:** A new meter is installed or “up sized” as a result of increased gas use or added load by an existing commercial or multi family residential customer.
- **Branch service:** A new branch service/meter is installed to an existing customer as a result of a building addition/modification activity. [SCG interpreted this scenario as a service relocation request by the customer.]
- **Added meter:** A new service/meter is installed to provide another point of service to an existing customer facility.
- **On main customer addition:** A new service/meter is installed to provide service to a site/premise and customer that has not had gas service previously.
- **Franchise expansion project customer:** A new gas main, service and meter are installed to provide service to a premise and customer that has not had gas service previously.

Our review in this section is focused on two of the four questions posed by the PURA with respect to the eleven detailed scenarios. Specifically, what rate plan is appropriate for the customer, and in the case of a new customer, are they counted as a system expansion customer?

The first of the two questions clearly has a direct impact on the customer, as it defines the applicable rate. In general terms, the customer would either stay on their existing, non

⁶⁶³ Response to information request EN-001 in Docket No. 16-04-10

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system expansion rate, or they would be placed on a System Expansion (SE) rate requiring a 10% premium if the premise is “on main” and a 30% premium if the premise is “off main.”⁶⁶⁴ A premise is “on main” if there is existing main in the street in front of the premise as of January 1, 2014⁶⁶⁵. A premise is off main if the installation of new main is required to serve the new customer.

Regarding the second question, whether the new customer is considered a system expansion customer, there is no impact to the customer or SCG ratepayers as a whole. We have been told this count is not used in the annual SE reconciliation proceedings to determine revenue requirements. Only customers on the SE rate are considered during the SE reconciliation proceedings. The consideration of whether the new customer is counted as a system expansion customer is only relevant to the measurement of progress to meeting the ten year goals or commitments associated with the gas conversion/system expansion program. Therefore, while we will comment on the policies associated with classifying new customers as system expansion customers, in the end it does not have a cost impact to customers, new or existing.

One of the factors our team considered in assessing the SCG policies and procedures is whether the change in the customer requirement is considered “organic” growth or whether the change may have been impacted by efforts of SCG to influence the selection of gas service consistent with CES objectives. In our opinion, changes in customer requirements driven by organic growth would not in isolation be a trigger for placing customers on a system expansion or SE rate schedule.

The responses by SCG to the eleven scenarios are provided below, along with our assessment of the policies:

⁶⁶⁴ CES Decision dated November 22, 2013 in Docket 13-06-02, on page 43

⁶⁶⁵ Decision in Docket No. 13-06-02, page 42

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Gas Customer Connection Scenarios	Standard Rate or System Expansion Rate SE	Recorded as Expansion Customer	RCG/SCG LLC Comments
Age Change	Existing rate whether non-SER or SER tariff	No	Agree
Leak Repair	Existing rate whether non-SER or SER tariff	No	Agree
Third Party Damage	Existing rate whether non-SER or SER tariff	No	Agree
Move-in/out -- Existing Meter	Existing rate at premise whether non-SER or SER tariff	Yes, if prior account inactive for one year	Agree on the rate question. Do not agree on designation as expansion customer
Move-in/out -- New Meter --	Existing rate at premise whether non-SER or SER tariff	Yes, if prior account inactive for one year	Agree on the rate question. Do not agree on designation as expansion customer
Added Load -- Existing Meter	Existing rate whether non-SER or SER tariff*	Yes if additional load >150 Mcf or more per year	Agree on the rate question. Do not agree on designation as expansion customer
Added Load -- New Meter	Existing rate whether non-SER or SER tariff*	Yes if additional load >150 Mcf or more per year	Agree on the rate question. Do not agree on designation as expansion customer
Branch Service	Existing rate at premise whether non-SER or SER tariff	No	Agree
Added Meter	Customer placed on On-Main SER tariff	Yes	Agree
On Main Customer Addition	Customer placed on On-Main SER tariff	Yes	Agree
Franchise Expansion Project Customer	Customer placed on Off-Main SER tariff	Yes	Agree
* Unless move to higher rate class			

Exhibit 98 - Evaluation of Company Responses to "Eleven Scenarios"

In our assessment, most scenarios are pretty straightforward and logical. We believe some clarity is required on selection of the appropriate rate plan under these scenarios. We believe the policy should apply:

- If a premise is on main, and at the time of the change described in the scenario the premise was served under the standard rate plan, that rate would still apply for the new or existing customer.
- If the premise is on main, and at the time of the change described in the scenario the premise was served under the SE on main tariff, that rate would still apply for the new or existing customer (usually a premise that became served by gas after January 1, 2014).

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- If the premise is on main, but was not served by SCG, the new customer would be subject to the on main SE tariff.
- If new main had to be installed to serve the new customer, it would logically be covered by the off main SE tariff.

Company policy is consistent with these statements.⁶⁶⁶ However, clarity is required because there are some other factors that may impact the selection of the appropriate rate schedule to the customer. Three factors for consideration are:

- Increase in customer load (e.g., residential non heating customer becomes a heating customer, or the energy needs of a commercial customer increases),
- Additional capital investment required by SCG to serve the customer, and
- Premise has been inactive for at least one year.

Added Load

Some of the scenarios above involve added load (either with an existing or new meter). The footnote in the SCG response to the scenario analysis indicates the customer may be placed on alternative rate schedule if their increased usage causes them to be placed in a higher rate class (e.g., Small General Service to Medium General Service). Importantly, the increase in gas usage, which can be represented as *organic growth*, is not a trigger for placing the customer into the SE rate if the premise was not already served by the SE rate. If the premise was served on a main installed prior to January 1, 2014 and was on a standard non SE rate, the customer would remain on a standard non SE rate, even if moved to a higher rate class. The company has concurred that this is the current policy.⁶⁶⁷ However, SCG *does* count the customer as a system expansion customer if the load increase is above 150 Mcf per year, as indicated in Exhibit 96. We disagree with this treatment, and will discuss this issue later.

Additional Capital Investment

The next consideration is the addition of capital investment to serve the customer. In fact there was considerable discussion in the hearings earlier this year in Docket 16 04 10 regarding both the need for additional capital investment as well as the impact of a premise being inactive for at least one year. Reviewing the transcript from June 22, 2016, the question was asked of Mr. Diotalevi, Senior Director of Business Services, whether “The decision of rate SE or non rate SE would be driven by specific factors, the amount of time it has or has not been inactive, as well as the capital expenditure associated with that particular premise.”⁶⁶⁸ Mr. Diotalevi’s response was:

⁶⁶⁶ As confirmed in telephone interview with Roddy Diotalevi on September 30, 2016

⁶⁶⁷ Ibid.

⁶⁶⁸ Transcript from Docket 16-04-10 on June 22, 2016, page 47 line 15

“We believe that the premise dictates the rate that the customer would be on in this situation. We’re specific in the decision of the original docket that a new customer charge, either our SER 10 percent or SER 30 percent, is dictated on whether there was main installed at that premise on January 1, 2014. So regardless of a new customer who’s in or out, what was the situation of the main in relation to that premise on 1/1/14 would dictate whether they’d be on a system expansion 10 percent or 30 percent rate.”⁶⁶⁹

While there are instances upon which capital spending may impact the selection of the appropriate rate schedule, clarity on the capital investment scenarios is warranted. The policy, as confirmed with SCG,⁶⁷⁰ is as follows:

- **Meter only addition** – if the extent of capital investment was only to install a new meter, this investment would be irrelevant to the selection of the rate schedule. If the premise was served by a standard non SE rate, it would continue to do so, even with the addition of or change in meter. If the premise was served by an SE rate, it would continue to do so.
- **Service line installed** – There are various examples under which a new service line would be installed or an existing line modified.
 - The most obvious is the addition of a new service for a customer that was not previously served by SCG as a gas customer. This customer would be placed on an SE rate schedule.
 - Similarly, if a customer requests a new point of service on an existing facility, and a new service line is installed, the added point of service would be placed on an SE rate schedule.
 - In the case of the branch service scenario while SCG capital investment is required, SCG has interpreted this scenario as a service relocation. In this instance, the customer would pay for the service relocation yet this action would not result in placing the customer on the SE rate if the customer was not already on the SE rate.
 - As a final example, if the customer requires a load increase, it is possible that load increase will require investments to modify the service line to accommodate the increase in load. However, as this scenario represents *organic growth* by the customer, the customer would not be placed on the SE rate if they were not already on the SE rate. A hurdle rate analysis would be completed to determine if any customer contribution was required. As indicated by SCG,⁶⁷¹

⁶⁶⁹ Ibid., page 47 starting on line 20

⁶⁷⁰ Telephone interview with Roddy Diotalevi on September 30, 2016

⁶⁷¹ Email from Roddy Diotalevi to Morris Jacobs on October 1, 2016

“For existing customers, we would not place them on a SE rate if they were on a standard rate. We would run a Cap model and if the load growth was enough to require a larger service, most often the load would cover that investment and no CIAC would be required. We don't believe making them pay a premium via a SE rate was the intent of the new SE rates.”

- Main expansion for system planning reasons – SCG may decide to incur investments to better manage system capacity or performance triggered by customer expansion in a region. Such investments for system planning reasons would not cause a customer to be placed on an SE rate.

We concur with these practices and believe it is consistent with the intent of CES, as expressed in the PURA Final Order defining the rules associated with implementing CES.⁶⁷²

“The Authority hereby approves a new set of rates for new customers to offset the incremental costs of expanding natural gas infrastructure pursuant to the Plan.”

However, we recommend providing additional clarity to these policies through the published tariffs, clarifying what events might trigger placing a customer on an SE rate.

Premise Inactive for More than One Year

In consideration of whether a premise was inactive for one year or more, as described in the move out/in scenarios, SCG policy is that the premise having been inactive for one year or more is irrelevant to the selection of the appropriate rate for the new customer. The new customer would receive the standard non SE rate or the SE rate depending upon whether the premise was previously served by one rate or the other. However, once again SCG does use the period of inactive status to trigger consideration of the new customer as a system expansion customer.

SCG logic is as follows:⁶⁷³

“We choose, as Mr. Michelson said, to count a customer as a new CES customer if that meter has been inactive for a year or longer because we believe that at the time we’ve eliminated the short term transience and we’re going to a new customer that has the decision of whether to go with gas or oil or other fuel source at that premise. And so that’s why we’ve chosen a one year inactive status on whether to count a new customer or not.”

⁶⁷² Docket No. 13-06-02 Final Order Page 41

⁶⁷³ Transcript from Docket 16-04-10 on June 22, 2016, page 48 line 8

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While counting new customers to track SCG performance relative to meeting ten year goals for converting customers from oil to gas has no cost impact to customers, existing or new, we believe this tracking mechanism should be consistent with the policies associated with selecting the proper rate schedules for customers and premises. That is, if a new customer was placed on an SE rate (and was not prior to the actions described in the eleven scenarios) that customer should be counted as a system expansion customer. If the customer would be placed on a standard, non SE rate, they should not be counted as a system expansion customer. The distinctions of adding load beyond 150 Mcf per year or a premise having been inactive for a year or more should not be considered, just as they are irrelevant to the selection of rate schedules.

In response to the justification provided in the transcript excerpt above, we believe it is unlikely that in an existing premise, where there is a gas main in the street and a gas furnace in the premise, a new customer would consider replacing the gas furnace with a new oil burning furnace. More likely if the gas furnace required replacement, it would be replaced with another more efficient gas furnace.

Finally, applying a rule for counting system expansion customers that is consistent with the application of rate schedule for new customers would provide ease in revenue requirements determination in subsequent rate cases. Distinguishing between system expansion and other customers would be considered during revenue requirements determinations (and in reviews by PURA staff) and counting customers in a manner consistent with rate schedule selection would limit confusion during rate case proceedings.

As stated earlier, in the end the designation of a new customer as a system expansion customer is only a question of how SCG is performing relative to their goals and commitments to PURA and the state. More important, in our opinion, is clarification of the rate plans for the new customer, especially to be sure company employees apply the policies appropriately.

Fortunately, SCG has implemented a new technology, Salesforce CRM, which employs algorithms to help “hard wire” the decisions regarding the placement of new customers on the proper rate,⁶⁷⁴ as long as the proper inputs are provided. We believe these algorithms should be reviewed to be sure they follow the policy recommendations described above.

Recommendations

Recommendation 10.3.1: *RCG/SCG LLC recommends that SCG should provide clarity on the application of standard versus SE rates to new customers as part of the system expansion program. The “eleven scenarios” do not adequately capture all the nuances of customer changes in service requirements. Clarity on these rules would minimize errors in application of these rates.*

⁶⁷⁴ Response to Data Request FIN109 CNG-SCG Attachment 1

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With regard to the changes in customer service requirements, “organic growth” should not be a consideration in applying an SE rate when the customer or premise is not already on an SE rate.

With regard to classifying customers as system expansion customers, we believe rules should be followed similar to the decision framework used for determining applicable rate schedules, and that an inactive meter beyond one year is not a distinction of importance. As well, customers that experience increases in load beyond 150 Mcf per year should not be counted as system expansion customers.

To assist with the clarity of policies, the following steps should be taken:

- Salesforce CRM should be configured to follow the company policies including the nuances described in this report. Questions should be posed in the application to trigger the proper treatment.
- Rate schedules should be modified to include adequate descriptions to fit these rules regarding when an SE rate would apply (and when it would not apply).
- The policies described in this report should be periodically reviewed by Internal Audit to assess compliance.

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Appendix 1- Abbreviations and Acronyms

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Abbreviations and Acronyms

AA	Affirmative Action
ACD	Automated Call Distributor
ACH	Automated Clearing House
AE	Account Executive
AFUDC	Allowance for Funds Used During Construction
AGA	American Gas Association
AIP	Annual Incentive Program
AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
AMS	Asset Management System
ANI	Adjusted Net Income
ANSI	American National Standards Institute
APM	Accident Prevention Manual
BACG	Business Area Control Group
BSC	Business Solutions Center
C&I	Commercial and Industrial
C&LM	Conservation and Load Management
CAM	Cost (or Corporate) Allocation Manual
CaPP	Capital Project Approval Policy and Procedures
CAU	Charge Accounting Unit
CBA	Collective Bargaining Agreement
CBM	Condition Based Maintenance
CCC	Cost Control Center
CCM	Connecticut Conference of Municipalities
CCNC	Completed Construction Not Classified
CDPUC	Connecticut Department of Public Utility Control
CE	Customer Experience
CEAB	Connecticut Energy Advisory Board
CEAP	Connecticut Energy Assistance Program
CEEF	Connecticut Energy Efficiency Fund
CEO	Chief Executive Officer
CES	(Connecticut) Comprehensive Energy Strategy
CFM	Corporate Financial Model
CFO	Chief Financial Officer
CHRO	Connecticut Human Rights Organization
CIA	Certified Internal Auditor
CIS	Customer Information System

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CLE	Continuing Legal Education
CM	Circuit Manager
CNG	Connecticut Natural Gas Corporation
COE	Center of Excellence
COLT	Corporate Online Time
CONVEX	Connecticut Valley Exchange
COO	Chief Operations Officer
CPA	Certified Public Accountant
CPM	Corporate Performance Management
CRM	Customer Relationship Management
CRMS	Corporate Records Management System
CSR	Customer Service Representative
CTA	Call to Action
CWIP	Construction Work In Progress
D&I	Diversity and Inclusion
DA	Decision Analysis
DART	Days Away Restricted Transferred
DDI	Development Dimensions International
Department	Department of Public Utility Control
DIF	Difficulty/Importance/Frequency
DOE	Department of Energy
DOT	Department of Transportation
DPUC	Department of Public Utility Control
DRM	Department Records Manager
DSCADA	Distribution Supervisory Control and Data Acquisition System
DSEM	Distribution System Engineering Manual
EAP	Employee Assistance Program
EBE	Economic and Business Development
ECMB	Energy Conservation Management Board
EDI	Electronic Data Interchange
EDS	Electronic Dispatch System
EEO	Equal Employment Opportunity
EIA	Energy Independence Act
EOC	Emergency Operations Center
ERM	Enterprise Risk Management
ERMC	Executive Risk Management Council
ERP	Enterprise Resource Planning
ERP	Emergency Restoration Program

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ERT	Electronic Receiver Transmitter
FASB	Financial Accounting Standards Board
FD	Fair Disclosure
FERC	Federal Energy Regulatory Commission
FFO	Funds from Operations
FTE	Full Time Equivalent
G/L	General Ledger
GAAP	Generally Accepted Accounting Principles
GIS	Geographic Information System
GIS	Graphical Inventory System
HIPAA	Health Insurance Portability and Accountability Act
HR	Human Resources
HRA	Health Reimbursement Account
HRIT	Human Resources Information Technology
IA	Internal Audit
IAD	Internal Auditing Department
IBEW	International Brotherhood of Electrical Workers
IIA	Institute of Internal Auditors
IM	Instant Messaging
IR	Investor Relations
ISACA	Information Systems Audit and Control Association
ISO	Independent System Operator
I/T	Information Technology
ITIL	Information Technology Infrastructure Library
IVR	Interactive Voice Response
JIT	Just in Time Training
KPI	Key Performance Indicators
KRA	Key Result Area
LIHEAP	Low Income Home Energy Assistance Program
LTIC	Long term Incentive Compensation
MARC	Management Associated Results Company, Inc.
MDS	Mobile Dispatch System
MIBS	Management Information and Budget System
MIMS	Materials Information Management System
MIS	Management Information System
MPP	Matching Payment Program
MVRS	Multi Vendor Reading System
NARUC	National Association of Regulatory Utility Commissioners

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NFM	Non Firm Margin
NEO	Named Executive Officers
O&M	Operation and Maintenance
OCCap	Operating Companies Capital Program
OCRC	Operating Company Review Committee
OJT	On the Job Training
OPEB	Other Post Employment (Retirement) Benefits
OSHA	Occupational Safety and Health Administration
OTD	On Time Delivery
PCB	Polychlorinated biphenyls
PES	Performance Enhancement System
PMVA	Preventable Motor Vehicle Accident
PTMS	Performance and Talent Management System
PURA	Public Utilities Regulatory Authority
RaCC	Risk and Capital Committee
RCG	River Consulting Group, Inc.
RCM	Reliability Centered Maintenance
RCRC	Regulated Company Review Committee
RFP	Request for Proposal
RIM	Records and Information Management
RM	Records Manager
RMC	Risk Management Council
RMS	Route Mean Square
ROW	Rights of Way
RSU	Restricted Share Units
RTO	Recovery Time Objective
S&P	Standard & Poor's
SAT	Systematic Approach to Training
SAU	Source Accounting Unit
SBC	Standards of Business Conduct
SCADA	Supervisory Control and Data Acquisition
SCG	Southern Connecticut Gas Company
SCG LLC	Raymond G Saleeby, LLC d/b/a Saleeby Consulting Group, LLC
SEC	Securities and Exchange Commission
SERP	Supplemental Executive Retirement Plan
SERT	Skills Enhancement Refresher Training
SIRS	Safety Incidence Report System
SLA	Service Level Agreement

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SOC	System Operations Center
SOX	Sarbanes Oxley
SPCC	Spill Prevention, Control, and Countermeasure
SSR	Shared Services Roundtable
STORMS	Severn Trent Operational Resource Management System
T&D	Transmission and Distribution
T2F	Time to Fill
TDRP	Transmission and Distribution Reliability Performance
TOU	Time of Use
TRACS	Tracking Regulated Activities and Calendar System
UGCap	Utility Group Capital Program
UI	United Illuminating Company
UIL	UIL Holdings
UOMA	Utilities Operations and Management Analysis
UPIS	Utility Plant in Service
UTG	Utility Group
VOC	Voice of the Customer
VP	Vice President
WMS	Work Management System
WPP	Winter Protection Program
WRAP	Weatherization Residential Assistance Partnership
YGS	Yankee Gas Services (now Eversource Energy)
YTD	Year to Date
ZIP	Zero Incident Program

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ATTACHMENT D
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February 8, 2023

Paul Dexter, Esq.
New Hampshire Department of Energy
21 S. Fruit Street, Suite 10
Concord, New Hampshire 03301

Re: Docket No. DE 19-057
Public Service Company of New Hampshire d/b/a Eversource Energy
Business Process Audit

Dear Mr. Dexter:

On behalf of Public Service Company of New Hampshire d/b/a Eversource Energy (the “Company”), we are writing in relation to the final report of River Consulting Group, Inc. (“River Consulting”) (the “Audit Report”) regarding the business process audit undertaken pursuant to the Settlement Agreement approved in Docket DE 19-057. For the reasons stated below, the Company respectfully requests that DOE agree to a process and timeline for mutual review and comment by DOE and the Company on the *original* work product generated by River Consulting for its final report.

As you are aware, the Company received a copy of the River Consulting report (“Audit Report”) on November 30, 2022. Since that date, the Company’s internal teams have conducted a thorough review of the content for verification and factual accuracy. Based on this review, the Company’s assessment is that the Audit Report delivered to the Company was likely edited by the staff of the Department of Energy (“DOE”) prior to the Company’s receipt of the report, perhaps substantially. Among other indications, the structure and content of the Audit Report departs in material respects from the structure and content of other final reports generated by River Consulting for past professional engagements.¹

In Docket No. DE 22-030, the Company’s Petition for a Third Step Adjustment, the DOE’s own correspondence with the PUC on this matter (dated October 13, 2022) acknowledged that DOE had received a draft of the final report from River Consulting and that it intended to provide

¹ By way of example, the Company is providing herewith a copy of the River Consulting final report on a management audit of Southern Connecticut Gas Company (“SCG”), prepared for the Connecticut Public Utilities Regulatory Authority (issued on January 6, 2017). The SCG audit report is concise, objectively framed and narrated with exactitude, as would be expected from an independent audit. The Audit Report delivered to the Company does not share these same characteristics and therefore does not appear to be the exclusive work product of River Consulting.

ATTACHMENT D

Letter to DOE
Docket No. DE 19-057
February 8, 2023
Page 2 of 4

River Consulting with comment on the draft by November 4, 2022, preceding the Company's receipt of the Audit Report from River Consulting. As the Audit Report was not provided to the Company in the original form delivered to DOE, the Company is unable to distinguish the findings and recommendations of River Consulting from the exposition that DOE seems to have added to the Audit Report in the weeks or months that it held the report before returning it to River Consulting.

The Company's request (and fundamental expectation in agreeing to the business process audit) was that it would be conducted as a third-party audit in order to provide the highest value to the Public Utilities Commission ("PUC") in future ratemaking proceedings, following a process similar to that which DOE's Audit Division has used for many, many years. The sequence of the DOE Audit Division process is: (1) issuance of a draft audit report by the Audit Division; (2) review and proposed edits in redlined form from the Company to make factual corrections only; (3) receipt of an Audit Division response clearly identifying where the Company's feedback is or is not incorporated. In this process, no changes are made to the Audit Division report except to the extent deemed appropriate by the Audit Division to address any factual correction or counterpoint raised by the Company. Adhering to this type of process is absolutely vital to maintain the third-party, independent nature of the Audit Report. Independence is a necessity if the recommendations set forth in the Audit Report are to be incorporated into the Company's actual business processes and relied on as a basis for Commission review on the merits of project costs in future rate proceedings.

From the Audit Report produced to the Company, the independent findings of River Consulting cannot be discerned.² Staff's edits to the River Consulting report appear to be incorporated without any delineation to differentiate Staff's comments from the feedback and expertise of River Consulting, so that the Audit Report is no longer the exclusive work product of River Consulting.

Without transparency regarding the original work product submitted by River Consulting, the core purpose of the business process audit is undermined and the validity of the findings are compromised, such that the Company cannot agree to accept and adopt the recommendations resulting from the business process audit, as the Company was prepared to do in order to facilitate and streamline future rate reviews before the Commission. The entire purpose of the business process audit was to conduct a third-party review of the Company's capital authorization, budgeting and execution processes; to identify recommendations for improvement; to establish a standardized, accepted basis for the business process; and to thereby enable a more systematic basis for reviewing Company projects in a prudence review.

² This is inconsistent with the intent of the business process audit itself and undermines the integrity of the process (see, e.g., 10-26-20 AM Tr. at 55-56, stating that the business process audit was intended to provide a **third-party** review of the Company's business processes and provide opportunities for improvements into how we manage our projects and oversee the costs associated with them).

ATTACHMENT D

Letter to DOE
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Page 3 of 4

At this stage, it is unclear what DOE expects the Company to do with the Audit Report. It appears that the Company's only option is to send back a redlined document to River Consulting that attempts to remove the pervasive editorial "testimony" incorporated to this document. Among other concerns that the Company has, this editorial conveys a strong bias against the Company that is not characteristic of other audit work produced by River Consulting in its professional capacity.

At the same time, the Company has a strong preference to complete this work effort, having devoted substantial resources to the audit process, including participation in approximately 50 interviews and panel discussions, preparing responses to 224 data requests, and hosting several field visits in April 2022. The Company also incurred costs of approximately \$500,000, which the Company agreed would not be collected from customers.

The Company stands prepared to work with DOE and River Consulting to conduct a transparent process to allow for the issuance and adoption of the Audit Report associated with the independent work product developed by River Consulting, subject to any appropriate factual corrections. Completion of the business process audit is a critical objective for the Company, which the Company had wanted to accomplish with sufficient time to incorporate recommendations into the Company's business processes before the upcoming base distribution rate case proceeding. For this to happen, the Audit Report must be formally issued by River Consulting well in advance of the base distribution rate case filing, so that the Company can implement the recommendations.

Accordingly, the Company respectfully requests that DOE agree to a timeline for review and comment on the *original* work product generated by River Consulting for its final report that would be complete by the end of February so that the Company can implement the recommendations of River Consulting before its distribution rate filing. At a minimum, that process should provide for the following steps:

- (1) Distribution of the *original* Audit Report prepared by River Consulting to the Company and DOE;
- (2) Provision of a redlined copy of DOE's suggested changes to the Company;
- (3) Provision of a redlined response from the Company to identify any factual corrections or modifications, as well to respond to DOE's comments and the audit findings; and
- (4) Submission of a final report to DOE and the Company by River Consulting, accepting or rejecting the proposed factual corrections or other proposals submitted by the Company and/or DOE and explaining the basis for that treatment.

If DOE prefers, all iterations could be preserved within the formal report version for full transparency when presented to the Commission pursuant to the Settlement Agreement. Also, the Company would have no objection to DOE having a final opportunity to respond to the Company's

ATTACHMENT D

Letter to DOE
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Page 4 of 4

comments before River Consulting formally issues its findings and recommendations so long as full transparency is maintained.

Without a commitment from DOE to full transparency in finalizing this work product, the Company intends to make a request to the Commission to establish a process so that the work product is not wasted and can be issued by River Consulting in a valid and reliable form with the integrity of third-party independence. However, the Company's sincere preference is to work collaboratively with DOE to complete the process of finalizing the Audit Report on a valid and transparent basis. The Company respectfully requests a response from DOE within seven days as to DOE's willingness to engage on this basis to complete this important work effort.

The Company is willing to adopt the findings or recommendations put forth by River Consulting subject to any appropriate factual corrections once confirmation is obtained that the stated findings and recommendations are those of an independent third-party utilizing industry expertise and working in a professional capacity.

Please contact me if you have any questions or wish to discuss. Thank you for your attention to this matter.

Sincerely,



Jessica Buno Ralston

cc: River Consulting Group

COMMISSIONER
Jared S. Chicoine

DEPUTY COMMISSIONER
Christopher Ellms, Jr.

STATE OF NEW HAMPSHIRE
ATTACHMENT E



DEPARTMENT OF ENERGY
21 S. Fruit St., Suite 10
Concord, N.H. 03301-2429

TDD Access: Relay NH
1-800-735-2964

Tel. (603) 271-3670

FAX No. 271-1526

Website:
www.energy.nh.gov

February 15, 2023

Via Electronic Mail

Jessica Buno Ralston, Esq.
Keegan Werlin, LLP
99 High Street, Suite 2900
Boston, MA 02110

Re: Docket No. DE 19-057; Public Service Company of New Hampshire d/b/a Eversource Energy; Business Process Audit

Dear Attorney Buno Ralston:

Your letter of February 8, 2023 states:

“The Company is willing to adopt the findings or recommendations put forth by River Consulting subject to any appropriate factual corrections once confirmation is obtained that the stated findings and recommendations are those of an independent third-party utilizing industry expertise and working in a professional capacity.”

Attached is a letter from River Consulting Group, Inc. (the authors of the Business Process Audit Final Report - which was provided to Eversource for review and comment on November 30, 2022) confirming that the findings and recommendations stated in that Final Report are those of an independent third-party (*i.e.*, River Consulting Group, Inc.) utilizing industry expertise and working in a professional capacity.

The statements in your February 8 letter questioning the independence of the Final Report and the conduct of the DOE staff are baseless and unwarranted.

The Department of Energy recommends that Eversource provide comments on the November 30, 2022 Final Audit Report by March 15, 2023. The Department will provide any comments it has by that same date. Once River Consulting Group, Inc. has reviewed these comments and made any changes to the Final Report it deems appropriate, the Department will present that final product to the Public Utilities Commission. *See Settlement Agreement in DE 19-057, Appendix 2.*

ATTACHMENT E

Sincerely,

/s/ Paul B. Dexter

Paul B. Dexter
Legal Director /Senior Hearings Examiner
New Hampshire Department of Energy

Cc: River Consulting Group, Inc.
Attachment

ATTACHMENT E



February 15, 2023

Via Electronic Mail

Jessica Buno Ralston, Esq.
Keegan Werlin, LLP
99 High Street, Suite 2900
Boston, MA 02110

Re: Docket No. DE 19-057; Public Service Company of New Hampshire d/b/a Eversource
Energy; Business Process Audit

Dear Attorney Buno Ralston:

In response to your letter to Attorney Dexter of the New Hampshire Department of Energy dated February 8, 2023 (a copy of which was provided to River Consulting Group, Inc.) I write to confirm that the stated findings and recommendations contained in the Final Business Process Audit Report, which was provided to Eversource via email on November 30, 2022, are those of an independent third-party (River Consulting Group, Inc) using their industry expertise and working in a professional capacity.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Robert M Grant', is written over a horizontal line.

Robert M Grant
President
River Consulting Group, Inc.

Cc: New Hampshire Department of Energy

STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

October 26, 2020 - 10:10 a.m.

DAY 1

Morning Session ONLY

[Remote Hearing conducted via Webex]

RE: DE 19-057

EVERSOURCE ENERGY:

Notice of Intent to File Rate
Schedules. *(Hearing regarding
Settlement Agreement)***PRESENT:** Chairwoman Dianne Martin, Presiding
Cmsr. Kathryn M. BaileyJody Carmody, Clerk
Eric Wind, PUC Remote Hearing Host**APPEARANCES:** Reptg. Public Service Company of
New Hampshire d/b/a Eversource Energy:
Matthew J. Fossum, Esq.Reptg. Clean Energy New Hampshire:
Elijah D. Emerson, Esq. (Primmer...)Reptg. The Way Home:
Raymond Burke, Esq. *(N.H. Legal Asst.)*
Stephen Tower, Esq. *(N.H. Legal Asst.)*Reptg. AARP:
John Coffman, Esq.

Court Reporter: Steven E. Patnaude, LCR No. 52

APPEARANCES: *(C o n t i n u e d)*

Reptg. Residential Ratepayers:

D. Maurice Kreis, Esq., Consumer Adv.
Office of Consumer Advocate

Reptg. PUC Staff:

Suzanne G. Amidon, Esq.
Brian D. Buckley, Esq.
Scott M. Mueller, Esq. *(S. Mueller Law)*

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I N D E X	
	PAGE NO.
WITNESS PANEL:	RICHARD CHAGNON DOUGLAS P. HORTON TROY M. DIXON
Direct examination by Ms. Amidon	16
Direct examination by Mr. Fossum	19
Interrogatories by Cmsr. Bailey	37, 70
Interrogatories by Chairwoman Martin	68, 81, 111

E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
5	Direct Testimony of William J. Quinlan	<i>premarked</i>
6	Direct Testimony of Eric H. Chung & Troy M Dixon, with attachments	<i>premarked</i>
7	Direct Testimony of Joseph A. Purington & Lee G. Lajoie	<i>premarked</i>
8	Direct Testimony of Charlotte B. Ancel & Jennifer A. Schilling with attachments	<i>premarked</i>
9	Direct Testimony of Ann E. Bulkley, with attachments	<i>premarked</i>
10	Direct Testimony of Robert D. Allen	<i>premarked</i>
11	Direct Testimony of Penelope McLean Conner, with attachments	<i>premarked</i>
12	Direct Testimony of Penelope McLean Conner, with attachments {CONFIDENTIAL & PROPRIETARY}	<i>premarked</i>
13	Direct Testimony of Erica L. Menard, with attachments	<i>premarked</i>
14	Direct Testimony of John J. Spanos with attachments	<i>premarked</i>
15	Direct Testimony of Amparo Nieto - Allocated Cost of Service Study, Marginal Cost of Distribution Service Study and Implications for Rate Design, with attachments	<i>premarked</i>

{DE 19-057} [Day 1/Morning Session ONLY] {10-26-20}

E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
16	Direct Testimony of Edward A. Davis, with attachments	<i>premarked</i>
17	Standard filing requirements	<i>premarked</i>
18	Eversource Energy decision to resubmit two projects for approval in separate dockets	<i>premarked</i>
19	Eversource Energy Updated Revenue Requirement	<i>premarked</i>
20	Updated Rate Schedules	<i>premarked</i>
21	Clean Energy NH Testimony of Madeleine Mineau, with attachments	<i>premarked</i>
22	ChargePoint, Inc. Testimony Kevin Miller, with attachments	<i>premarked</i>
23	AARP New Hampshire Testimony of Scott J. Rubin, with attachments	<i>premarked</i>
24	The Way Home Testimony of Roger D. Colton, with attachments	<i>premarked</i>
25	Testimony of Pradip Chattopadhyay, with attachments	<i>premarked</i>
26	Testimony of John Defever, with attachments	<i>premarked</i>
27	Testimony of Paul J. Alvarez, with attachments	<i>premarked</i>
28	Testimony of Ron Nelson, with attachments	<i>premarked</i>

{DE 19-057} [Day 1/Morning Session ONLY] {10-26-20}

E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
29	Testimony of Ron Nelson, with attachments {CONFIDENTIAL & PROPRIETARY}	<i>premarked</i>
30	Testimony of Richard Chagnon, with attachments	<i>premarked</i>
31	Testimony of Amanda O. Noonan, with attachments	<i>premarked</i>
32	Testimony of Jay E. Dudley, with attachments	<i>premarked</i>
33	Testimony of Jay E. Dudley, with attachments {CONFIDENTIAL & PROPRIETARY}	<i>premarked</i>
34	Testimony of Kurt Demmer, with attachments	<i>premarked</i>
35	Testimony of Donna H. Mullinax, with attachments	<i>premarked</i>
36	Testimony of J. Randall Woolridge, with attachments	<i>premarked</i>
37	Testimony of Augustin J. Ros, with attachments	<i>premarked</i>
38	Testimony of Augustin J. Ros, with attachments {CONFIDENTIAL & PROPRIETARY}	<i>premarked</i>
39	Testimony of Sanem I. Sergici, with attachments	<i>premarked</i>
40	Walmart, Inc. Testimony of Steve. W. Chriss, with attachments	<i>premarked</i>

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E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
41	New Hampshire Department of Environmental Services Testimony of Rebecca Ohler & Christopher Skoglund, with attachments	<i>premarked</i>
42	The Way Home Rebuttal Testimony of Roger D. Colton	<i>premarked</i>
43	Rebuttal Testimony of Joseph A. Purington	<i>premarked</i>
44	Rebuttal Testimony of Douglas P. Horton & Troy M. Dixon	<i>premarked</i>
45	Rebuttal Testimony of Erica L. Menard, Lee G. Lajoie & David L. Plante, with attachments	<i>premarked</i>
46	Rebuttal Testimony of Erica L. Menard, Lee G. Lajoie & David L. Plante, with attachments {CONFIDENTIAL & PROPRIETARY}	<i>premarked</i>
47	Rebuttal Testimony of Robert D. Allen & William A. Van Dam, with attachments	<i>premarked</i>
48	Rebuttal Testimony of Penelope McLean Conner, with attachments	<i>premarked</i>
49	Rebuttal Testimony of Ann E. Bulkley, with attachments	<i>premarked</i>
50	Rebuttal Testimony of Amparo Nieto	<i>premarked</i>

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E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
51	Rebuttal Testimony of Edward A. Davis	<i>premarked</i>
52	Eversource Updated ROE Testimony and attachments	<i>premarked</i>
53	OCA Updated ROE Testimony, with attachments	<i>premarked</i>
54	Staff Updated ROE Testimony, with attachments	<i>premarked</i>
55	Staff Updated Testimony Cover Letter and Motion	<i>premarked</i>
56	Updated Testimony of Jay Dudley, with attachments	<i>premarked</i>
57	Updated Testimony of Donna Mullinax, with attachments	<i>premarked</i>
58	Settlement Agreement on Permanent Distribution Rates	<i>premarked</i>

{DE 19-057} [Day 1/Morning Session ONLY] {10-26-20}

P R O C E E D I N G

CHAIRWOMAN MARTIN: We're here this morning in Docket DE 19-057 for a hearing regarding the Eversource Energy Petition for Permanent Rates. A Settlement Agreement has been filed for consideration.

I need to make the necessary findings, because this is a remote hearing.

As Chairwoman of the Public Utilities Commission, I find that due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic, and in accordance with the Governor's Emergency Order Number 12, pursuant to Executive Order 2020-04, this public body is authorized to meet electronically. Please note that there is no physical location to observe and listen contemporaneously to this hearing, which was authorized pursuant to the Governor's Emergency Order.

However, in accordance with the Emergency Order, I am confirming that we are utilizing Webex for this electronic hearing. All members of the Commission have the ability to communicate contemporaneously during this

{DE 19-057} [Day 1/Morning Session ONLY] {10-26-20}

1 hearing, and the public has access to
2 contemporaneously listen and, if necessary,
3 participate.

4 We previously gave notice to the public
5 of the necessary information for accessing the
6 hearing in the Order of Notice. If anybody has a
7 problem during the hearing, please call
8 (603)271-2431. In the event the public is unable
9 to access the hearing, the hearing will be
10 adjourned and rescheduled.

11 Okay. Let's take a roll call
12 attendance of the Commission. And, when each
13 Commissioner identifies himself, if anyone is
14 with you, please also identify that person as
15 well.

16 My name is Dianne Martin. I am the
17 Chairwoman of the Public Utilities Commission.
18 And I am alone.

19 Commissioner Bailey.

20 CMSR. BAILEY: Good morning.
21 Commissioner Bailey, Kathryn Bailey. And I am
22 alone as well.

23 CHAIRWOMAN MARTIN: All right. Let's
24 take appearances, starting with Mr. Fossum.

1 MR. FOSSUM: Good morning,
2 Commissioners and parties. Matthew Fossum, here
3 for Public Service Company of New Hampshire,
4 doing business as Eversource Energy.

5 CHAIRWOMAN MARTIN: Okay. And Mr.
6 Kreis.

7 MR. KREIS: Good morning, Chairwoman
8 Martin, Commissioner Bailey, fellow rate
9 enthusiasts, I am D. Maurice Kreis, the Consumer
10 Advocate, here on behalf of the residential
11 utility customers of Eversource today.

12 And I am speaking to you from the
13 basement at the New Hampshire Department of
14 Justice, which is why there is a weird billboard
15 under my name that doesn't have my name in it.

16 CHAIRWOMAN MARTIN: Okay. And
17 Ms. Amidon.

18 MS. AMIDON: Suzanne Amidon, for
19 Commission Staff. And I'd like my co-counsels to
20 introduce themselves for the record.

21 MR. MUELLER: Good morning. Scott
22 Mueller, Scott Mueller Law Office, on behalf of
23 Staff. And I'm in my home office, by myself.

24 CHAIRWOMAN MARTIN: Thank you.

1 MR. BUCKLEY: Good morning. Brian
2 Buckley, on behalf of the Commission Staff.

3 CHAIRWOMAN MARTIN: Thank you.

4 And I'm going to walk through the list
5 I have. I have New Hampshire DES, Chris
6 Skoglund? I don't see him on my screen, though.

7 MS. AMIDON: Madam Chair, if I may.
8 This is Attorney Amidon. I believe that he will
9 be here tomorrow. The agenda item for his
10 discussion is scheduled for tomorrow.

11 CHAIRWOMAN MARTIN: Okay. Thank you
12 for that.

13 MS. AMIDON: Sure.

14 CHAIRWOMAN MARTIN: How about Clean
15 Energy New Hampshire?

16 MR. EMERSON: Good morning,
17 Commissioners. This is Eli Emerson, from the law
18 firm of Primmer, Piper, Eggleston & Cramer, on
19 behalf of Clean Energy New Hampshire.

20 Thank you.

21 CHAIRWOMAN MARTIN: Thank you. And
22 ChargePoint? Is anyone here today for
23 ChargePoint?

24 *[No verbal response.]*

1 CHAIRWOMAN MARTIN: Okay. Ms. Amidon,
2 as I read through, if they're not -- if you don't
3 expect them today, just let me know and I'll move
4 on.

5 MS. AMIDON: Yes. ChargePoint will be
6 here tomorrow morning.

7 CHAIRWOMAN MARTIN: Okay. And we have
8 AARP, anyone today?

9 MR. COFFMAN: Yes. Good morning, Madam
10 Chair. This is John Coffman, on behalf of AARP.

11 CHAIRWOMAN MARTIN: Excellent. Thank
12 you. And Walmart?

13 MS. AMIDON: Madam Chairwoman, I
14 believe they will not appear at all. But we
15 haven't heard from them.

16 CHAIRWOMAN MARTIN: Okay. Thank you.
17 Did I miss anyone who is here today? I see
18 Mr. Burke.

19 MR. BURKE: Yes. Good morning,
20 Commissioners. Raymond Burke, from New Hampshire
21 Legal Assistance, here on behalf of The Way Home.
22 And my co-counsel, Stephen Tower, also from Legal
23 Assistance, is in attendance as well.

24 CHAIRWOMAN MARTIN: Okay. Thank you.

1 Okay. Anyone else that I've missed?

2 *[No verbal response.]*

3 CHAIRWOMAN MARTIN: Okay. Hearing
4 none.

5 Let's move onto exhibits. I have
6 Exhibits 5 through 58 prefiled and premarked for
7 identification. Has anything changed with regard
8 to that?

9 MR. FOSSUM: Yeah, I do not believe so.

10 CHAIRWOMAN MARTIN: Okay. Excellent.
11 Any other preliminary matters?

12 MR. FOSSUM: This is Matthew Fossum,
13 from Eversource. I believe the only preliminary
14 matter, and there was a brief discussion about
15 this before the hearing began live, there are
16 some pending requests for confidential treatment
17 that have not been ruled upon.

18 It is my understanding, and I can be
19 correct me if I'm wrong -- well, I know that
20 there were no objections filed. And it is my
21 understanding that nobody has any objections to
22 the Motions for Confidential Treatment that were
23 submitted.

24 So, I just put that out there as those

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 have yet to be ruled upon. I note also, it's my
2 understanding, I don't expect anybody to be
3 addressing any confidential information. So, I
4 don't expect it to be an issue for this hearing,
5 but simply wanted to note that.

6 CHAIRWOMAN MARTIN: Okay. Thank you.
7 I appreciate that. We will treat all information
8 that has been marked "confidential" as
9 confidential for purposes of the hearing. So,
10 please, if anyone does need to identify
11 confidential information, let me know before you
12 do so, so we can get into a non-public setting.
13 And we will issue an order on the pending motions
14 after the hearing.

15 All right. So, let's proceed with the
16 first set of witnesses. Mr. Patnaude, could you
17 swear in those folks. And, Mr. Wind, could you
18 bring them up.

19 (Whereupon **Richard Chagnon,**
20 **Douglas P. Horton,** and **Troy M. Dixon**
21 were duly sworn by the Court Reporter.)

22 CHAIRWOMAN MARTIN: All right. Mr.
23 Fossum.

24 MS. AMIDON: Madam Chairman, I'll

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 qualify Mr. Chagnon first, if that is okay with
2 you?

3 CHAIRWOMAN MARTIN: Okay. Go ahead.

4 MS. AMIDON: Thank you.

5 **RICHARD CHAGNON, SWORN**

6 **DOUGLAS P. HORTON, SWORN**

7 **TROY M. DIXON, SWORN**

8 **DIRECT EXAMINATION**

9 BY MS. AMIDON:

10 Q Mr. Chagnon, would you state your full name for
11 the record please?

12 A (Chagnon) Yes. My name is Richard Chagnon.

13 Q And by whom are you employed and what is your
14 position there?

15 A (Chagnon) I am employed by the New Hampshire
16 Public Utilities Commission. And my position is
17 the Assistant Director of the Electric Division.

18 Q Mr. Chagnon, have you previously testified before
19 the Commission?

20 A (Chagnon) Yes, I have.

21 Q Did you participate in the investigation of the
22 Petition that's the subject of this proceeding
23 today?

24 A (Chagnon) Yes, I did.

{DE 19-057} [Day 1/Morning Session ONLY] {10-26-20}

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Q Without going into specifics, what general areas
2 did you examine in connection with the Petition?

3 A (Chagnon) Well, there were many. I was assigned
4 as Staff lead for this rate case. I've been
5 involved in all aspects of the case, including
6 the review of testimony, issuing data requests,
7 attending all of the technical sessions,
8 providing testimony, and answering data requests,
9 and I participated in all of the settlement
10 conferences.

11 Q Thank you. And you said you wrote testimony. Is
12 your testimony identified as "Exhibit 30"?

13 A (Chagnon) Yes, it is.

14 Q And this testimony, as you said, was prepared by
15 you or under your direction, correct?

16 A (Chagnon) Correct.

17 Q Do you have any changes or corrections to that
18 testimony?

19 A (Chagnon) No, I do not.

20 Q And does it accurately represent your position on
21 the issues at the time that you wrote this
22 testimony?

23 A (Chagnon) Yes, it does.

24 Q Did you participate in -- you said you

{DE 19-057} [Day 1/Morning Session ONLY] {10-26-20}

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 participated in the settlement discussions?

2 A (Chagnon) Correct.

3 Q Did you participate in the final draft of the
4 Settlement Agreement?

5 A (Chagnon) Yes, I did.

6 Q And, so, you're familiar with the terms of the
7 Settlement Agreement?

8 A (Chagnon) I am.

9 Q Do you find -- do you believe also that the
10 Settlement Agreement, if approved, is just and
11 reasonable and is in the public interest?

12 A (Chagnon) Yes, I do.

13 Q And that it will result in just and reasonable
14 rates?

15 A (Chagnon) Correct.

16 MS. AMIDON: Thank you. I've concluded
17 with Mr. Chagnon. Thank you.

18 CHAIRWOMAN MARTIN: All right. Thank
19 you. Mr. Fossum.

20 MR. FOSSUM: Thank you. So, I'll begin
21 with Mr. Horton and Mr. Dixon. And I have a
22 series of questions, and I'll ask Mr. Horton to
23 answer first, and then Mr. Dixon after.

24 BY MR. FOSSUM:

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Q Could each of you state your names, positions,
2 and responsibilities for the record?

3 A (Horton) Yes. Good morning. My name is Doug
4 Horton. I'm Vice President of Distribution Rates
5 and Regulatory Requirements at Eversource Energy.

6 Q And, Mr. Horton, what are your general
7 responsibilities in your position?

8 A (Horton) I am response for and my group is
9 responsible for all of the distribution-related
10 rate filings that go before the Commission here
11 in New Hampshire, as well as our state regulators
12 in Massachusetts and Connecticut.

13 Q Thank you. And Mr. Dixon?

14 A (Dixon) My name is Troy Dixon. I am Director of
15 Revenue Requirements for Eversource Energy. In
16 that capacity, I'm responsible for the
17 preparation and presentation of distribution rate
18 filings and various other regulatory filings.

19 Q Thank you. And now, for each of you, returning
20 to Mr. Horton, have you previously testified
21 before this Commission?

22 A (Horton) I have not. I have testified a number
23 of times in Massachusetts and Connecticut. This
24 is my first time in New Hampshire.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Q And recognizing you have not testified here
2 previously, could you very briefly just give
3 some -- your background and qualifications? You
4 only need to be brief, because it is covered in
5 this. Just for the record here.

6 A (Horton) Certainly. I've worked at Eversource
7 for, I believe, fourteen years, in a variety of
8 roles, mostly in the finance organization, as
9 part of the regulatory group.

10 I have an undergraduate and a Master's
11 of Business Administration from Bentley
12 University, in Waltham, Massachusetts. And my
13 MBA is a concentration in Finance, my
14 undergraduate is an Economics and Finance degree.
15 I have three crazy sons.

16 Q And, Mr. Dixon, have you previously testified
17 before this Commission?

18 A (Dixon) Yes, I have.

19 Q Now, turning to -- well, I'll ask this first, by
20 way of clarification.

21 Mr. Horton, were you or have you taken
22 the place of Mr. Eric Chung, whose testimony was
23 submitted initially in this case?

24 A (Horton) I have, yes, substituted myself for his

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 testimony.

2 Q Okay. Very good. Now, knowing that, did you
3 both file testimony and attachments as part of
4 the Company's initial rate case filing back on
5 May 28th, 2019, which has been marked and
6 included as "Exhibit 6"?

7 A (Horton) I did. Mr. Chung did, and I've
8 substituted in his place, where he's taken
9 another position outside of Eversource.

10 A (Dixon) And, yes, I did as well.

11 Q And, for each of you, was that, understanding the
12 substitution issue, was that testimony prepared
13 by you or at your direction?

14 A (Horton) Yes.

15 A (Dixon) Yes.

16 Q And do you have any corrections to that
17 information this morning?

18 A (Horton) No.

19 A (Dixon) No.

20 Q And do you adopt that testimony as your testimony
21 for this proceeding?

22 A (Horton) Yes.

23 A (Dixon) Yes, I do.

24 Q And, similarly, did you both file testimony and

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[WITNESS PANEL: Chagnon|Horton|Dixon]

1 attachments as part of the Company's rebuttal
2 filing, on March 4th, 2020, and which has been
3 included as "Exhibit 44"?

4 A (Horton) Yes.

5 A (Dixon) Yes, I did.

6 Q And was that testimony prepared by you or at your
7 direction?

8 A (Horton) Yes.

9 A (Dixon) Yes.

10 Q And do you have any corrections to that testimony
11 this morning?

12 A (Horton) No.

13 A (Dixon) No.

14 Q And do you likewise adopt that testimony as your
15 testimony for this proceeding?

16 A (Horton) Yes.

17 A (Dixon) Yes.

18 Q All right. Thank you. Getting through -- moving
19 on now to the more important stuff. Did each of
20 you participate in the discussions, negotiations,
21 and drafting of the Settlement Agreement that's
22 under consideration before the Commission this
23 morning?

24 A (Horton) Yes.

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[WITNESS PANEL: Chagnon|Horton|Dixon]

1 A (Dixon) Yes.

2 Q And are you both familiar with the terms of that
3 Settlement Agreement?

4 A (Horton) Yes.

5 A (Dixon) Yes.

6 Q Now, Mr. Horton, I guess, and Mr. Dixon, to the
7 degree that's necessary, but I'll start with
8 Mr. Horton. Could you please provide an overview
9 of the Settlement that is pending before the
10 Commission today? Understanding that the
11 document speaks for itself. So, you don't need
12 great detail. But, nonetheless, please, could
13 you provide an overview of that, that filing, and
14 the Company's perspective on it?

15 A (Horton) Yes, I can. First, just to provide some
16 context, as many of you know, when this case
17 first started, we noted in that filing all the
18 things that had changed in the ten years since
19 our last rate case, including the merger of
20 PSNH's parent company, the completion of the
21 divestiture of our generating assets, as well as
22 a number of other changes in our system
23 operations, significant amount of investments in
24 distribution capital, as well as improvements in

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[WITNESS PANEL: Chagnon|Horton|Dixon]

1 system reliability and performance.

2 As is typical in a rate case
3 proceeding, throughout the process there were
4 several parties that identified questions, at
5 times concerns, and offered alternate positions
6 on a number of elements of our proposal. And, as
7 a result of a lot of hard work, collaboration,
8 and compromise, particularly in light of the
9 challenges presented by the pandemic, I'm proud
10 to say that we're here today able to present a
11 comprehensive Settlement Agreement that's been
12 agreed to by all parties in the case. It's been
13 agreed to by Staff at the PUC, at the Office of
14 the Consumer Advocate, Clean Energy New
15 Hampshire, New Hampshire Department of
16 Environmental Services, The Way Home, Acadia
17 Center, Walmart, AARP New Hampshire, ChargePoint,
18 and Eversource.

19 We all know that a rate increase at any
20 time is difficult for our customers, and it's
21 particularly so in light of the current economic
22 challenges that are faced by many of our
23 customers due to the pandemic. But, as I said,
24 I'm proud to say that, through the Settlement, we

ATTACHMENT F

25

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 have implemented measures to ease the rate
2 impact to customers. For example, as I'll talk
3 about in a moment, we have proposed and agreed to
4 treat the excess deferred income taxes in the
5 Settlement in a way that will effectively
6 offset the bill impacts associated with
7 recoupment.

8 The Agreement covers a range of topics,
9 other than just the base rate change that will
10 result in an increase to customers. Those other
11 proposals will add value to customers, as well as
12 introduce additional transparency into our
13 processes to enable Eversource to continue to
14 make sound investments in our system, in an
15 effort to continually improve our customer
16 satisfaction and system performance.

17 So, we have four days of hearings
18 scheduled for this week. We have carved out
19 certain topics for each of the first three days,
20 and have reserved the fourth day for overflow.
21 Today, we'll be covering the general overview, as
22 well as the business process audit, and step
23 adjustments covering core distribution capital
24 investments, as well as the ROE and capital

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1 structure. Several other topics will be covered
2 throughout the rest of the week, including
3 electric vehicles, base resilience investments,
4 the engineering assessment that has been agreed
5 to, a handful of rate design and tariff items, as
6 well as metering-related items. And then,
7 finally, we'll also discuss the arrearage
8 forgiveness proposal and fee free proposals that
9 will be in effect as a result of the Settlement
10 Agreement.

11 So, with that, in this section, I will
12 start by providing a general overview of the
13 Agreement. You'll notice throughout the
14 Agreement we did try to provide contextual
15 background in each section, in order to try to
16 introduce the why certain settlement terms have
17 been included and are structured in the way that
18 we are -- the way that they are. We also
19 provided details, where we had them, to codify
20 the specifics of our compromises, and also to
21 note where there was more work necessary, and our
22 commitment around that work that will be
23 following.

24 In the interest of your time, as part

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 of this overview, I won't be reading the terms of
2 every provision. I'll attempt to give a flyover
3 of each section at a very high level. And then,
4 of course, will be available for any questions.

5 I'm trying to watch faces, as I'm also
6 referring to my notes. Because, as folks who
7 I've worked closely with over the last several
8 months in completing the Settlement Agreement
9 know, brevity is not a word that's often used to
10 describe me, especially when I get going on rate
11 topics. So, if I notice heads nodding, I'll try
12 to speed it up.

13 But I did think -- we did think it was
14 important to try to provide just a brief overview
15 of the Settlement terms and, generally, what the
16 Agreement stands for.

17 Starting with Section 2, the "Revenue
18 Requirement Increase". We had originally
19 proposed a permanent increase of about \$70
20 million. At the end of the day, the Settlement
21 Agreement provides a permanent increase of \$45
22 million, inclusive of the temporary increase that
23 had been agreed to and has been in effect since
24 last summer.

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1 As a result, a Rate R residential
2 customer using 650 kilowatt-hours a month, would
3 see an increase of about \$1.97 per month, which
4 is about 1.64 percent, inclusive of the base rate
5 change and recoupment. These bill impacts are
6 included in Appendix 10 to the Settlement as
7 well.

8 The increase is the result of extensive
9 negotiations and compromise, as I said, the terms
10 of which are confidential. But, as you'll hear
11 this week, the Settling Parties all agree that
12 the result of this increase is just and
13 reasonable, and we hope that you will agree.

14 Section 3 discusses "Plant in Service".
15 As noted therein, there were questions raised
16 throughout the documentation of our plant
17 investments. And, as part of the Settlement
18 Agreement, in an effort to help resolve these
19 questions, we have agreed to conduct a business
20 process audit, the scope for which is discussed
21 in Appendix 2.

22 There is also discussion in
23 Section 2 [Section 3?] around the automated meter
24 reading investments. In 2013 to 2014 timeframe,

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 we converted our prior meters, which were
2 manually read by walk-up meter readers, to an
3 AMR, automated meter reading infrastructure,
4 where we now read the meters via drive-by
5 technology. Questions were raised during the
6 proceeding regarding our decision to invest in
7 that technology, as well as the accounting that
8 is associated with that technology. This is
9 covered in Section 4 and in Section 3.

10 In Section 3, we have agreed to
11 continue with additional process, working
12 collaboratively with the Staff and the OCA, in
13 order to verify the accuracy of the accounting
14 associated with retirements of the prior metering
15 infrastructure.

16 In Section 4, we have agreed to conduct
17 a feasibility assessment of advanced metering
18 functionality, which is meters that do not
19 require to be read via drive-by, but are read via
20 a communication infrastructure that is in place,
21 and allows for more real-time meter reading, as
22 well as additional functionality. That
23 assessment will include a number of different
24 scenarios, as well as will include an evaluation

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 of the life cycle costs and benefits, sensitivity
2 analyses, and other considerations.

3 And moving to Section 5, the "Storm
4 Cost Reserve", essentially keeps in place the
5 practice that exists today, except that it makes
6 exception for single large events that are not
7 otherwise covered by the normal process.

8 In Section 6, we describe additional
9 process related to vegetation management
10 recovery. There is an amount built into base
11 rates as part of this Agreement associated with
12 our vegetation management activities. As part of
13 this Agreement, we are agreeing to commit to
14 additional reporting requirements, as well as
15 additional transparency and tracking, such that
16 the recovery of our vegetation program tracks
17 with our actual costs. If we spend less than the
18 amount in base rates, customers will get the
19 credit. If we spend more than the amount in base
20 rates, we have an ability to recover the amount
21 above base rates up to 10 percent above the
22 amount in base rates.

23 Section 7 and Section 8, I won't dwell
24 on. They speak for themselves. And we will also

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 be talking about Section 8, "Cost of Capital",
2 later on this afternoon.

3 Moving on to Section 9, the Regulatory
4 Reconciling Adjustment mechanism is intended to
5 provide for a reconciling mechanism for certain
6 discreet categories of costs, that, in general,
7 are costs that are not within the utility's
8 direct control. And includes items such as
9 regulatory assessments and consultant costs,
10 property tax expenses, and lost revenues
11 associated with net metering.

12 It also includes the variance related
13 to vegetation management that I discussed
14 earlier. And then, finally, a provision related
15 to storm cost recovery, which is really a
16 carryover from the temporary agreement that we
17 had reached last year, and it will allow for the
18 amount that's built into base rates today,
19 subject or as a result of that temporary
20 agreement to be reconciled for actual audited
21 cost adjustments, and also our cost of debt,
22 again, both provisions of the Temporary
23 Settlement Agreement.

24 Moving on to Section 10, and there just

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 are a handful of other sections that I'll touch
2 upon. In Section 10 covers our step adjustments,
3 which will allow for three step rate changes, to
4 reflect actual nongrowth-related core
5 distribution capital plant additions for the
6 calendar year 2019, 2020, and 2021, none of which
7 are captured in the rates approved as part of
8 this proceeding.

9 That section also describes caps that
10 would be applied to those step adjustments, at
11 \$11 million, \$18 million, and \$9.3 million for
12 each of those three years, respectively. The
13 first step adjustment will go into effect on
14 January 1 of this year. And the second two will
15 go into effect on August of 2021 and August of
16 2022.

17 We have also agreed to continue to work
18 with Staff on a template for the filings that
19 will document the projects and costs associated
20 with those projects that are included in each
21 step adjustment. And we will incorporate the
22 results of that collaboration, as well as the
23 results of the business process audit that I
24 referenced earlier, to the extent that we're able

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 to, and to the extent it's applicable, into those
2 future filings.

3 In Section 11, we describe that we had
4 proposed, as part of our initial filing, to
5 accelerate certain types of investments, to which
6 several parties had asked questions and raised
7 observations about those proposals. We have
8 agreed, as a result, to conduct a third party
9 assessment of our system to evaluate the
10 cost-effectiveness of a number of our activities,
11 in order to inform the least cost integrated
12 resource planning process.

13 We have also agreed, as part of that
14 section, to conduct a customer survey, so that we
15 can incorporate and reflect specific information
16 from our customers in New Hampshire regarding
17 their prioritization of reliability and
18 resiliency versus costs.

19 Section 12 and Section 13 cover,
20 respectively, the fee free proposal, as well as
21 the arrearage management proposal, which will
22 also be the subject of topic at hearings later
23 this week.

24 The fee free proposal will eliminate

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 fees that are charged today to customers when
2 they wish to pay their bills by credit card, for
3 residential customers, which is a customer
4 dissatisfier. With this proposal, that fee will
5 no longer be charged directly to the customer.
6 And we have implemented a proposal, similar to
7 something that is in effect at Eversource in
8 Connecticut, in order to allow us to make that
9 transition.

10 The arrearage management proposal is a
11 new program in New Hampshire, whereby customers
12 who qualify will be able to have a portion of
13 their arrearage balances that have built up
14 forgiven in exchange for making timely payments.
15 This program offers customers a valuable tool to
16 enable the customer to develop consistent bill
17 payment habits, and protect those customers from
18 service disconnection while participating in the
19 programs.

20 Section 14 covers "Tariff and Rate
21 Design". There are a number of topics in there,
22 again, subject of a hearing day later this week.

23 And Section 15, I mentioned earlier,
24 "Recoupment". We had proposed and have agreed to

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 accelerate the excess deferred income tax credit
2 that is made available by the reduction in the
3 federal income tax rate. We're accelerating a
4 portion of that credit to customers, in order to
5 offset the bill impacts of recoupment. And with
6 that, we've been able to severely limit the
7 impact associated with that aspect of the bill
8 increase.

9 And then, finally, on Section 16,
10 related to "Electric Vehicles", the commitments
11 are straightforward and spelled out there. But
12 it essentially requires that we will submit a
13 filing within four months of the approval of this
14 Agreement, which will encompass proposals for
15 make-ready investments for electric vehicles.
16 And, as part of that proposal, we will develop an
17 alternative to demand charges for electric
18 vehicle charging rates, and that we will work
19 collaboratively with the Settling Parties on the
20 development of that proposal.

21 That completes my overview. I
22 appreciate the opportunity. And I thank you for
23 the chance to provide it.

24 And I'd also like to express my sincere

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1 appreciation to all of you and to the Settling
2 Parties, and their support teams for all the hard
3 work that went into getting us to this point,
4 again, particularly in light of the pandemic and
5 the challenges it has created for people. I
6 appreciate it.

7 And we are ready to answer any
8 questions that you all may have.

9 Q All right. Thank you very much, Mr. Horton.
10 Just I think one question left for me, for you,
11 and then Mr. Dixon, is is it your position, and
12 the position of the Company, that the Settlement
13 that you've just given the overview of is just
14 and reasonable and in the public interest, and
15 that the rates specified in that Settlement are
16 likewise just and reasonable?

17 A (Horton) Yes.

18 A (Dixon) Yes.

19 MR. FOSSUM: Thank you. That is what I
20 have for the direct.

21 CHAIRWOMAN MARTIN: All right. Thank
22 you. And I understand that the Parties will not
23 conduct cross-examination, is that correct?

24 MR. FOSSUM: That is an aspect of our

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Agreement, yes.

2 CHAIRWOMAN MARTIN: Okay. Then, we'll
3 go straight to Commissioner Bailey.

4 CMSR. BAILEY: Okay. Thank you. Good
5 morning, everyone.

6 WITNESS HORTON: Good morning.

7 CMSR. BAILEY: I just have to get to
8 the beginning of my questions.

9 BY CMSR. BAILEY:

10 Q Okay. Can we start with Paragraph 2.3 please?
11 Can you tell me what this 5 million regulatory
12 asset is about?

13 A (Horton) We had agreed, as a condition of
14 Settlement, of course, the specifics of that
15 Settlement are confidential, the specific
16 concessions that are made in all directions. But
17 we had agreed to a number of concessions, and the
18 regulatory asset was one that is offsetting that
19 to be recovered over ten years, which results in
20 an amortization of half a million dollars per
21 year.

22 Q What's it for? What does it represent?

23 MR. FOSSUM: I believe, well, I'm
24 sorry, I don't know that I can speak for

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Mr. Horton. I believe it's a product of
2 Settlement, and it represents the position of the
3 Parties.

4 BY CMSR. BAILEY:

5 Q So, stated another way, instead of a \$45 million
6 increase, it's a \$50 million dollars increase,
7 but 5 million of it is spread over ten years?

8 A (Horton) That's not how I look at that. If it
9 were a \$50 million increase, there would be, you
10 know, \$5 million increase in each year. You
11 know, there is a basis to it. I'm struggling,
12 because I don't know how much I can get into the
13 specifics of it. There is a basis to it. The
14 Settling Parties agreed that the amount ought to
15 be recovered. It represents a real cost that New
16 Hampshire customers are, you know, ought to be
17 paying. And, rather than paying it each year, or
18 in one lump sum, it's the type of cost that
19 should be paid for over time.

20 Q Is it a capital investment cost?

21 A (Horton) It's an investment that has -- have been
22 made, it's a cost that has been made, which is
23 benefiting New Hampshire customers. And that
24 this is the appropriate recovery of that cost,

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 depending on the nature of -- associated with the
2 nature of it, that customers are getting that
3 benefit over time, and the recovery is
4 commensurate, also being recovered over time.

5 It's not an annually recurring expense
6 for inclusion in the cost of service. It's a
7 cost that has been incurred that the benefits
8 associated with that cost are in excess of it.

9 Q Can you tell me what the benefits are? I mean,
10 this is -- unless it's just a black box, you
11 agreed to a \$5 million additional revenue, I --

12 MR. FOSSUM: Yes. I believe --
13 Commissioner, I believe that's an accurate
14 statement about what that represents. Likewise,
15 in the prior paragraph -- in the prior section of
16 that same paragraph, there's a similar note.
17 Those are just items that we have agreed to as a
18 group and settled upon.

19 BY CMSR. BAILEY:

20 Q It doesn't include carrying costs, does it?

21 A (Horton) No.

22 Q So, it's just \$500,000 will be recovered every
23 year. Does that mean that the revenue -- that
24 the revenue that you have to require -- that you

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 have to collect every year goes up \$500,000 as a
2 result of this?

3 A (Horton) No, it's not. The revenue doesn't go up
4 \$500,000 as a result of this. What it is is, and
5 as Mr. Fossum mentioned, there were concessions
6 in the other direction to customers' benefit.
7 So, costs that had been incurred, that we're not
8 including in the settled cost of service. This
9 is included in the cost of service, and will be
10 for the ten years, until the cost is ultimately
11 recovered. Until the regulatory asset is fully
12 recovered and fully amortized.

13 So, once it's in, once the \$500,000 is
14 in the cost of service, it's not an additional
15 increase in year 2 or year 3 or through year 10.
16 It's being recovered. And then, when it's fully
17 recovered, that will go away.

18 Q Okay. All right. Thank you. Okay. I have --

19 CMSR. BAILEY: Actually, Madam
20 Chairwoman, I hate to do this on the fly, but do
21 you want -- do you want to ask questions about
22 Section 2 or should I ask all my questions about
23 the whole -- about the whole Agreement, and then
24 turn it over to you? What do you think would be

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 the best way to handle it?

2 CHAIRWOMAN MARTIN: I think, if you
3 want to just go ahead and ask your questions, and
4 if I have one that's related to an area you're
5 asking about, I'll put my hand up and see if I
6 can jump in.

7 CMSR. BAILEY: Okay. Thank you.

8 BY CMSR. BAILEY:

9 Q All right. The next section, "Plant In Service",
10 can each one of you tell me what you think --
11 what you think the templates will include for the
12 regulatory review? And this is to address some
13 testimony about how difficult it is to go back
14 and review prudence that's occurred over the last
15 ten years, since there was so much time in
16 between rate cases. Is that right?

17 A (Horton) It's -- excuse me, I can start. And
18 then, of course, others can jump in.

19 So, it's to review -- it's to get
20 clarity and understanding an agreement around the
21 presentation of the project costs for plant that
22 has been placed in service, which will be
23 reviewed as part of the steps, and then after the
24 steps, between rate cases.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 You know, as we said in the Settlement
2 Agreement, there were a number of questions
3 raised by Staff and other parties around our
4 presentation of the documentation associated with
5 those plant investments that have been made. You
6 know, certain things we just frankly didn't see
7 eye to eye on as a part of the settlement process
8 and those discussions. It was important to us
9 that we agree to a process going forward, so that
10 both parties -- all parties could have, you know,
11 more productive discussion and review in the
12 regulatory process.

13 So, our objective is to try to work
14 with Staff and other parties to develop a
15 template, so that we can have a clear, clean
16 presentation of the project costs, sort of over
17 the life cycle of those costs, so that it's easier
18 for Staff and other parties to evaluate reasons
19 for project cost variances or project scope
20 changes, which would result in additional
21 supplemental authorizations for approvals of our
22 projects.

23 So, we're working with Staff as part of
24 the step adjustment filing to accommodate what we

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 can now, and expect, as the Settlement says, to
2 continue to do that, and associated with the next
3 step adjustment filing, which will take place
4 early next year, and then again in the 2022
5 process. But, also beyond, as we -- as we can
6 incorporate or to the extent we can incorporate
7 any recommendations from that business process
8 audit into our processes, so that, when we get
9 into a regulatory review, again, it's -- there's
10 a clearer understanding of the presentation of
11 those costs. So that the presentation isn't
12 leading or, you know, isn't causing confusion or
13 concerns around the prudence of our investment
14 decisions. That it's more clearly able to
15 identify the life cycle of the project, again,
16 and what are the drivers for project changes and
17 cost changes.

18 Q So, once you come up with a template, do you
19 envision that you'd make a filing every year of
20 the investments, that someday, I'm talking about
21 after the step adjustments, that someday, in the
22 next rate case, there's a prudence review, these
23 templates would be filed in sort of real-time as
24 the investments are made? Or what do you

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 anticipate?

2 A (Horton) I actually wasn't anticipating that. It
3 was -- I don't think that was the intent of what
4 we were trying to accomplish with that. Not to
5 have, you know, the prudency review be undertaken
6 every year. But to make sure that, at the time
7 we get into a rate process, that, you know, the
8 template is clear, and that review is more easily
9 facilitated.

10 Q Yes. I didn't mean that we'd have a prudence
11 review every year. But that the documentation
12 necessary for approval to be sometime in the
13 future would be just saved in your files
14 somewhere or would it be filed at the Commission
15 every year?

16 A (Horton) Yes. Again, I wasn't -- I don't have
17 any particular negative reaction to that. But
18 that wasn't, I don't think, what we were
19 intending to do, to file it every year.

20 I know there are other compliance
21 filings that we make on an annual basis about our
22 project plans and things of that nature, that
23 would continue. This was, again, more for when
24 we're in that regulatory review process, that

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1 where we have the complete documentation, and
2 it's taking a form that is facilitating the
3 review by the Commission and its Staff.

4 Q You know, I was struck by how overwhelming the
5 documentation necessary to make a prudence
6 determination on every investment over the last
7 ten years, or seven or eight years, since the
8 last step adjustment. And I think that maybe you
9 can think about filing the documentation
10 annually. Just talk about it, I guess, when
11 you're working on a template. So that it's not
12 quite as overwhelming when we get to a rate case.

13 So, can you tell me, Mr. Horton, before
14 we hear from Mr. Chagnon and Mr. Dixon, what you
15 expect the template to include?

16 A (Horton) Specifics, probably not as well. But
17 I'm expecting it's going to establish common
18 terminology. You know, it would have things like
19 the project number, the year placed in service,
20 the initial project estimate, the type of project
21 it is. We have projects that are -- we call them
22 "specific projects" that are identified and
23 they're tracked in one way. We have projects
24 that are blanket annual projects for programs

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 that we undertake every single year. And then,
2 there is another category of costs for projects
3 that had projects placed in service in prior
4 years, but then there are what we call "carryover
5 costs" that go into service in subsequent years.

6 And so, what we're trying to do is
7 present -- you know, realizing that that's the
8 reality of the business is run, and how costs are
9 incurred for the Company, we don't always have a
10 nice clean tie in a year for a project that's,
11 you know, created on January 1, and all costs are
12 closed to plant on December 31st or before. So
13 that it makes that review of a project by project
14 expenditures nice, clean, and easy.

15 So, we're trying to work with Staff to
16 come up with a way that will help to, you know,
17 acknowledge the real-world challenges that -- and
18 the real-world life cycle of a project. But
19 present it in a way, to your point, that is not
20 so overwhelming, and it's able to identify sort
21 of the life cycle of the project costs and the
22 life cycle of our internal approval processes
23 that acknowledges that, you know, there are these
24 real-world challenges that happen, that require

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1 for the scope of the project to change, the
2 budgets to change and whatever, and that that's
3 not indicative to us, certainly, of a lack of
4 oversight, but just a real-world challenge that
5 occurred.

6 We want to be able to provide and
7 present the information in a way that makes it
8 easy for someone who's coming in, you know, after
9 the fact, reviewing a number of high-volume
10 projects, certainly, in the case of Eversource,
11 and help to try and come up with a way that makes
12 it easy for them to be able to do that.

13 So, it will include, you know,
14 project-specific details, initial project
15 estimates, pre-construction estimates, variances
16 and the reasons for those variances, or changes
17 in scope, if that's what's driving it, trying to
18 identify where those -- where the things changed,
19 again, to facilitate the review.

20 Q By "initial project estimate", is that the same
21 as the "conceptual project estimate"?

22 A (Horton) Well, I think that's what we're trying
23 to work on, is to establish, you know, a common
24 understanding and expectation of what's

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 reasonable for us to have at what stage of a --
2 what stage of a cycle -- or, of a project, you
3 know, from our perspective, that would help to
4 facilitate the prudence review. Because an
5 initial project conceptual estimate, which is
6 based on, you know, a concept, it's not based on
7 a fully engineered pre-construction estimate. It
8 is not going to have the level of accuracy that
9 we would need, expect them to be held for
10 prudence, you know, a prudence determination, if
11 we have our actual costs coming in different than
12 that.

13 But there is a point in time when we
14 certainly expect, you know, to be held
15 accountable for changes that may not be, you
16 know, that we should have been able to anticipate
17 or things of that nature.

18 So, I think part of why we agreed to
19 this, and the value that I see in it, is that it
20 is in establishing that common understanding and
21 expectation around what it is we're presenting
22 and how, and what we're calling, you know, what
23 we're calling each of the things, so we don't
24 have definitional issues that are causing

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1 concerns and raising those questions. That we're
2 focusing on substance and focusing on -- yes,
3 sorry.

4 Q At what cost does the Company decide to proceed?
5 So, when you have a conceptual estimate, somebody
6 must say "yes, that sounds like a good idea. It
7 would be cost-effective to make that investment."
8 And then, you get to the pre-construction
9 estimate, which it looks like is usually higher,
10 looks like most of the time twice as high,
11 according to your rebuttal testimony.

12 At what point does the Company decide
13 to go forward with the investment? Is it at the
14 conceptual point?

15 A (Horton) So, I mean, we do have -- I'm not the
16 right witness to talk to the full project life
17 cycle in that, each checkpoint. But I think
18 those are the types of questions that we're
19 looking to be able to answer as part of this
20 template. You know, we come up with an initial
21 project estimate based on an identification of a
22 need. You know, we don't investment in -- we
23 don't move forward with every project that we
24 could. We have more system needs that we assess

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 than we are able to finance. And, so, it's a
2 process that we go through to prioritize, you
3 know, where is the greatest need, where do we
4 have to prioritize our activities, and we put our
5 efforts around doing that. And then, the
6 project's life cycle takes, you know, a life
7 cycle of its own.

8 So, to your point, we develop a
9 conceptual estimate at the initial outset to
10 identify that "yes, that's a need. We need to
11 pursue it." It wouldn't make sense for us to try
12 to have a fully engineered design quality
13 estimate before making that decision. It would
14 be too expensive and we wouldn't get anything
15 done. So, that's just a natural -- that's how we
16 do it. And I'm sure our experts would testify
17 that that's the best practice.

18 There is a point in time where maybe
19 you get into it, though, and say, you know, "the
20 scope is different, the work required is
21 different." And, so, it isn't that it's twice
22 the original estimate. That original estimate
23 was a conceptual design based on a need of the
24 system to move forward to identify or to correct

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1 a challenge that we see on the system. So, that
2 challenge is still valid, the challenge is still
3 real. It's just that the cost is now different,
4 all right. But we still have to address the
5 issue that was identified. And, so, it's about,
6 in my opinion at least, it's about trying to
7 provide the right documentation in a cohesive
8 manner, to enable the review of, you know, how --
9 to make sure that that change in project estimate
10 is justified, and the decision to move forward,
11 once that estimate changed, is also still
12 justified.

13 Q Do you -- you and I could probably talk about
14 this all day, but I do want to hear from Mr.
15 Chagnon and Mr. Dixon. But one more question.

16 Do you -- how often would you say a
17 project does not go forward, between, you know,
18 you have a conceptual estimate, you identify a
19 need, and then you get a pre-construction
20 estimate, and you say "Oh, that's no longer
21 worth" -- you know, "it's no longer
22 cost-effective to make that investment. We need
23 to look at another option." How often does that
24 happen?

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1 A (Horton) That I really can't speak to the
2 specifics of that.

3 Q Anybody know?

4 A (Horton) I don't think me or Troy don't -- we're
5 not in the -- you know, we don't manage the
6 projects, we're not on the engineering side. So,
7 I would say that Erica, who is going to be on in
8 a little bit, may have some visibility into that
9 from her role in investment planning, she's not
10 in that role anymore, so she may have some
11 insights into that. Or, later in the week, I
12 know that we have Lee Lajoie testifying.

13 Q Okay. Okay. So, if I get into questions that,
14 you know, I don't really understand the whole
15 process of, you know, when and where I'm supposed
16 to ask my questions. So, if the questions are
17 for another time, if somebody could let me know,
18 that would be really great.

19 All right. Could I ask Mr. Chagnon
20 what you expect the template to look like?

21 A (Chagnon) Well, the template, at first, is
22 focused on the step increases, the adjustments.
23 And it really is to address the original concerns
24 that were identified in Mr. Dudley's testimony.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Not certain what it will look like.
2 However, the outcome is really to have a more
3 effective and efficient review of the step
4 filings for Staff and for the OCA. Eversource,
5 being such a large utility in New Hampshire,
6 there's so much information that we need to look
7 at. And the template will help us eliminate data
8 requests, so we would receive information up
9 front, and it would be more efficient for Staff
10 and the OCA.

11 Q Mr. Dixon, do you have any expectations of what
12 the template is going to look like?

13 A (Dixon) I don't think I have anything more than
14 what Mr. Horton said. I think, for us, it's
15 about, you know, creating a consistent
16 presentation with common terminology that really
17 aids in the ultimate review of these projects.

18 Q Will the Commission have any involvement in
19 reviewing the template before you put it into
20 place?

21 A (Horton) We, and Mr. Chagnon can chime in if this
22 isn't how he's expecting it to work, my
23 expectation is was not that we'd go to the
24 Commission explicitly for a review of the

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 templates prior to us using them. That we'd work
2 with Staff and the OCA to get a common agreement
3 on what that template should look like.

4 Again, we've done that for the first
5 step agreement, which is currently under review.
6 We realize it's going to continue to evolve.
7 And, so, we'd certainly get the Commissioners'
8 feedback as that process plays out in the context
9 of the steps. But I wasn't expecting to take it
10 to the Commission prior to us, you know,
11 following it, once we had agreement amongst
12 the -- the Parties working on it together, that
13 was our plan, was to move forward with it.

14 Q What happens if you don't get a common agreement?

15 A (Horton) We didn't build in like an arbitration
16 process into it. I don't think that's necessary.
17 I think we'll -- I think we'll be able to get
18 agreement on it. And we also have the business
19 process audit, which will be run by Staff, which
20 none of us can predict the outcome of what
21 recommendations would come from that.

22 And, certainly, we expect that, if we
23 disagree or don't agree with certain things, then
24 we'll have to be presenting a case in whatever

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 process and form that that takes.

2 But, you know, we were -- I'm
3 confident, based on how this process has gone,
4 that we're going to be able to work together and
5 be reasonable to come up with a template that
6 works to facilitate this process, I don't foresee
7 that as being a major obstacle.

8 Q Mr. Chagnon, do you have any concerns that you
9 will or won't reach a common agreement?

10 A (Chagnon) Staff doesn't have any concerns. We're
11 confident that we will reach agreement. And the
12 Company, the OCA, and Staff are on the same page
13 on this issue.

14 Q Okay. Great. Thank you. Can you talk a little
15 bit about the business process audit and how that
16 plays into this?

17 A (Horton) Sure. Like I said, Staff and other
18 Parties had identified questions and issues
19 during the course of the proceeding on our
20 project documentation. And, so, this was -- it's
21 described in Appendix 2 to the Settlement
22 Agreement what the scope will be of that business
23 process audit. And, so, it was intended to
24 provide a third party review of our business

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 processes, and to, you know, provide
2 opportunities for improvements into how we manage
3 our projects and oversee the costs associated
4 with them.

5 Q Okay. Thanks. Let's move on to the metering
6 section. Starting with Paragraph 3.3, and the
7 "nine-year depreciable life for existing AMR
8 infrastructure", can you tell me what the usual
9 service life of an analog meter is?

10 A (Horton) An analog meter? Do you mean the meters
11 that we have currently in effect?

12 Q No. The ones that you took out and replaced with
13 AMRs?

14 A (Horton) I actually don't know that offhand.

15 Q Is that a question for another panelist?

16 A (Horton) I think we can get that. And I'll be on
17 every day. So, I could -- if I can't get it by
18 this afternoon, I can get that information and
19 come back to that.

20 Q Okay. Why did you choose a nine-year depreciable
21 life for AMR meters?

22 A (Horton) I think the intent of that was, again,
23 tied to Section 4, where we have agreed to
24 conduct a business -- or, excuse me, an advanced

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 metering functionality, assessment of advanced
2 metering functionality, which recognizes that,
3 eventually, we will be moving -- we will have to
4 replace the AMR infrastructure that's in effect
5 now. Eventually, those meters will no longer be
6 effective, they will need to be replaced. And a
7 lot of times what happens with companies that are
8 replacing AMR or any metering infrastructure,
9 there is an undepreciated balance of assets,
10 which can become a challenge in jumping to a new
11 technology.

12 I think that we recognize, Eversource
13 at least, at least we recognize that eventually
14 we're going to have to replace those meters. The
15 technology of choice is likely to be AMI. And,
16 so, we're agreeing to come up with an assessment,
17 to develop an assessment of that path, from where
18 we are today to where we would eventually go in
19 the future. And what technology can be enabled
20 along the way while we still have the metering
21 infrastructure in place that we do.

22 The nine-year depreciable life, you
23 know, we installed these meters, the AMR meters
24 in the early 2000s, as I mentioned, 2013 to 2014

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 timeframe. So, we're already six, seven years
2 into the deployment of those meters. I believe
3 we have an estimated useful life of 20 years for
4 those meters generally. And so, this was
5 acknowledging that there ought to be an
6 acceleration of the depreciation of those, those
7 meters, a reasonable acceleration of those
8 meters, that will help to facilitate, but there
9 will not be as much of an unrecovered balance of
10 those assets when we get to the point to replace
11 the AMR meters.

12 Q Are you asking the Commission in this Settlement
13 Agreement to find that installing AMR meters in
14 2013 and '14 was prudent?

15 A (Horton) Yes. The Settling Parties have not --
16 have agreed or have made no -- have not found
17 that decision to be imprudent. We are -- we have
18 agreed to, because of questions raised, or there
19 were questions raised, we are agreeing to conduct
20 an assessment of how to utilize that investment,
21 like I said, to enable AMF, advanced metering
22 functionality, with the use of those meters, and
23 to establish, essentially, a road map that will
24 assess the timeline, the costs, and the benefits

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 of AMF in New Hampshire for our customers.

2 Q You just said that the useful service life of an
3 AMR meter is 20 years, and you want to depreciate
4 them in nine years, and replace them in nine
5 years? Is that what you're saying?

6 A (Horton) We haven't made any determination about
7 when we will replace them. That's not what I
8 said. We're not agreeing --

9 Q Go ahead.

10 A (Horton) We have not determined when it will be
11 appropriate to replace them. But we have agreed
12 to conduct an assessment of, again, the road map,
13 if you will, of where we are today, to where the
14 functional -- where we will go into the future,
15 acknowledging that at some point in the future
16 the meters will need to be replaced. And,
17 generally, when the metering infrastructure
18 starts to fail, you replace -- you don't just
19 replace them as they fail, you try to get ahead
20 of it. And, so, at some point, we're going to be
21 faced with a decision, like we are in Connecticut
22 and in Massachusetts, where we had installed the
23 AMR meters years prior to where we did in New
24 Hampshire. As those meters reach the end of

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1 their useful life, a decision has to be made.
2 And it's likely to be made, we anticipate at that
3 time it will be, you know, whatever is the state
4 of technology at the time. And we're expecting
5 that to be AMI, as the technology continues to
6 advance and becomes more prominently deployed
7 throughout the country and elsewhere.

8 Q Didn't you foresee that in 2013 and '14?

9 A (Horton) Didn't we foresee what? That we would
10 eventually move to AMIs?

11 Q Yes.

12 A (Horton) In 2013 and '14, and again, this was --
13 there were various perspectives raised in the
14 proceeding around the decision to move towards or
15 to make the investment in AMR when we did.

16 Q What proceeding are you talking about?

17 A (Horton) In this proceeding, in the rate case.
18 So, there were -- that perspective was one that
19 was brought up in the proceeding, as part of the
20 Settlement Agreement, --

21 Q Okay.

22 A (Horton) -- in recognition of the fact that we
23 had different perspectives around that decision,
24 you know, the Settlement Agreement is resolving

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 those disagreements, essentially, to the liking
2 of all parties, and establishing a process going
3 forward for us to be able to make an assessment
4 of the metering infrastructure that's in place,
5 and the metering infrastructure -- and the
6 eventual adoption of AMI in New Hampshire.
7 Acknowledging the specifics of the, you know,
8 existing metering infrastructure, as well as what
9 the capabilities are that exist for AMI today,
10 and everything else that's listed in that Section
11 4 of the Settlement Agreement.

12 Q Mr. Chagnon, did you have something that you
13 wanted to add?

14 CHAIRWOMAN MARTIN: You're on mute.

15 **BY THE WITNESS:**

16 A (Chagnon) Yes, Commissioner Bailey. I did want
17 to remind you that we do have a panel on metering
18 on the 29th. And, so, we will go into more
19 depth.

20 But I did want to just state that the
21 Parties believe that the rapid advancements in
22 the metering technologies as of late, we think
23 that the nine years is appropriate, so that it
24 doesn't discourage new technologies sooner more

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1 than later. And, so, we do feel like the nine
2 years is appropriate.

3 BY CMSR. BAILEY:

4 Q Okay.

5 CHAIRWOMAN MARTIN: Commissioner
6 Bailey, you're on mute.

7 CMSR. BAILEY: Sorry.

8 BY CMSR. BAILEY:

9 Q Mr. Chagnon, if the AMR meters are depreciated
10 over nine years, then they will be fully
11 depreciated in 2020 -- 13, plus 10, is 23, so
12 2022 and 2023, is that right?

13 A (Chagnon) I would look for Mr. Horton to answer
14 that.

15 A (Horton) And if we could --

16 Q Go ahead.

17 A (Horton) If I could just confirm that, and
18 potentially could we address that at the metering
19 day. I just don't have that at my fingertips.

20 Q Okay. Sure. I think I may save the rest of my
21 metering questions for the next -- for that
22 panel.

23 But, at the end of this section, right
24 before Section 4, it says "Nothing in this

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 settlement precludes Staff or the OCA from
2 petitioning the Commission, after such
3 collaboration, to review the accounting for the
4 retirement of the metering infrastructure, except
5 any petition has to be filed by April 30th,
6 2021." Is that April 30th, 2021 date, which is
7 about six months away, a reasonable amount of
8 time to be able to know whether you need to file
9 a petition, Mr. Chagnon?

10 A (Chagnon) Yes. Staff believes that that is
11 plenty of time. Before the end of this year, the
12 Company and the OCA will be meeting to discuss
13 the issue, which is focused around the
14 retirements of the existing analog meters, as
15 well as the AMR meters, which have been retired
16 to date.

17 Q Mr. Horton, do you know, are there still existing
18 analog meters in your system in New Hampshire or
19 have they all been replaced by AMRs?

20 A (Horton) I mean, there may be some in certain
21 applications. But, generally speaking, we've
22 replaced the old analog meters with AMR. And,
23 certainly, that's our meter of choice, the
24 drive-by technology.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 But, as Mr. Chagnon mentioned, this
2 provision is related to the accounting retirement
3 of those meters. There were a number of
4 adjustments that we made, and spent a lot of time
5 working with Staff and the OCA to resolve. But
6 there were still questions that we need to help
7 clarify and work through. And, so, that's what
8 this is, this commitment is focused on. And I
9 agree with Rich, we will be able to meet that
10 date.

11 Q Okay. The accounting review, what if -- what if
12 that shows that there were a number of meters
13 that were not fully depreciated and not accounted
14 for in this revenue requirement, what happens
15 then?

16 A (Horton) So, what -- I think what happens when we
17 retire metering assets, when we replace metering
18 assets, for accounting purposes, is we retire
19 them off our books. And we have made corrections
20 to properly reflect those. There were, frankly,
21 some issues in our systems that were causing
22 discrepancies, between the number of the meters
23 that the systems were -- our accounting systems
24 were showing, and we had to correct for those,

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1 which we have done. We have made two subsequent
2 entries to retire the assets. One was made in
3 the end of 2018, another through the course of
4 this proceeding was identified and adjusted, and
5 is reflected in the cost of service.

6 So, again, in my opinion, we've
7 corrected for those. But we did not -- we did
8 not resolve all open questions, and that's the
9 point of having this provision. That, if, coming
10 out of this further process and further
11 discussion, where we're seeking to continue to
12 clarify and get Staff and the OCA comfortable
13 that the cost of service is reflecting things
14 appropriately and accurately, that's what the
15 provision that you reference would allow for, if
16 there needed to be some other change. But we've
17 already -- we've already corrected for those
18 changes and have reconciled them. It's just
19 acknowledging that there's still more work to be
20 done to get everybody comfortable with that.

21 Q So, what your saying is there won't need to be
22 any future adjustments, because you are sure that
23 the accounting has been appropriately done. But
24 Staff and the OCA aren't as sure as you, and so

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 this is just an exercise to convince them after
2 the fact?

3 A (Horton) Rich, do you want to take that?

4 A (Chagnon) Yes. We didn't have time to clarify
5 and actually meet to discuss this issue. We did
6 have open questions, and we're looking just to
7 clarify it. Do we expect anything out of the
8 other end? Staff doesn't. However, if we do,
9 then we would make a recommendation, for the
10 correction.

11 Q Okay. So, if you do, and you make a
12 recommendation for a correction, how would that
13 work, after -- assuming we approve the Settlement
14 Agreement?

15 A (Chagnon) We have until the end of the due date
16 in April to actually petition to the Commission,
17 either through a recommendation from Staff or
18 OCA, or even a joint recommendation from
19 including the Company.

20 A (Horton) What I would say is, so, in reality, if
21 there were to be -- the concern here would be is
22 if the cost of service that's being approved is
23 inaccurate, incorrect. And this follow-on
24 activity identifies that. So, if the follow-on

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1 activity identifies that, first of all, I'm with
2 Rich, you know, the Company would -- that we
3 would not object, we would agree unilaterally.
4 I don't anticipate there to be any change. If
5 there is a change, it would be immaterial, but it
6 would be appropriate to make, we would have to
7 figure out how to do that. We have the
8 reconciling -- the RRA would be one potential
9 avenue to make some adjustment. We could work
10 together to figure out if there is another way to
11 do it.

12 But, really, the impacts would be
13 small, based on how the retirement activity, if
14 there would need to be a correction, would be --
15 would be reflected. But it's, as Rich said, it's
16 really just a matter of, you know, we had some
17 corrections that we had to make, that led to some
18 more questions. And then, in the interest of
19 trying to resolve the Settlement Agreement,
20 everyone got comfortable that we had made
21 corrections, but there were still more questions.
22 We wanted to continue to work through it, to make
23 sure that everybody was comfortable at the end of
24 the day. I'm not anticipating that this is --

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[WITNESS PANEL: Chagnon|Horton|Dixon]

1 there is anything incorrect. But just allowing
2 for the potential for there to be some other
3 process, if this follow-on activity yields any
4 result.

5 CHAIRWOMAN MARTIN: Commissioner
6 Bailey?

7 CMSR. BAILEY: Okay. Yes?

8 CHAIRWOMAN MARTIN: Can I just ask a
9 clarifying question on this?

10 *[Commissioner Bailey indicating in the*
11 *affirmative.]*

12 BY CHAIRWOMAN MARTIN:

13 Q I want to make sure I'm understanding the
14 process. Mr. Chagnon, you've testified that you
15 haven't been able to meet to ask discuss those.
16 It looks like, in Section 3, initially, it's
17 going to be having those meetings to work
18 collaboratively. But then there's the mention of
19 "hiring an independent accounting firm". That is
20 not a definite. Am I right to my understanding
21 of that, and that an accounting firm may not be
22 hired?

23 A (Chagnon) That is correct. Only if the Parties
24 believe that one is required.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Q And any party or any of the identified parties
2 here could make that request?

3 A (Horton) Yes.

4 Q Okay. And the Company has agreed to do that in
5 that situation?

6 A (Horton) Yes. I'll just -- one more thing to
7 offer. This type of analysis that's described in
8 this section is something that I personally have
9 been involved with three times now for other
10 Eversource affiliates. And it's, you know, it's
11 a valuable exercise to undertake. You know,
12 we've seen these same sorts of adjustments in the
13 same account at NSTAR Electric, NSTAR Gas, and in
14 a recent study that was undertaken, very similar
15 scope as this, for assets that were required
16 related to Columbia Gas, in Massachusetts.

17 So, there's, you know, it's not to
18 suggest to try to like undermine, you know,
19 minimize this. But it is something that, you
20 know, is typical, it happens. That, basically,
21 the counts in the plant accounting system over
22 time become out of alignment for whatever reason
23 with the actual number of units that are
24 installed in the field. And then, it requires

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1 these adjustments that are really immaterial to
2 both, certainly, to the financial statements that
3 we report, it's also immaterial to the cost of
4 service. But -- and it's important that all
5 parties, of course, are comfortable that we've
6 sort of turned over every stone. And, so, that's
7 why I see these potentially having some value in
8 this exercise. I'd have no concerns agreeing to
9 do this at the request of the Staff or the OCA,
10 as it said in the Agreement.

11 CHAIRWOMAN MARTIN: Okay. Thank you,
12 Commissioner Bailey, for letting me interject.

13 BY CMSR. BAILEY:

14 Q All right. Let's move on to the feasibility
15 study on the advanced metering. Can you describe
16 the work that you've done in Connecticut?

17 A (Horton) Yes. We have an active proceeding in
18 Connecticut, where the PURA, the regulator in
19 Connecticut, has initiated several dockets
20 related to grid modernization. One of those
21 documents was related specifically to advanced
22 metering infrastructure. And, so, over the
23 summer, we had engaged a third party consultant
24 to help evaluate AMI for CL&P. And we presented

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 a comprehensive business case for that investment
2 in Connecticut. And, so, this section
3 acknowledges that there's been quite a bit of
4 work done, granted, not with New Hampshire
5 specific information or for PSNH, but with
6 Eversource systems and personnel, and so
7 acknowledges that that work has been done. There
8 may be some efficiencies in process and scope to
9 leverage that analysis here. And, so, that's
10 what we're looking to try to do.

11 Q Can you describe the work that's been done? What
12 were they looking to find out?

13 A (Horton) Sure. It was a robust, comprehensive
14 business case analysis to understand if the
15 benefits of deploying AMI in Connecticut for CL&P
16 overall exceeded the costs. It is an expensive
17 proposition for customers to deploy AMI. It was
18 in 2013, it's still the case today. And, so,
19 there's a lot of effort that needs to go into
20 evaluating if the comprehensive set of benefits
21 exceed those costs, before the decision is made
22 to move forward. And, so, that's really the work
23 that they did, was to help us evaluate the full
24 stream of benefits, the full stream of life cycle

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 costs, identify to whom those costs and benefits
2 accrue, and then present a robust study of the
3 costs and benefits to determine, again, and to
4 defend whether or not it's cost beneficial to
5 move forward with that investment.

6 Q Mr. Chagnon, did you have something to add to
7 that? Or, the blue square lit up, and maybe
8 because you're not on mute, I'm not sure.

9 A (Chagnon) No. I don't have anything to add.
10 Thank you.

11 Q Okay. Thanks. So, what did they determine for
12 Connecticut -- well, did they decide that the
13 costs -- the benefits outweigh the costs in
14 Connecticut?

15 A (Horton) The business case assessment, again,
16 based on the specifics of Connecticut, it was a
17 positive business case. I've forgotten the ratio
18 offhand. It was a slightly positive business
19 case that was presented to our regulators. The
20 process is still open in Connecticut. And, so,
21 the ultimate resolution is that we don't know,
22 you know, the timing or the next step or what
23 that will be, in terms of deploying AMI.

24 Q Who was the consultant that you used in

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1 Connecticut?

2 A (Horton) It's a company called "West Monroe
3 Partners".

4 Q And would you anticipate using the same
5 consultant for this feasibility study or how does
6 that work?

7 A (Horton) That will be in consultation with the
8 OCA and with Staff. We have agreed to, first,
9 evaluate them. Again, because they have done a
10 lot of work, that I'm expecting we ought to be
11 able to leverage. But we have not yet had those
12 discussions with the OCA and with Staff, in order
13 to, you know, make sure that we're landing on the
14 same page there.

15 Q And is it possible that some costs that were
16 included in Connecticut would not be included in
17 New Hampshire?

18 A (Horton) Do you mean, is it possible that the
19 technology we deploy could be different in New
20 Hampshire than in Connecticut?

21 Q No. Connecticut has very specific laws and
22 mandates requiring decarbonization. And they may
23 have some specific laws regarding the health
24 benefits of decarbonization that maybe New

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1 Hampshire doesn't have, I don't know, off the top
2 of my head.

3 But I can imagine that, when you're
4 looking at costs and benefits, some of the
5 benefits in Connecticut, if Connecticut has laws
6 that require decarbonization, may not apply here.
7 Is that possible?

8 A (Horton) Oh, yes. I completely agree. I think,
9 in many respects, the business case will be
10 different. And that was the intent, was to try
11 to tailor it to the specifics of New Hampshire.
12 There's the factor that you mentioned, which are
13 not identical at this point in New Hampshire.
14 There's also a vastly different terrain,
15 geography, in New Hampshire than what we would
16 consider in Connecticut. That would need to be
17 incorporated into the business case for the
18 communication infrastructure. So, it's not going
19 to be a copy-and-paste by any extent.

20 But I do think there's, you know, a
21 pool of work that's been undertaken that would
22 help to create some efficiencies. But it's going
23 to be, in order for it to have value, it will be
24 tailored and unique to New Hampshire, that's our

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1 goal.

2 Q Okay. Thanks. In Paragraph (b), this is, you
3 know, a list of scenarios that you'll evaluate,
4 you're saying that "The assessment shall include
5 [at least] an assumption that AMR meters hadn't
6 been deployed." But why would -- why would you
7 assume that, since they have been?

8 A (Horton) I believe this one was an acknowledgment
9 of the fact that questions were raised about the
10 decision to invest in AMR. And, so, as part of
11 the assessment, we, as a collective settling
12 group, had agreed to understand how the fact that
13 we deployed AMR would affect the assessment, and
14 what that assessment -- if and how that
15 assessment would be different had we not made
16 that investment decision.

17 Q So, the analysis will do it both ways, assume
18 that AMR was never deployed, and see what the
19 cost is, and then assume that AMR was deployed,
20 as it has been, and see what the cost is of going
21 to AMI?

22 A (Horton) That's my expectation. Costs and
23 benefits, and just other considerations. And we
24 tried to identify some scenarios that it's not

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1 exclusive to what we have listed here, I am sure,
2 but we have tried to identify a number of various
3 scenarios and sensitivities that the assessment
4 will incorporate.

5 Q Okay. Thanks. Is there a plan by the Company to
6 move to AMI, or advanced metering functionality,
7 if the study concludes that it would be cost
8 beneficial to do so?

9 A (Horton) Again, like I said, I think, where we
10 are on AMI, is we do see benefits of AMI for our
11 customers. And I think, eventually, as I said, I
12 know, eventually, the meters that we have in
13 place will need to be replaced. And it's likely
14 that at that time AMI will be the technology of
15 choice.

16 So, I do believe, in New Hampshire,
17 it's not a matter of if, but when. But it is
18 still be very expensive. It's likely to still be
19 very expensive when we get to that point. And,
20 so, I'm not convinced it's anytime, you know, in
21 the very short term. But I think that's the idea
22 of having this assessment, that is the idea of
23 having this assessment, is to try to understand
24 the specifics of what that will look like here in

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1 New Hampshire, what will it take, what benefits
2 have already been realized related to the AMR
3 metering infrastructures that we have, that, you
4 know, would not then be incremental when we go to
5 AMI. But what are all the other benefits that we
6 can enable with AMI, at what cost, over what
7 timeframe.

8 I think the idea is to try to evaluate,
9 you know, acknowledging that AMI will be an
10 eventuality. What are all the considerations
11 that go into that? And what can we do in the
12 meantime, to try to unlock some of the
13 incremental benefits that AMR, on its own doesn't
14 facilitate?

15 Q Can you highlight some of those incremental
16 benefits that AMR does not facilitate?

17 A (Horton) There's two-way communication and
18 control over meters. Certain meters enable, with
19 customer interaction, enable more integration
20 with in-home devices to some extent, which is
21 another consideration in New Hampshire that would
22 need to be looked at specifically. It's more
23 real-time information for the Company about the
24 status, especially with distributed generation,

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1 about the status of the distributed generation
2 units on the system, that we don't get directly
3 from the AMR meters today.

4 So, there are a number of benefits that
5 are enabled both to the Company, to the
6 customers. But all of those, again, come at a
7 cost, and they need to be considered in the
8 overall business case.

9 Q Is one of the benefits possibly more
10 sophisticated pricing?

11 A (Horton) And real-time pricing or, excuse me,
12 time-of-use pricing. Certainly, to the extent
13 that a billing system is part of the AMI
14 deployment, which often it is, because there's so
15 much more data that's coming in, you know,
16 there's some much more data that's coming in from
17 the metering infrastructure, you're able to do
18 more complicated rate designs. And, so, those
19 are all potential benefits that can be enabled
20 for customers, again, at a cost. Because
21 those -- that data needs to be managed in a meter
22 data management system, the potential for a
23 change to the billing system and customer
24 information system, those are all considerations

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1 that go into a deployment to enable those costs.
2 But I think to your earlier -- or, to enable
3 those benefits. But, to your earlier question,
4 you know, there may be benefits that make sense
5 for us to pursue, and the costs are reasonable in
6 Connecticut, that aren't in New Hampshire, or
7 vice versa.

8 Q How long do you think it will take to complete
9 the assessment and when do you expect it to
10 begin?

11 A (Horton) I expect it to begin, essentially, as
12 soon as the Settlement Agreement is approved.
13 And I think, for the Connecticut assessment, I
14 think it was a six to eight months effort. And,
15 so, I would expect we'd be looking at that
16 similar timeframe. We started work internally,
17 anticipating the Settlement is approved, to try
18 to get ready to have the discussion with Staff
19 and OCA. But, in the efficiency of everyone's
20 time, we're essentially waiting to get the
21 decision approved on the Settlement Agreement,
22 and then we'll be starting that process.

23 Q And would the Commission be able to use your
24 assessment in other dockets? I can imagine some

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1 of them may be useful. I mean, it may be useful
2 in some other dockets that we have.

3 A (Horton) You mean other dockets related to
4 Eversource?

5 Q Well, I mean other dockets that Eversource is
6 involved in, yes.

7 A (Horton) Yes. I mean, you know, we're looking to
8 make this a comprehensive assessment of the
9 considerations that will go into deploying AMI,
10 as well as looking at what other things can be
11 done in the interim while we don't have AMI. So,
12 certainly, if there's information that's useful
13 in that assessment that we can leverage
14 elsewhere, I don't know why we wouldn't.

15 Q And is this something that Eversource has agreed
16 to pay for?

17 A (Horton) Yes.

18 CMSR. BAILEY: Okay. I think that's
19 the questions that I have for this section, Madam
20 Chair, at the moment.

21 CHAIRWOMAN MARTIN: Okay. Thank you.

22 I think that nearly every question I
23 had has been asked, so you'll be happy to hear.
24 Let me just double check.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 BY CHAIRWOMAN MARTIN:

2 Q Oh. You mentioned the bill impacts in Appendix
3 10. Could you just walk through those,
4 Mr. Horton?

5 A (Horton) We do have a Rate Design panel later in
6 the week. I'm, of course, happy to walk through
7 what's in Appendix 10. But, just in the interest
8 of, if there are follow-on questions to how those
9 are developed or what goes into them, I think it
10 would be probably more efficient to wait until
11 Mr. Davis is on later in the week.

12 Q Okay. If you have a witness who will have more
13 information, that's a better time to do it. So,
14 we'll wait on that.

15 A (Horton) Thank you.

16 CHAIRWOMAN MARTIN: And I think that's
17 all the questions that I have left.

18 So, let's go back to Mr. Fossum and Ms.
19 Amidon, to see if you have any redirect?

20 CMSR. BAILEY: Madam Chair, that wasn't
21 the end of my questions for the Settlement
22 Agreement. It was just the end of my questions
23 for that section.

24 CHAIRWOMAN MARTIN: Oh. I thought you

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 were done.

2 CMSR. BAILEY: No. And, if you got
3 tired of me, I'd be happy to take a break. But I
4 have more questions about the Settlement.

5 CHAIRWOMAN MARTIN: Okay. Go ahead
6 then.

7 CMSR. BAILEY: All right. Thanks.

8 BY CMSR. BAILEY:

9 Q Okay. Moving on to "Storm Cost Reserve", --

10 CMSR. BAILEY: Oh, sorry. My dog is
11 going to be a pain right now. Hang on.

12 Can we take a really quick, short
13 five-minute break, because we don't want to hear
14 howling in the background here?

15 CHAIRWOMAN MARTIN: Sure. Let's go off
16 the record and take a five-minute recess.

17 *(Recess taken at 11:40 a.m., and the*
18 *hearing resumed at 11:48 a.m.)*

19 CHAIRWOMAN MARTIN: Okay. Let's go
20 back on the record.

21 CMSR. BAILEY: Thank you.

22 BY CMSR. BAILEY:

23 Q Okay. Let's move on to "Major Storm Cost
24 Recovery". Can you, Mr. Chagnon, let's start

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 with you, can you just go through how storm costs
2 get recovered? And, you know, we collect \$12
3 million in rates every year for storm cost
4 recovery. And then, we have this provision that
5 helps us -- or, helps the Company recoup expenses
6 for storms that cost a lot more. Can you just
7 tell me how that works?

8 A (Chagnon) Yes. As you mention, there is 12
9 million in base rates for major storm costs.
10 And, as the Company incurs costs that are for
11 restoration of a "major" storm, declared "major
12 storm", those are submitted to the PUC for
13 reconciliation annually. And included in those
14 costs are also pre-staging costs, where it's been
15 determined, through their weather forecasting,
16 whether there's a high probability of a major
17 storm that will affect a large amount of
18 customers. The Company has the ability to
19 pre-stage for those storms. And, if, for some
20 reason, those storms don't occur or become a
21 major storm, then the Company still is able to
22 recover the costs for pre-staging. And that is
23 also included in the storm cost recovery, of that
24 12 million average per year.

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1 Q So, does the Company have to get approval to use
2 the money that -- the \$12 million that's
3 collected? Or, as long as the costs are under
4 \$12 million, does that money just get used to
5 cover things like pre-staging and expenses for
6 major storms?

7 A (Chagnon) At the end of the year is when the
8 Company does transfer from one account to
9 another. There's a storm cost account, and then
10 there is the funding for that account. That will
11 typically happen at the end of the year, I
12 believe. And, however, they do have to report to
13 the PUC annually what the storms and the costs
14 consist of. Each year, those costs are audited
15 by Audit Staff at the PUC.

16 Q Okay. Mr. Horton, I think, and I could be wrong
17 about this, but it seems to me like it takes a
18 long time for companies to report the storm
19 costs. Like, it doesn't always happen the same
20 year that the storm happens, or even the year
21 after. Is there any time limitation on when the
22 Company has to report the costs for a storm that
23 happened in, I don't know, October of 2020?

24 A (Horton) I believe, but I can confirm, that we

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 are required, and this is, I think, the result of
2 a fairly recent order by the Commission, to
3 report on our storm costs for the prior calendar
4 year by May 1st of each year. But it does take a
5 number of months for, especially in larger
6 events, for all of the invoices to come in. And
7 that's potentially even aggressive. I've seen it
8 take, you know, eight months or longer, a year or
9 longer, in some of the larger events. For
10 whatever reason, it takes a very long time for
11 all the costs to come in.

12 So, I believe we file by May 1st each
13 year the storm costs for the qualifying storms of
14 the prior calendar year. But then, in the event
15 that there are costs that occurred, say, in
16 October, that we won't have fully compiled all of
17 the costs or received all the invoices, I believe
18 there's a process that we essentially hold those
19 at bay until we have all of the invoices, and
20 then would include them in the next annual
21 filing.

22 Q So, at the latest, it would be in the next annual
23 filing?

24 A (Horton) That's right.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Q Okay. How many times do you have a storm -- do
2 you have storm costs that are greater than \$12
3 million in a year?

4 A (Horton) I mean, in recent years, it's fairly
5 common. There's a number -- there's an
6 increasing number of these qualifying events, for
7 a number of reasons. And, so, the ratemaking
8 that follows is generally like this. We have
9 similar contracts in place in Massachusetts and
10 Connecticut, whereby it's really not possible to
11 build a representative level in base rates for
12 these types of storms. And, so, this treatment
13 is typical. Where we have, you know, a
14 representative level for these qualifying events
15 in base rates that acts as a reserve account,
16 meaning, if, in any year, we have -- we were to
17 have less than \$12 million, we wouldn't keep that
18 money. We would keep it in the account to fund
19 future storm events.

20 And, conversely, if the \$12 million is
21 insufficient, if we have greater than \$12 million
22 in base rates -- or, excuse me, in actual storms,
23 then we would defer those and use, you know,
24 ongoing \$12 million, to hopefully, you know, work

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1 those costs down.

2 But then, when we get to the next rate
3 case, if there's a remaining balance not
4 recovered, we would incorporate that into
5 recovery at that point in time. That's exactly
6 what happened in the temporary rate in this
7 proceeding, where we had a balance remaining of
8 about almost \$70 million for storms that had been
9 qualified, had been reviewed and audited, at
10 least mostly reviewed and audited, but just the
11 storm fund was not sufficient to recover them.

12 So, it's a balance between trying to
13 get timely recovery, and, you know, not
14 over-recovering the costs for these storm events
15 that are increasing in frequency and size.

16 Q So, the \$70 million that was included in
17 temporary rates, over what period of time does
18 that get recovered?

19 A (Horton) That was recovered over -- that will be
20 recovered over five years.

21 Q Okay. Okay. Thanks. So, then, there's a
22 provision here that says "for storms that cost
23 more than 25 million". And you can amortize
24 those costs right away or, you know, after your

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 May 1st filing gets approved.

2 How many times, in the last three to
3 five years, have you had storms that were more
4 than 25 million? Do you know that?

5 A (Horton) I certainly could get it. It was only
6 two or three, as I recall. And, really, what
7 this was was we had originally proposed a
8 mechanism that was more complicated, and it
9 resulted in more frequent rate changes. And, as
10 a result of this Agreement, we're really keeping
11 with what is in place today, except for
12 accommodating for these certain, you know,
13 hopefully, one-off large events, that there
14 really wouldn't be any way for that \$12 million
15 to cover them.

16 So, I think there were -- I'm just
17 seeing, I think there were two times between 2014
18 and today. There was one storm, Thanksgiving in
19 2014, that was 26 million, and another in October
20 of 2019 -- or, excuse me, October 2017, that was
21 32 million. So, it's not a common occurrence.

22 This is really just acknowledging that,
23 if we were to have a singular event that was of a
24 magnitude that's significant, you know, again,

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 the \$12 million just won't be sufficient to
2 recover it. So, it's allowing for an interim
3 change before the next -- it's allowing for that
4 to happen after a process at the Commission.

5 Q And is that different than any other accumulation
6 of storm costs that go over 25 million in total?

7 A (Horton) We did not make a specific provision for
8 the event where the storm fund itself exceeded a
9 threshold. That's not part of the Settlement
10 Agreement. It was, again, it was really intended
11 to cover the event where a single -- a singular
12 event could cause the whole thing to not work
13 right.

14 Q Okay. Can we skip to 6.2(d)? We're moving into
15 "Vegetation Management" now. And can you tell me
16 what the Company's "recoupment adjustment" means?

17 A (Horton) I'm sorry, 6.2(d)?

18 Q Yes, I think it is. It's on Page -- Bates Page
19 013. It's Paragraph (d), right above
20 Section 6.3, the last sentence.

21 A (Horton) The "recoupment adjustment" refers to
22 the fact that we have implemented temporary rates
23 as of July 1st, 2019.

24 Q Okay.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 A (Horton) And they will have a -- we'll be
2 implementing permanent rates upon approval of
3 this Settlement Agreement for January 1, 2021.
4 And, so, this is identifying that, because the
5 vegetation management portion of the -- both the
6 permanent rate adjustment, as well as the
7 temporary rate adjustment, we had agreed to
8 certain parameters around that recovery. Such
9 that, if we spent less than the agreed to amount,
10 customers would get the credit. And there are
11 just different parameters within each. So,
12 suffice it to say, the vegetation management
13 portion of recoupment requires a separate
14 treatment to account for that, account for that
15 commitment and agreement made by the Parties.

16 Q And going forward, if there is an over-recovery
17 for vegetation management, does that get returned
18 in the RRAM?

19 A (Horton) Yes. Except that, in Section 9(b), as
20 it relates to the RRAM, we did allow for the
21 provision, if we could justify, if we were
22 underspent in a year, but intended to spend it in
23 the following year, that we would be able to
24 propose to carry that amount forward, as opposed

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 to crediting it and then just recovering it, we
2 left that as an open option.

3 But, if it's not to be spent, and it's
4 an over-recovery, yes, it would flow back through
5 the RRAM.

6 Q And would you be allowed to do that without
7 Commission approval or is that something the
8 Commission would review and authorize the
9 carryforward?

10 A (Dixon) In Section 6.2(c), I think it refers to
11 "upon Commission approval". So, we would request
12 it and get approval.

13 Q Okay. Thanks. So, the overall vegetation
14 management budget, with a 10 percent adder, is
15 that fixed until the next rate case?

16 A (Horton) Yes. Except there is -- it is. Except
17 that there was also, as part of the engineering
18 assessment, we will be evaluating the
19 cost-effectiveness of the enhanced tree trimming
20 and the hazard tree removal programs. And I
21 believe that -- one moment.

22 I'm sorry, I'm not putting my fingers
23 on it. I believe -- I thought there was a clause
24 in the Settlement Agreement that talked about a

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 potential adjustment based on the result of that
2 review. But I don't want to muddy the record,
3 so --

4 MR. FOSSUM: Just if I may, I believe
5 that's covered in Section 6.3.

6 WITNESS HORTON: Oh. Thank you. Thank
7 you, yes. That's what I was looking for, right
8 in front of me.

9 BY CMSR. BAILEY:

10 Q And that was going to be my next -- my next
11 question is, you know, how do you know when
12 you've spent enough on vegetation management, and
13 further spending is no longer cost-effective? Do
14 you have -- is there going to be a panel that
15 talks to us about metrics?

16 A (Horton) Well, yes. Later in the week, we have a
17 panel on the Engineering Assessment and the Base
18 Resiliency Investments.

19 Q Is the engineering assessment on vegetation
20 management?

21 A (Horton) The engineering assessment will include
22 vegetation management, ETT, and hazard tree
23 removals are a part of that engineering
24 assessment.

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1 Q Okay. I'll wait for that then. All right.
2 Moving on to "Cost of Service". Can you tell me
3 what the difference between "whole life
4 depreciation" is and what we've used
5 historically?

6 A (Horton) Oh, boy. Well, it's the Commission --
7 it has historically been the practice in New
8 Hampshire to utilize the whole life method for
9 depreciation. You know, we do hire a
10 depreciation expert consultant, who evaluates
11 what's the proper level of depreciation,
12 acknowledging the useful life of the assets. And
13 our witness's expertise, an example -- or, excuse
14 me, expertise, he doesn't utilize the whole life
15 method, he utilizes the remaining life method.

16 As part of the Settlement Agreement, we
17 have agreed to utilize the whole life method in
18 this proceeding, which, again, is consistent with
19 the practice that's typically done, utilized here
20 in New Hampshire.

21 Q Mr. Chagnon, can you add to anything about why
22 whole life is better than remaining life?

23 A (Chagnon) Whole life is, as Mr. Horton said,
24 consistent with all filings at the New Hampshire

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 PUC. And, so, it was Staff's concern that we
2 have consistency amongst all of our utilities,
3 including gas, instead of moving to a remaining
4 life.

5 Q Okay. At the end of Paragraph 7.1, you say
6 "Future environmental costs shall be recovered on
7 a current basis through the Stranded Cost
8 Recovery Charge." Do you -- does anybody have
9 anything in mind about future environmental costs
10 that will have to be recovered?

11 A (Horton) I think, though I'm not aware of plans
12 related to the remediation of costs associated
13 with the manufactured gas plant, but I do
14 understand that there are -- there have been
15 costs that have been continued to be incurred.
16 So, this is just acknowledging that, to the
17 extent that those costs are incurred, that the
18 mechanism to recover them would be through the
19 SCRC, as opposed to base rates.

20 Q Mr. Chagnon, is Staff aware of any future
21 environmental costs?

22 A (Chagnon) No, we are not. However, we needed to
23 have a provision for any that do come up.

24 Q Okay. I think we've recently approved a

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 significant amount of debt. Does the Company
2 anticipate borrowing additional money, and will
3 that change the capital structure?

4 A (Horton) We have incorporated that \$150 million
5 issuance, based on the financing plan that was
6 recently approved, into the cost of service in
7 this proceeding. So, to the extent there is
8 additional debt that's issued, and the capital
9 structure changes into the future, that's not
10 reflected here. But the issuance that was
11 approved by the Commission recently, and at
12 favorable rates, is reflected in the cost of
13 service that's to be approved here.

14 Q Given that that is so cheap now, and equity isn't
15 as -- or, equity is more costly, obviously, would
16 it be better for ratepayers if the Company did
17 issue more debt?

18 A (Horton) I think we have to balance the -- and,
19 again, we have our Cost of Capital panelists will
20 be on later today who can speak to this at
21 length.

22 My opinion and my perspective is that
23 it's a balance that you strike between riskiness
24 of the debt that's issued and the cost associated

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 with that. Managing to an appropriate capital
2 structure is an important element of how we, you
3 know, capitalize our investments. And, so, the
4 Settling Parties have agreed that the capital
5 structure for ratemaking is appropriate, as is
6 the cost of debt. And, again, we have reflected
7 that issuance at favorable rates into the cost of
8 service, which is to the benefit of customers.

9 Q Okay. I'm skipping all the way down to "Step
10 Adjustments". What will the annual filings for
11 step adjustments look like?

12 A (Horton) We filed our first step adjustment
13 filing recently. It will include, and it did
14 include, testimony, as well as exhibits. That
15 gets back to that discussion earlier we were
16 having around the template and the format that
17 template will take. So, it will provide a
18 listing of all the projects and their associated
19 costs, as well as the variances and reasons for
20 variances at a high level. And I think we'll
21 continue to work with Staff and the OCA on
22 subsequent step adjustment filings, to ensure
23 that we're getting that filing right, and
24 providing information at an appropriate level to

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 facilitate the review.

2 Q And is there an expectation that you
3 automatically will get the revenue that you've
4 agreed to as a cap? Or, do you have to show that
5 you've spent the money, and we have to make a
6 prudence determination on it, and that --

7 A (Horton) It's the latter. We have agreed to caps
8 on the step adjustments. And we know that
9 there's a process that we have to go through, and
10 that process will determine what the ultimate
11 step adjustment is.

12 But the only amount that would go into
13 rates as a starting point would be for
14 investments that have been made and plant placed
15 into service. And that's a clear provision of
16 the Settlement Agreement. Anything less than the
17 amounts placed in service is not eligible for
18 recovery, naturally.

19 Q When did you have your last step adjustment?
20 What year was it? Does anybody remember?

21 A (Horton) I believe there were step adjustments as
22 part of the 2009 rate case proceeding. But I
23 don't recall the specifics of when that step
24 adjustment would have gone into place, if there

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 were two or three, or a different number.

2 Q So, maybe 2012 at the latest?

3 A (Horton) Probably.

4 Q How did you go from 2012 to 2020 without a rate
5 case for capital expense -- capital investment?

6 A (Horton) Yes. I think a significant factor in
7 that, which is, again, to the benefit of
8 customers, was the merger that took place in 2012
9 between NU and NSTAR, which enabled for there to
10 be cost synergies and savings as a result of that
11 merger. There's also been, you know, over time,
12 we're constantly challenging ourselves to run the
13 business more efficiently and effectively,
14 while -- and continuously improving service to
15 our customers.

16 And, so, it's part of something that we
17 take great pride in, is managing the financial
18 aspects of our business, as well as the
19 operational considerations, providing safe,
20 reliable, resilient service to our customers, and
21 managing within the, you know, the financial
22 constraints that we have.

23 So, over that timeframe, there were a
24 number of considerations and changes made. And

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 there was a merger. There was divestiture.
2 There was historically sales growth at various
3 and different levels than we see today, with
4 advancement of energy efficiency and other
5 customer-sited initiatives and changes. So, I
6 think there are a number of factors that go into
7 it. Those are a few.

8 Q But, ultimately, the Company must have decided
9 then that the revenue that it was recovering
10 every year was adequate to pay the depreciation
11 expense on the investments that were made for
12 those years?

13 A (Horton) Well, there are also a number of
14 considerations and commitments made related to
15 the timing of a rate case filing. So, you know,
16 it isn't -- we were -- I know that divestiture
17 was one consideration. That there was an
18 acknowledgment to postpone the timing and the
19 filing of our rate case, in order to allow us to
20 complete the divestiture, so that the test year
21 could incorporate, you know, costs in a more
22 clean way, that wouldn't be influenced by
23 divestiture, so, there -- by the generating
24 assets.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 And, so, there are a number of
2 considerations that go into the timing of when we
3 file a rate case. It isn't just that, you know,
4 it isn't just based on the earnings
5 considerations. There's a number of factors that
6 go into it.

7 Q Mr. Chagnon, did you want to say something?

8 A (Chagnon) Just to clarify, the 2015 Settlement
9 Agreement, through the divestiture, did allow the
10 Company to full recovery for reliability
11 enhancement. And, so, since 2015, the Company
12 has been allowed to recover dollars for that
13 program through what we call "REP". And, so,
14 that helped as well.

15 Q Right. Thank you. Okay. So, in this Settlement
16 Agreement, you have step increases for
17 investments in '19 and step increase for
18 investments in 2020, and another opportunity for
19 investments next year, which would go into effect
20 in August of 2022, is that right?

21 A (Horton) Yes.

22 Q And the agreement is that you can't have another
23 test year before 2022? I think you're on mute.

24 A (Horton) I'm sorry. Yes.

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 Q So, is that reasonable? There's basically no
2 stay-out then, is that right?

3 A (Horton) There's a stay-out. There's a stay-out
4 until at least 2023, based upon a 2022 test year.
5 And also acknowledging that the step adjustments
6 are capped. So, to the extent there are
7 investments made in core capital that are above
8 the amount of the caps that are authorized here,
9 those are not eligible for recovery until our
10 next rate case.

11 There is also operating and maintenance
12 pressures that are not reflected in the step
13 adjustment, that are post year, and we'll carry
14 into the future, that we'll be motivated to
15 continue to try to find ways to improve and
16 maintain our cost-effectiveness and efficiencies,
17 in order to keep our costs down, and, ultimately,
18 to keep rates lower for customers.

19 I'll just note that, given the timing
20 and the delays that were necessitated as a result
21 of the pandemic, just to point out that this
22 filing was made based on a 2018 test year, and
23 originally filed in 2019. And, so, although
24 we're looking ahead to 2022 as being a test year,

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1 and here we are in 2020, just want to also
2 acknowledge that the costs that we're setting now
3 are based on a 2018 test year. So, already a
4 nearly two-year stay-out by the time they will go
5 into effect. So, it's essentially four years of
6 a gap between those test year periods, which is a
7 significant amount of time.

8 Q The gap being in expense costs mostly, because,
9 for the most part, you're going to recover your
10 capital expenditures, right?

11 A (Horton) There's a gap in O&M. But, also, the
12 way that the step adjustments are intended to
13 work, it is not a dollar-for-dollar recovery.
14 You know, it is recognizing that there are
15 additional invest- ments that, once placed in
16 service and once reviewed through the audit
17 process and approved by the Commission, you know,
18 as being prudent and in service to customers,
19 that those find their way into rates. But it's
20 on a lag. It's not that it's -- you know, it's
21 not full reconciling recovery. There is a delay
22 from when we make the investments in a given year
23 until we get through that process and they get
24 reflected in rates.

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1 So, I think, you know, on balance, the
2 steps have been used in New Hampshire in the past
3 as a way to provide recognition of those
4 incremental capital costs, but by no means
5 providing full recovery. And I think, you know,
6 in all aspects of this Settlement Agreement, all
7 the Parties, we tried to balance the interests of
8 customers and paying for the service their
9 receiving, while giving the Company an ability,
10 but not a guarantee, to recover its costs.

11 Q Okay. I think I'm going to skip over the section
12 on the new programs for the arrearage management
13 program, and I'll save that, because I know that
14 there is a panel specifically included to address
15 that.

16 If we can jump ahead to the "Tariffs"
17 section, it's Paragraph 14.2, no tariff --
18 apparently, you, in your Petition, wanted a
19 tariff provision that would allow default energy
20 customers to block incoming enrollments from
21 competitive suppliers, is that right?

22 Actually, can you just explain
23 Paragraph 14.2 to me please?

24 A (Horton) I can try. But we do, again, have a

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1 Rate Design panel later in the week, that Mr.
2 Davis will be on, and he can provide some more
3 color. But I can try to take it and see if
4 that's sufficient.

5 You know, as it says, we had originally
6 proposed as part of our tariff that customers
7 taking service under the default Energy Service
8 could be blocked from incoming enrollments from
9 competitive suppliers. And, as part of the
10 process of reaching a settlement, had agreed to
11 eliminate that explicit and specific provision of
12 our tariff.

13 Q So, the provision would have allowed customers to
14 tell you to block their account from being
15 transferred to a competitive supplier? Is that
16 what that was about?

17 I can wait till the next panel, if you
18 want me to?

19 A (Horton) I think that would be -- I would
20 appreciate that. Thank you.

21 Q Okay. All right. Thanks. Okay. Paragraph 14.3
22 says "The Company shall propose a symmetrical
23 decoupling mechanism in its next rate case", but
24 it "doesn't prejudice any party's right to

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1 oppose, or seek to modify, such proposal in the
2 next rate case."

3 My question is, can the Company object
4 to decoupling in the next rate case or does it
5 have to make a proposal on decoupling that it is
6 willing to implement?

7 A (Horton) We will make a proposal on decoupling
8 that we're willing to implement.

9 Q Okay. And you're not going to oppose it?

10 A (Horton) No. I never even thought of that.

11 Q Okay.

12 A (Horton) We'll make a proposal that we would be
13 prepared to live with.

14 Q All right. Thank you. On Section 15, and you
15 touched a little bit about this in your opening
16 remarks, the excess deferred income tax credit.
17 And you said that it would offset, basically, the
18 revenue increase. Can you explain a little bit
19 more about how that works?

20 A (Horton) Yes. And, to be clear, it offsets the
21 revenue increase associated with recoupment. So,
22 excess deferred income taxes is enabled by the
23 reduction in the federal income tax rate from the
24 2018 Tax Cuts & Jobs Act. So that federal income

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1 tax rate reduction resulted in two changes to
2 the -- both to customers' benefit.

3 One is it reduced the level of income
4 tax expense in our base rates, which is an
5 annually recurring cost that we incur and
6 recover. That's different from the excess
7 deferred income tax benefit that's also to
8 customers' benefit. That relates to accumulated
9 deferred income taxes, which is a source of
10 benefit to utilities, where we have our tax
11 expenses, with the tax expense differences versus
12 our book accounting expenses. Those arise from
13 changes in how we account for expenses for tax
14 reporting purposes versus for book accounting
15 purposes. Generally, for utilities, the largest
16 source of that is a benefit, because we have --
17 we accelerate depreciation for tax purposes at a
18 greater level than we do for book purposes. So,
19 that creates a timing difference, which is to the
20 benefit of the utility, and that benefit is
21 passed through to customers through reducing rate
22 base.

23 When the income tax rate was reduced,
24 that ADIT was overstated. Because that meant

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1 that, as the assets turned around for book and
2 tax purposes, we'd be paying taxes at a lower
3 rate than the original regulatory -- the original
4 liability that had been created. So, once that
5 happened, and the tax rate was lowered, a portion
6 of the ADIT balance moved over into a separate
7 regulatory liability, called "excess deferred
8 income taxes", or "EDIT".

9 And it was still customer money, it
10 just would be paid back over time. And there's
11 rules around how quickly that can be given back
12 to customers. For the assets that are related to
13 plant, we need to return that to customers over a
14 specified timeframe for IRS rules.

15 But then there's a separate
16 classification called "unprotected EDIT" that we
17 have a little bit more flexibility, at least from
18 an IRS perspective. It turns around faster than
19 the book-related or protected ADIT would have
20 turned around. And there are not specific IRS
21 provisions to restrict how quickly we can provide
22 that to customers.

23 So all that is to say, simply put, the
24 EDIT is customer money that they're going to get

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1 over time. And, as a result of the Settlement
2 Agreement, we agreed that, particularly in light
3 of the pandemic, that one thing we could do to
4 benefit customers would be to accelerate that
5 credit for the EDIT piece, and give it back
6 faster than we expect it to basically to turn
7 around to our benefit. So, we'll give customers
8 the benefit sooner than we otherwise would have,
9 and that allows us to mitigate the bill increase
10 today. So, customers would get the money. It's
11 just we would give it back to them over time.
12 So, we're going to take the money that we would
13 have given them over time, we're going to
14 accelerate the credit, and basically align that
15 credit with the recovery of recoupment. So that,
16 from a customer perspective, there's very little
17 bill impact of recoupment.

18 CHAIRWOMAN MARTIN: Commissioner
19 Bailey?

20 CMSR. BAILEY: Yes.

21 CHAIRWOMAN MARTIN: I don't know if you
22 have lost Attorney Amidon on your screen?

23 CMSR. BAILEY: I did. I did lose her,
24 yes.

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1 CHAIRWOMAN MARTIN: Ms. Amidon, are you
2 there?

3 MS. AMIDON: Yes. What happened is, I
4 needed to stand up, because my back was bothering
5 me.

6 CHAIRWOMAN MARTIN: Okay. No worries.
7 I just wanted to make sure you could still hear
8 and see.

9 MS. AMIDON: Oh, yes. I have my
10 headset on. I just -- it was just my -- you
11 know, it's one of the things that comes with
12 getting older.

13 CHAIRWOMAN MARTIN: Okay. All right.
14 Go ahead.

15 CMSR. BAILEY: We must be almost at
16 lunch. I think I'm almost done.

17 BY CMSR. BAILEY:

18 Q Okay. So, how much is the EDIT credit amount
19 right now?

20 Is it \$13.3 million, in Paragraph
21 15.3(a)?

22 A (Dixon) Yes. That's the first piece of the EDIT
23 credit. So, you essentially have the recoupment
24 amount of about \$18 million, and that \$13 million

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1 is essentially dropping the recoupment down to
2 about 5 million. And then, really what you have
3 is some of those other accelerated amounts that
4 we're using to even take that \$5 million net
5 recoupment and bringing that all the way down to
6 roughly \$580,000. So, the EDIT amounts are
7 really, essentially, wiping out the total
8 recoupment.

9 Q Okay. Thank you.

10 A (Dixon) But the total pot of the EDIT that we're
11 talking about is roughly \$23 million.

12 Q So, then, is there money left over in that
13 account that still has to be returned to
14 customers even after the recoupment?

15 A (Dixon) Yes. There's also a credit in base
16 distribution rates of roughly \$5 million that's
17 going back every single year.

18 A (Horton) And that piece is related to the -- and
19 again, there's the protected and the unprotected
20 amount. So, the protected amount means it's --
21 we are restricted by how quickly that can be
22 returned to customers. And it's intended to be
23 reflected as a credit to customers as it turns
24 around to the benefit of the utility. So, that's

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1 what that 5 million represents.

2 Basically, we will have a cash benefit
3 of 5 million that we're giving to customers
4 annually. That's the 5 million amount in base
5 rates. And we wouldn't, for IRS rules, wouldn't
6 be allowed to give it back any faster than that.
7 The unprotected balance is really what we are
8 talking about as it relates to recoupment.

9 CMSR. BAILEY: Okay. Thank you very
10 much. I really appreciate your explanations.

11 And that's all I have for this panel,
12 Madam Chair.

13 CHAIRWOMAN MARTIN: Okay. I have a
14 couple more questions, and then maybe we can take
15 these, and do any redirect, and then take lunch.

16 BY CHAIRWOMAN MARTIN:

17 Q First, in Section 11, the "Assessment of Future
18 Distribution Infrastructure Needs", Staff had
19 identified, in its prefiled testimony, some
20 concerns about Eversource's infrastructure
21 replacement plans. I assume this infrastructure
22 assessment -- condition assessment is designed to
23 address those concerns. And I note, in 11.3,
24 that the Company is currently going to continue

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 with its practices.

2 So, I guess that leaves me wondering,
3 how will the assessment be implemented? What is
4 the expectation related to results and
5 implementation?

6 A (Horton) I can start, and then perhaps Mr.
7 Chagnon can jump in.

8 So, as you pointed out, we did have
9 some differences of opinion around the
10 investments that we're making and the decisions
11 that we're making. And, so, the intent of this
12 was to acknowledge that, and to try to, you know,
13 make progress towards coming to an understanding
14 around it.

15 And, so, I think the Company's
16 expectation is that this assessment will help to
17 make progress towards coming together on how we
18 view the system, and resolving some of those
19 discrepancies and differences that had emerged
20 throughout the course of the proceeding. You
21 know, how far we can get, I think, remains to be
22 seen, just based on the results of the
23 Settlement. But, certainly, we're expecting it
24 will be, you know, a process that all parties

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1 find valuable, and an output that all parties are
2 also similarly finding valuable, to help,
3 basically, bring in a third party to assess the
4 system, and to help to validate the condition of
5 the system, and then be used by all parties.

6 Q Mr. Chagnon, can you enlighten me on how Staff
7 plans to use this to address its concerns? And,
8 in light of the agreement that current practices
9 will remain in effect, how do you see it being
10 implemented?

11 A (Chagnon) The engineering assessment will be
12 filed in the LCIRP docket, which is Docket DE
13 20-161. And the assessment is due on March 31st.
14 Staff and the Commission does have the
15 opportunity to hire its own engineering firm to
16 review the assessment, and for another opinion.
17 And it may not result in any allowances or
18 disallowances of any specific projects or
19 investment. But it's really meant to inform
20 whether the Company's investment strategies are
21 consistent with the least cost planning.

22 And, so, to answer your question, it
23 will all be handled within the LCIRP docket, and
24 decisions and recommendations will be made there.

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1 Q Okay. And what about the survey of the
2 customers? What do you expect to learn from that
3 and how do you expect to use that?

4 A (Horton) I would say, similar to the response
5 that Mr. Chagnon just provided, you know, there
6 was a lot of discussion in the proceeding around
7 how much reliability is enough? How much
8 resiliency is enough? How do we incorporate the
9 voice of the customer into those decisions? So,
10 really, to the same end, we wanted to have
11 something that we could utilize that was based on
12 our New Hampshire customers' perspectives, and to
13 just help to inform the discussion, as part of
14 the LCIRP, and as part of other dockets that
15 we're engaged in, and discussions that we're
16 having with the Staff and other parties.

17 Q Do have any thoughts at this point on how you're
18 going to conduct that survey?

19 A (Horton) Ms. Conner will be on later in the week,
20 and she would be the expert to speak to that and
21 would be able to provide color. But I know
22 that's one thing we also intend to participate in
23 discussions with Staff and the OCA, to ensure,
24 you know, we're utilizing the proper resources we

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1 have, customer groups in place today that we use
2 as focus groups to get feedback from them on. We
3 have survey tools that we utilize today, in our
4 Call Center interactions and other customer
5 interactions. So, I'm sure we'll look to
6 leverage those. But I think there is other
7 channels that we'd also want to try to implement,
8 to make sure that we're getting a good
9 perspective and a broad array of input.

10 Q Okay. And the other thing I wanted to cover was
11 the fee free credit and debit card payment.
12 This, as I understand it, eliminates the fee that
13 would be otherwise charged to the customer. Can
14 you walk through the cost related to that? I
15 understand there's a short-term plan to assess
16 it, to assess the adoption, and how that will
17 be -- how that cost will be covered?

18 Whether this is just a short-term
19 assessment or something you plan to have for a
20 long time?

21 A (Horton) I see. That's a great question. I view
22 it as a short-term transition. So, from the
23 Company's perspective, we have proposed to
24 eliminate the individual customer from paying

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 that fee. And, now, as part of the Settlement,
2 that's what the Settlement Agreement is
3 achieving, because that is a dissatisfier for
4 customers. If we think about how customers pay
5 bills in other aspects of their lives, that fee
6 is sort of incorporated into the total cost of
7 service. It's not something that they pay
8 separately in many aspects of their lives. So,
9 it was important to us to try to accommodate the
10 same thing.

11 From a utility perspective, you know,
12 our view of it was it's like, you know, when a
13 customer pays through other mechanisms, the costs
14 for which are built into the overall cost of
15 service. As customers, our customers, are
16 evolving and utilizing credit cards to a greater
17 extent, we're happy to be able to offer this as a
18 solution, and really treat it the same way. It
19 will be just a part of the cost of service.

20 But the concern that we have is that,
21 if we were to take that step on our own, well, we
22 wouldn't, without the proper regulatory mechanism
23 in place, because of our concern about the
24 potential for the cost to balloon. Once

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1 customers understand that they can now pay
2 through a credit card and not incorporate a
3 separate fee, we expect the adoption of that
4 payment mechanism to increase, and then the cost
5 of doing that will be still incurred. And,
6 without a mechanism reflecting that, that would
7 be incorporated into the cost of service.

8 But we don't have enough experience
9 with it on our own in order to incorporate a
10 reflective amount into the cost of service that
11 we would be comfortable taking that step without
12 the proper regulatory framework in place. So,
13 the regulatory framework in place that we have
14 agreed to here builds an amount into base rates,
15 based on our estimates of the activity and the
16 costs that will be incurred. And then, we'll
17 reconcile that up or down to actual experience.

18 My expectation would be that, in our
19 future rate-setting processes, I would expect as
20 early as the next rate-setting process, we would
21 then be in a position with enough experience to
22 incorporate an amount into base rates that's
23 reflective of, you know, just like any other
24 expense, it's built into base rates at a level

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1 that we expect to incur going forward.

2 It's really just the transition period
3 from customers paying the fee, to that fee now
4 being incorporated as a general cost of service,
5 that we are concerned around how quickly that
6 could balloon, and not have the ability to -- and
7 not be able to recover it with a representative
8 amount in base rates.

9 Q Is the \$375,000 in some way based upon your past
10 experience with use, or no? Where did you come
11 up with that number?

12 A (Horton) That's based on our estimated first year
13 costs, which I believe were -- and again,
14 Ms. Conner can -- we can confirm the specifics of
15 what went into that. But what we had -- what we
16 had agreed to is that \$375,000 represents our
17 estimate of the first year of the costs. And
18 then, once we get into that first year, because
19 we expect and have provided forecasts that those
20 costs will go up over time. But what we have
21 agreed to do here is we will implement the
22 estimate of the first year, and then, based on
23 the actual experience of the program, we would
24 then, if we meet or exceed that level, we would

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1 then make a filing to implement the amount at a
2 higher level in year two, once we have
3 demonstrated the participation in the program
4 warrants that higher amount.

5 CHAIRWOMAN MARTIN: Okay. Thank you.
6 I don't have any other questions.

7 Ms. Amidon or Mr. Fossum, do you have
8 any questions to follow up?

9 MR. FOSSUM: I have a couple of items
10 to follow up on. But the ones that I have, I
11 believe, are probably -- they're mostly
12 meter-related, and I think are better left for
13 addressing on with the meter discussion later in
14 the week.

15 So, rather than try to push through
16 them now, and then just having to deal with them
17 later, I would rather just deal with them later.

18 MS. AMIDON: And, Madam Chairwoman,
19 that's the same situation for me, we have some.
20 I think, for one thing, Mr. Dudley may be able to
21 talk about the template development that
22 Commissioner Bailey was asking about. And I
23 think that our Meter panel will be better able to
24 answer some of those questions on meters.

ATTACHMENT F

120

[WITNESS PANEL: Chagnon|Horton|Dixon]

1 So, I don't have any redirect for my
2 witness at this point.

3 CHAIRWOMAN MARTIN: All right. Then,
4 why don't we recess for lunch at this point, and
5 plan to return at 1:30, since it's almost 12:45.
6 Okay. Thank you, everyone.

7 *(Whereupon the Day 1 Morning Session*
8 *was adjourned at 12:42 p.m. Please*
9 *note that the Day 2 Afternoon Session*
10 *will be filed under a separate*
11 *transcript so identified.)*

{DE 19-057} [Day 1/Morning Session ONLY] {10-26-20}

000120

ATTACHMENT F

1

1 STATE OF NEW HAMPSHIRE
2 PUBLIC UTILITIES COMMISSION

3 October 26, 2020-1:40 p.m. DAY 1
4 AFTERNOON SESSION ONLY

5 [Remote Hearing conducted via Webex]

6 RE: DE 19-057
7 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
8 D/B/A EVERSOURCE ENERGY
9 Notice of Intent to File Permanent Rates
10 [Hearing on Settlement Agreement]

11 PRESENT:

12 Chairwoman Dianne Martin, Presiding
13 Commissioner Kathryn M. Bailey

14 Jody Carmody, Clerk
15 Eric Wind, PUC Remote Hearing Host

16 APPEARANCES:

17 Reptg. Public Service Co. of NH, d/b/a
18 Eversource Energy:
19 Matthew J. Fossum, Esq.

20 Reptg. The Way Home:
21 Raymond Burke, Esq. (NHLA)
22 Stephen Tower, Esq. (NHLA)

23 Reptg. Clean Energy:
24 Elijah D. Emerson, Esq. (Primmer...)

25 Reptg. AARP:
 John Coffman, Esq.

 Reptg. Residential Ratepayers:
 D. Maurice Kreis, Esq.
 Office of Consumer Advocate)

 Reptg. Commission Staff:
 Suzanne Amidon, Esq.
 Scott Mueller, Esq.
 Brian Buckley, Esq.

 COURT REPORTER: SUSAN J. ROBIDAS, NHLCR NO. 44

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

2

I N D E X

WITNESS PANEL: ANN E. BULKLEY
DOUGLAS HORTON
PRADIP CHATTOPADHYAY
RICHARD CHAGNON

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* * * * *

WITNESS PANEL: JAY DUDLEY
ERICA MENARD
DOUGLAS HORTON
RICHARD CHAGNON

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ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

3

1 AFTERNOON SESSION
2 (Resumed at 1:40 p.m.)

3 CHAIRWOMAN MARTIN: On the
4 record now for real.

5 Ms. Robidas, if you could
6 swear in the additional witnesses, I would
7 appreciate it.

8 (WHEREUPON, ANN E. BULKLEY AND PRADIP
9 CHATTOPADHYAY were duly sworn and
10 cautioned by the Court Reporter.)

11 ANN E. BULKLEY, SWORN

12 PRADIP CHATTOPADHYAY, SWORN

13 CHAIRWOMAN MARTIN: And Mr.
14 Fossum, are you starting on this one?

15 MR. FOSSUM: I can. Yes, I
16 can do that. So I will -- Mr. Horton has
17 already been qualified, so I will skip over
18 that and just address Ms. Bulkley for now.

19 DIRECT EXAMINATION

20 BY MR. FOSSUM:

21 Q. Ms. Bulkley, could you please state your
22 name, position, and your responsibilities for
23 the record.

24 A. (Bulkley) Yes. My name is Ann Bulkley. I'm
25 a senior vice-president with Concentric

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

4

1 Energy Advisors. And my area of expertise
2 would be the cost of capital and valuation
3 matters within the practice.

4 Q. And have you previously testified before this
5 Commission?

6 A. (Bulkley) I have not.

7 Q. And in light of that, could you very briefly
8 give a summary of your background and
9 experience.

10 A. (Bulkley) Sure. My educational background is
11 economics and finance; economics and finance
12 as an undergrad, and economics from Boston
13 University as a master's. I have about 25
14 years in the industry in consulting to the
15 energy industry. And most of that has been
16 focused on cost of capital and valuation
17 matters over that time. I think I've
18 testified on the cost of capital on the order
19 of about 50 times.

20 Q. Now, Ms. Bulkley, back on May 28, 2019, did
21 you file testimony and attachments that have
22 been included in the Company's initial case
23 and which have been marked as Exhibit 9?

24 A. (Bulkley) Yes.

25 Q. And was that testimony prepared by you or at

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

5

1 your direction?

2 A. (Bulkley) Yes, it was.

3 Q. Do you have any corrections to that testimony
4 this afternoon?

5 A. (Bulkley) No, I don't.

6 Q. And do you adopt that testimony as your
7 testimony for this proceeding?

8 A. (Bulkley) Yes.

9 Q. And similarly, did you file testimony and
10 attachments as part of the Company's rebuttal
11 on March 4th, 2020, in what has been marked
12 as Exhibit 49?

13 A. (Bulkley) Yes, I have.

14 Q. And was that prepared by you or at your
15 direction?

16 A. (Bulkley) Yes.

17 Q. Do you have any corrections to that this
18 afternoon?

19 A. (Bulkley) No, I don't.

20 Q. And do you adopt that as your testimony for
21 this proceeding as well?

22 A. (Bulkley) Yes.

23 Q. And finally on this line, did you file
24 supplemental testimony on July 16, 2020, and
25 which has been marked as Exhibit 52?

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ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

6

1 A. (Bulkley) Yes, I did.

2 Q. And was that testimony likewise prepared by
3 you or at your direction?

4 A. (Bulkley) Yes.

5 Q. And do you have any corrections to that
6 testimony?

7 A. (Bulkley) No, I don't.

8 Q. And do you likewise adopt that as your
9 testimony for this proceeding?

10 A. (Bulkley) I do.

11 Q. Ms. Bulkley, did you participate in the
12 discussions and negotiations and drafting of
13 the settlement agreement that's pending
14 before the Commission?

15 A. (Bulkley) No, I did not.

16 Q. But are you nonetheless familiar with the
17 terms of that agreement, at least insofar as
18 it pertains to ROE and capital structure?

19 A. (Bulkley) Yes, I am. The terms in the
20 settlement agreement that relate to cost of
21 capital and capital structure are in
22 Section 8. I'm familiar with that section.

23 Q. Okay. Then I just basically have really just
24 a couple of questions for you.

25 First, with respect to the return on

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

7

1 equity that's specified in that Section 8
2 that you just referenced, how does that align
3 with your understanding of appropriate
4 returns for companies like PSNH?

5 A. (Bulkley) So 9.3 percent is within the range
6 of returns that have been recently
7 authorized. In my rebuttal testimony at
8 Page 12, I prepared a scatter plot of the
9 various authorized ROEs for electric
10 utilities for the past ten years. And if you
11 look at that scatter plot, it demonstrates
12 that the 9.3 percent is in the range, but at
13 the low end. Now, that data ends as of
14 January 31st, 2020. But I follow this on a
15 regular basis and would say that the scatter
16 plot for this year, while it probably has
17 fewer data points than other years, is
18 consistent in terms of an overall range. So
19 the 9.3 percent would be within that overall
20 range for 2020 as well, at the lower end.

21 Q. And so then is it your position that that
22 return on equity is reasonable?

23 A. (Bulkley) In the context of an overall
24 settlement, sort of the give and take of a
25 settlement, I would say that it's reasonable.

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

8

1 It was at -- it would not have been my
2 recommendation because it is at sort of the
3 lower end of the results. But taking into
4 consideration the overall settlement and the
5 trade-offs that occur in the context of a
6 settlement, I would say that in that context
7 it is reasonable, and it is, like I said,
8 within the range of returns that have been
9 authorized.

10 Q. And likewise, there's a specified capital
11 structure in that Section 8. What's your
12 understanding and assessment of the capital
13 structure as specified?

14 A. (Bulkley) The capital structure is within the
15 range that was established by the proxy group
16 that I presented in my direct testimony, and
17 I believe I updated as well in my rebuttal.
18 So, again, I think that that's an appropriate
19 capital structure.

20 MR. FOSSUM: And I think
21 that's what I have for direct.

22 CHAIRWOMAN MARTIN: All right.
23 Thank you.

24 Mr. Kreis.

25 MR. KREIS: Good afternoon,

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

9

1 everybody.

2 DIRECT EXAMINATION

3 BY MR. KREIS:

4 Q. Good afternoon, Dr. Chattopadhyay. Would you
5 be kind enough to identify your name and
6 title for the record. You have to unmute
7 yourself.

8 A. (Chattopadhyay) Yeah. I'm Pradip
9 Chattopadhyay. I'm the assistant Consumer
10 Advocate, and I represent New Hampshire OCA.

11 Q. And you have testified before the Commission
12 on previous occasions; correct?

13 A. (Chattopadhyay) Yes, I have.

14 Q. Turning your attention to what has been
15 marked for identification as Exhibit No. 25,
16 that is a document titled "Testimony of
17 Pradip Chattopadhyay and Attachments," and
18 it's dated December 20th, 2019. Is that the
19 written prefiled direct testimony that you
20 prepared and I filed with the Commission on
21 December 20th of last year?

22 A. (Chattopadhyay) Yes.

23 Q. And does that reflect your assessment of what
24 an appropriate return on equity and capital
25 structure would have been for Eversource back

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

10

1 on December 20th of last year?

2 A. (Chattopadhyay) That is correct. Yes.

3 Q. And so if we held this particular hearing
4 back on December 20th and I asked you all of
5 the questions that are laid out in that
6 written prefiled direct testimony, those are
7 the answers that you would have given; is
8 that a fair statement?

9 A. (Chattopadhyay) Yes.

10 Q. And do you happen to remember what return on
11 equity you recommended to the Commission for
12 Eversource back on December 20th of 2019?

13 A. (Chattopadhyay) To the best of my
14 recollection, if I talk about the range, it
15 was from 9 -- sorry --

16 (Court Reporter interrupts.)

17 A. (Chattopadhyay) 8.25 percent -- sorry -- 8.15
18 percent to 8.35 percent. And the point
19 estimate, to the best of my recollection, was
20 8.27 percent. And I'm saying to the best of
21 my recollection because at the same time I
22 also filed testimony in the Liberty Utilities
23 rate case.

24 Q. Thank you. Turning your attention now to
25 what has been marked for identification as

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

11

1 Exhibit No. 53. That is a document titled
2 "OCA Updated ROE Testimony and Attachments."
3 It's dated July 16, 2020. Is that an exhibit
4 that you wrote and prepared and that I filed
5 with the Commission back on July 16th?

6 A. (Chattopadhyay) Yes, I did.

7 Q. And is it fair to say that that updated ROE
8 testimony that you filed back on July 16th
9 reflects your assessment of what a reasonable
10 return on equity and capital structure for
11 Eversource would have been back on July 16th?

12 A. (Chattopadhyay) That is correct. Yes.

13 Q. And so if this hearing had been held back on
14 July 16th and I asked you all of the
15 questions that are reflected in the written
16 questions that are in Exhibit 53, the answers
17 that are written down in Exhibit 53 are the
18 answers that you would have given; correct?

19 A. (Chattopadhyay) Correct.

20 Q. And do you happen to recall what return on
21 equity you were recommending as of July 16?

22 A. (Chattopadhyay) Yes, I do. The point
23 estimate was 8.64 percent, and the range that
24 I had recommended was 8.55 percent to
25 8.75 percent.

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

12

1 Q. And I assume, Dr. Chattopadhyay, that you are
2 aware that the settlement agreement that we
3 are here asking the Commission to approve
4 recommends a return on equity of 9.3 percent;
5 yes?

6 A. (Chattopadhyay) Yes.

7 Q. So, obviously, 9.3 percent is in excess of
8 the 8.64 percent that you were recommending
9 back on July 16, and it's significantly in
10 excess of the return on equity you were
11 recommending back in December of 2019. Could
12 you explain to the Commission -- well, first
13 of all, do you agree that 9.3 percent is a
14 just and reasonable return on equity for the
15 Commission to approve here in this proceeding
16 now?

17 A. (Chattopadhyay) Yes, I do.

18 Q. And could you explain why you have that
19 opinion, given that 9.3 percent is
20 substantially higher than the returns that
21 you were recommending both in December of
22 2019 and July of 2020.

23 A. (Chattopadhyay) As is understood when we
24 settle, we look at all the moving parts. And
25 overall, looking at other parts, I am more

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

13

1 than comfortable with 9.3 percent as being
2 the recommended ROE in the bigger scheme of
3 things. So as part of the settlement,
4 representing the interest of residential
5 ratepayers, we have normally been able to
6 accommodate significantly lower ROE relative
7 to what was requested by the Company in its
8 original petition. We have also included
9 provisions to allow, for example, an
10 assessment of advanced metering functionality
11 for possible deployment in the future. We
12 have accommodated better accounting of
13 metering previously put in place. And we
14 have also introduced the Arrearage
15 Forgiveness Program --

16 A. (Chattopadhyay) -- which I think is expected
17 to begin in 2022. I'm also excited about the
18 introduction of --

19 (Court Reporter interrupts.)

20 A. (Chattopadhyay) I'm also happy that we have
21 time-of-use rates we can consider for the
22 future. And apart from that, there's also
23 the fact that the Company has to go for the
24 business process review and -- (connectivity
25 issue)

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ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

14

1 (Court Reporter interrupts.)

2 A. (Chattopadhyay) So let me start again with
3 what I mentioned about a few things that I
4 find important to us as representing OCA.
5 One of them is the rate design itself. We
6 have -- I know the Company is going to be
7 looking at time-of-use rates for the near
8 future, and that's going to be happening in
9 active consultation with parties like OCA.

10 I'm also happy that we have been able to
11 keep the residential customer charge at the
12 same level as was set in the temporary rates
13 phase.

14 Moreover, it's good to say that the
15 Company has agreed to a business process
16 review audit, which will be actually overseen
17 and conducted by Staff.

18 So all of that -- and, you know,
19 finally, I would also say the fact that the
20 cost of debt had gone down significantly with
21 the infusion of additional debt and the final
22 capital structure and the change in the
23 capital structure marginally, but, you know,
24 towards a smaller percentage for equity. All
25 of that in the bigger scheme of things is

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ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

15

1 helping us to conclude that the ROE of
2 9.3 percent is very reasonable.

3 Q. So I just want to make sure I understand what
4 you just said, Dr. Chattopadhyay. You listed
5 a number of elements of the settlement
6 agreement that you regard as capable
7 checkcheck to the residential ratepayers that
8 the proceeding represents. I think the
9 import of what you just described is that
10 those features of the settlement agreement
11 justify a certain degree of forbearance from
12 the OCA with respect to how hard we push the
13 Company on return on equity. Would that be a
14 fair statement?

15 A. (Chattopadhyay) That is a fair statement.

16 Q. In addition to that, have conditions in the
17 economy changed since December of 2019 in
18 ways that would affect a return on equity
19 that would be just and reasonable for a
20 utility like Eversource?

21 A. (Chattopadhyay) Yeah. The testimony that I
22 filed in July, even if I look at the range,
23 roughly it went up I think by, like, 40 basis
24 points. So there was a shift of the range.
25 And that was in -- so that got reflected in

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

16

1 my analysis, and that was filed in July as
2 the supplemental testimony. So we have
3 moved, you know, towards 9.3 principally
4 because of the change, you know, in the
5 economy due to the COVID-19 pandemic.

6 And since you have asked me this
7 question, I usually do this; I also look at
8 what's going on currently. And I can confirm
9 that even looking at what was going on, let's
10 say -- (connectivity issue)

11 (Court Reporter interrupts.)

12 A. (Chattopadhyay) So as I usually do, just for
13 my own education, I go back and look at what
14 the situation is currently. So I did some
15 analysis, maybe like last week, 19th or 20th
16 of this month, and the numbers are very
17 similar to where I was in July. And all of
18 that is consistent with my understanding that
19 with the COVID-19 situation, the allowed --
20 sorry -- the return on equity, the market
21 return on equity has gone up.

22 Q. You mentioned the Liberty rate case a few
23 minutes ago. And if memory serves, that was
24 Docket DE 19-064. And could you comment on
25 how the return on equity in this settlement

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

17

1 agreement of 9.3 percent compares to the
2 return on equity that was in the Liberty
3 Utilities electric rate case settlement
4 agreement that has already been approved by
5 the Commission?

6 A. (Chattopadhyay) Yes. The return on equity in
7 the other rate case, the DE 19-064, the
8 Commission has allowed 9.1 percent. And, you
9 know, so that is slightly lower than what's
10 been recommended here. That is
11 understandable, because when we discussed
12 9.1, you know, at that time I think it was
13 based on, to the best of my recollection,
14 information before the COVID-19 started.

15 And the other point is that the other
16 company has decoupling to reckon with, and I
17 know the Commission tends to reduce the
18 return on equity on account of that.

19 Q. Thank you. I think I just have one last
20 question to ask you, Dr. Chattopadhyay, and
21 it has to do with the agreed-upon capital
22 structure in the settlement agreement.
23 That's in Section 6.2, which says the
24 settling parties agreed on a capital
25 structure of 54.4 percent equity and

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ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

18

1 45.6 percent debt to be used for purposes of
2 determining the Company's revenue
3 requirement. Is that capital structure just
4 and reasonable, in your opinion?

5 A. (Chattopadhyay) Yes, it is. I tend to look
6 at the ranges. I'm less -- what should I
7 use -- I'm less fixated by having a precise
8 number when you're looking at the capital
9 structure. But I think looking at the proxy
10 groups for not only the ones that I had but
11 also what the Company's witness had, overall
12 I'm perfectly happy with that capital
13 structure, and, you know, I find it
14 reasonable.

15 Q. Thank you.

16 MR. KREIS: Madam Chairwoman,
17 I believe those are all the questions I have
18 for my witness on direct exam.

19 CHAIRWOMAN MARTIN: All right.
20 Ms. Amidon, do you have any direct questions
21 for this panel?

22 MS. AMIDON: I have a couple
23 of questions for Mr. Chagnon. They're very
24 brief.

25 DIRECT EXAMINATION

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

19

1 BY MS. AMIDON:

2 Q. Good afternoon, Mr. Chagnon.

3 A. (Chagnon) Good afternoon.

4 Q. It's correct that you did not file testimony
5 on ROE or capital structure; is that right?

6 A. (Chagnon) That's correct.

7 Q. However, you did participate in the
8 settlement discussions, as you previously
9 indicated; is that fair to say?

10 A. (Chagnon) Yes.

11 Q. What are your conclusions overall, then,
12 looking at the provision regarding capital
13 structure and return on equity? Do you
14 believe that the settlement agreement
15 reflects a reasonable resolution of issues
16 that the parties may have had?

17 A. (Chagnon) Yes, I do.

18 Q. And you find that provision to be consistent
19 with the result of just and reasonable rates;
20 is that correct?

21 A. (Chagnon) Correct.

22 Q. Okay. Thank you.

23 MS. AMIDON: That's all I
24 have.

25 CHAIRWOMAN MARTIN: All right.

{DE 19-057}[DAY 1 - AFTERNOON SESSION ONLY] {10-26-20}

ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

20

1 Thank you.

2 Commissioner Bailey.

3 INTERROGATORIES BY COMMISSIONERS:

4 BY COMMISSIONER BAILEY:

5 Q. Dr. Chattopadhyay and Mr. Chagnon, I asked a
6 question earlier about the capital structure.
7 And I understand that you both believe the
8 capital structure is reasonable. But given
9 the low cost of debt right now, would it be
10 more reasonable to expect the Company to take
11 out more debt and lower the rate of return
12 for customers? You know, would that be more
13 fair? Mr. Chattopadhyay.

14 A. (Chattopadhyay) Yeah, at the margin,
15 certainly that is possible. Again, when we
16 set the allowed return on capital, we have
17 actually moved a little bit away from what
18 the Company had requested. So it's -- to the
19 best of my recollection, it was closer to
20 54.8-something, and we've gone down to 54.4.
21 That is partly because of the infusion of
22 additional debt. And so, yeah, I mean,
23 mechanically speaking, if I had more of that,
24 the return on capital, the cost of capital
25 would have gone down.

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ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

21

1 But this is also about trying to
2 understand risks. And when you have more
3 debt, debt gets the priority in terms of
4 having to repay whoever you owe it to. And
5 that, as opposed to equity, which, yes,
6 you're being allowed a higher return, but
7 it's not guaranteed. So there is that
8 element of risk that needs to be understood.
9 And it's not simple. Therefore, it's in my
10 opinion, when you're looking at proxy
11 companies, proxy group companies, you want to
12 get a sense of where those numbers are for
13 the different companies and be comfortable
14 with whatever you have -- what we have agreed
15 to here. And so to me, that is one of the
16 aspects that can be discounted. And I'm
17 quite comfortable with the capital structure
18 as has been internalized, you know, within
19 the settlement metrics.

20 Q. Thank you. Mr. Chagnon, do you have anything
21 that you want to add?

22 A. (Chagnon) Only that in the context of the
23 overall settlement, Staff does believe that
24 the ROE and the capital structure is a
25 reasonable compromise and that it is just and

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ATTACHMENT F

[WITNESS PANEL: BULKLEY|HORTON|CHATTOPADHYAY|CHAGNON]

22

1 reasonable.

2 Q. Okay. Thank you.

3 COMMISSIONER BAILEY: That's
4 all I have.

5 CHAIRWOMAN MARTIN: I don't
6 have any other questions on that. Is there
7 any redirect?

8 MR. FOSSUM: Yes, I do have
9 one --(connectivity issue)

10 (Court Reporter interrupts.)

11 MR. KREIS: I just said I had
12 no questions on redirect.

13 MR. FOSSUM: Thank you.

14 REDIRECT EXAMINATION

15 BY MR. FOSSUM:

16 Q. Ms. Bulkley, did you just hear the question
17 that Commissioner Bailey addressed to Staff
18 and the OCA regarding additional debt
19 issuance?

20 A. (Bulkley) Yes, I did.

21 Q. And do you have an opinion or judgment on
22 that same issue?

23 A. (Bulkley) I do. I think there are a couple
24 of important things to note that happened as
25 a result of the pandemic. The first is that,

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23

1 back in April, S&P downgraded its outlook on
2 the entire utilities industry with concerns
3 about the effects of the pandemic on the
4 utilities industry. And then most recently,
5 early in October, S&P issued a report that
6 talked about the covered ratios associated
7 with companies more generally. So it covered
8 more than just the utilities segment. And in
9 that report they identified that utilities
10 were -- had among the lowest interest
11 coverage ratios. And so that's I think an
12 important consideration. This particular
13 article that S&P issued was looking at the
14 covered ratios of companies and being
15 concerned about whether or not they could
16 meet their debt coverage ratios. So I think
17 it's really important to note that utilities
18 are already considered very highly leveraged,
19 so additional debt I don't think would be
20 perceived well by the credit rating agencies.

21 Q. Thank you.

22 A. (Bulkley) Sure.

23 MR. FOSSUM: That was the only
24 question I had.

25 CHAIRWOMAN MARTIN: All right.

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24

1 Thank you for that. It looks like then we
2 are done with this panel, although, two of
3 the witnesses are staying on for the next
4 panel. Do I have that right?

5 [No verbal response]

6 If we could get Ms. Menard and
7 Mr. Dudley.

8 MS. AMIDON: Madam Chairwoman,
9 I would just say that my co-counsel, Scott
10 Mueller, is going to qualify Mr. Dudley as a
11 witness and may ask additional questions.
12 Thank you.

13 CHAIRWOMAN MARTIN: Okay.
14 Thank you for letting me know.

15 Ms. Robidas, could you swear
16 in the two additional witnesses.

17 (WHEREUPON, ERICA MENARD AND JAY DUDLEY
18 were duly sworn and cautioned by the
19 Court Reporter.)

20 ERICA MENARD, SWORN

21 JAY DUDLEY, SWORN

22 CHAIRWOMAN MARTIN: Okay.
23 Who's going first on this one?

24 MR. MUELLER: We can go ahead
25 and introduce Mr. Dudley.

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25

1 CHAIRWOMAN MARTIN: All right.

2 Thank you.

3 DIRECT EXAMINATION

4 BY MR. MUELLER:

5 Q. Mr. Dudley, can you state your name for the
6 record?

7 A. (Dudley) Jay Dudley.

8 Q. And where are you employed and in what
9 position?

10 A. (Dudley) New Hampshire Public Utilities
11 Commission, and I am an analyst in the
12 Electric Division.

13 Q. And have you previously testified before the
14 Commission?

15 A. (Dudley) Yes, I have.

16 Q. Did you participate in the investigation of
17 this petition?

18 A. (Dudley) Yes, I did.

19 Q. And what aspects of the petition were you --

20 CHAIRWOMAN MARTIN: Excuse me.
21 Mr. Mueller, are you able to turn your volume
22 on your device down? We're getting a lot of
23 feedback.

24 MR. MUELLER: Is that better?

25 CHAIRWOMAN MARTIN: Ooh, not

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26

1 really.

2 And Mr. Dudley, if you could
3 mute in between as well, perhaps that will
4 help -- (connectivity issue)

5 (Pause in proceedings)

6 MR. MUELLER: Okay.

7 BY MR. MUELLER:

8 Q. Mr. Dudley, did you submit initial testimony
9 in this proceeding that has been marked as
10 Exhibits 32 and 33?

11 A. (Dudley) Yes, I did.

12 Q. And are those respectively the unredacted and
13 confidential versions of your initial
14 testimony?

15 A. (Dudley) Yes, that's correct.

16 Q. And do you have any corrections to that
17 testimony at this time?

18 A. (Dudley) No, I do not. However, I would
19 point out that some of the initial budget
20 amounts that I used in my direct testimony of
21 December 20th were inaccurate, and I
22 subsequently corrected those amounts in my
23 updated testimony of July 16th. And those
24 can be found in Table 1 at Bates Pages 6 and
25 7.

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27

1 Q. And with that clarification, do you affirm
2 that your initial testimony accurately
3 represents your opinions at the time you
4 prepared it?

5 A. (Dudley) Yes, I do.

6 Q. And do you have -- looking now at Exhibit 56,
7 is this the updated testimony you referred
8 to?

9 A. (Dudley) Yes, it is.

10 Q. And do you have any corrections to that
11 testimony?

12 A. (Dudley) I do not.

13 Q. And do you affirm that that testimony
14 accurately represents your position at the
15 time that you prepared it?

16 A. (Dudley) Yes, I do.

17 Q. Did you participate in the development of the
18 settlement agreement?

19 A. (Dudley) Yes, I did.

20 Q. And are you familiar with the terms of that
21 settlement?

22 A. (Dudley) I am.

23 Q. And do you believe that the settlement
24 agreement meets the public interest and
25 results in just and reasonable rates?

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1 A. (Dudley) Yes, I do.

2 Q. Earlier this morning we had some questions
3 from the Bench regarding Articles 3.1 and 3.2
4 of the settlement regarding the regulatory
5 review template and the business process
6 audit. Are you familiar with those?

7 A. (Dudley) Yes, I am.

8 Q. Could you just briefly describe your view of
9 the purpose of the regulatory review template
10 and how that fits in with the business
11 process audit.

12 A. (Dudley) Yes. The vision for the
13 documentation template is for it to act as a
14 framework, if you will, for what is needed
15 for inclusion in Eversource's project
16 documentation going forward, based on the
17 documentation issues that I detail in my
18 testimony.

19 Pursuant to that, it is our expectation
20 that the business process review consultant
21 will provide us with some valuable input in
22 the template's development and design. And
23 that task has been included under Item 2 of
24 the scope of work which is included in
25 Attachment 2 to the settlement agreement.

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29

1 Q. Thank you.

2 MR. MUELLER: That concludes
3 our direct examination.

4 CHAIRWOMAN MARTIN: All right.
5 Thank you.

6 And Mr. Fossum, do you have
7 direct for Ms. Menard?

8 MR. FOSSUM: A little, tiny
9 bit.

10 DIRECT EXAMINATION

11 BY MR. FOSSUM:

12 Q. Ms. Menard, could you please state your name,
13 position, and responsibilities for the
14 record.

15 A. (Menard) Yes. My name is Erica Menard --

16 CHAIRWOMAN MARTIN: Ms.
17 Menard, can you speak up, please?

18 (Pause in proceedings)

19 MS. MENARD: Is that any
20 better?

21 MR. FOSSUM: It's clear but
22 quiet.

23 CHAIRWOMAN MARTIN: Very soft.

24 A. (Menard) Okay. My name is Erica Menard.

25 CHAIRWOMAN MARTIN: That's

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1 better.

2 A. (Menard) I am the manager of revenue
3 requirements for Eversource. And in that
4 capacity, I manage the rate calculations
5 associated with various rates, including
6 distribution, energy service, stranded costs,
7 transmission and SBC rates.

8 Q. And just for clarify, was that your same role
9 back at the time that this rate case
10 commenced?

11 A. (Menard) No. When the rate case first
12 started, I was in a different role, and I
13 oversaw capital investments for the Company.

14 Q. And have you previously testified before this
15 Commission?

16 A. (Menard) Yes.

17 Q. And Ms. Menard, back on May 28, 2019, did you
18 file testimony and attachments in what has
19 been marked as Exhibit 13?

20 A. (Menard) Yes.

21 Q. And was that testimony prepared by you or at
22 your direction?

23 A. (Menard) Yes.

24 Q. Do you have any corrections to that
25 testimony?

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1 A. (Menard) No, I don't.

2 Q. And do you adopt that testimony as your
3 testimony for this proceeding?

4 A. (Menard) Yes, I do.

5 Q. And Ms. Menard, did you also file testimony
6 and attachments as part of the Company's
7 rebuttal filing on March 4, 2020, in what has
8 been marked as Exhibits 45 and 46,
9 confidential and redacted versions?

10 A. (Menard) Yes, I did.

11 Q. Was this testimony prepared by you or at your
12 direction?

13 A. (Menard) Yes, for the portions that I was
14 responsible for.

15 Q. And do you have any corrections to that
16 testimony today?

17 A. (Menard) No, I don't.

18 Q. And do you adopt that as your testimony for
19 this proceeding?

20 A. (Menard) Yes, I do.

21 Q. And Ms. Menard, did you participate in the
22 discussions, negotiations, and drafting of
23 the settlement agreement that's under
24 consideration today?

25 A. (Menard) Yes.

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1 Q. And you're familiar with the terms of that
2 agreement?

3 A. (Menard) Yes, I am.

4 Q. So just very briefly, and very much in line
5 with the question that you just heard for the
6 Staff, do you have any additional detail to
7 provide around the development of the
8 template or the audit procedure? And I guess
9 this question would be for either you or Mr.
10 Horton. But since you're our new panelist, I
11 was directing it towards you.

12 A. (Menard) Sure. So the -- as part of the
13 business process template for the business
14 process review, we will be trying to come to
15 consensus on how best to demonstrate the
16 projects that we are including in our step
17 adjustments in the short term and then longer
18 term in future rate cases. With the current
19 step increase that we have filed, we have
20 started that process of trying to take the
21 first step in developing that template. And
22 the business process audit will continue that
23 further.

24 Q. Now, I guess just one other question in light
25 of the agenda identifying this panel also

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1 speaking to step adjustments.

2 Ms. Menard, were you listening in this
3 morning to the discussion about the
4 settlement agreement?

5 A. (Menard) Yes, I was.

6 Q. And did you hear the questions and answers
7 directed to handling of the step adjustments
8 answered by Mr. Horton this morning?

9 A. (Menard) Yes.

10 Q. And I guess I'll just give you this
11 opportunity. Do you have any additional
12 detail that you believe needs to be provided
13 about the handling of those step adjustments
14 beyond what's specified in the settlement
15 agreement, and other than what Mr. Horton
16 testified to?

17 A. (Menard) No, I don't.

18 Q. Thank you.

19 MR. FOSSUM: And I think
20 that's what I had.

21 CHAIRWOMAN MARTIN: All right.
22 Thank you.

23 Commissioner Bailey.

24 COMMISSIONER BAILEY: Thank
25 you.

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1 INTERROGATORIES BY COMMISSIONERS:

2 BY COMMISSIONER BAILEY:

3 Q. Mr. Dudley, do you believe that the business
4 process review and audit and the
5 establishment of the templates will address
6 the concerns of rates in your testimony?

7 A. (Dudley) Yes, I do, Commissioner Bailey. The
8 provision for the business process review
9 audit is, in my opinion, one of the key
10 elements and one of the positive attributes
11 of the settlement.

12 The audit will be structured to examine
13 the issues that I raised in my testimony
14 related to the Company's capital budgeting,
15 planning, documentation, project management,
16 et cetera. And what we hope to obtain from
17 the outside expert's review are helpful
18 recommendations involving improvements to the
19 Company's processes involving those issues.
20 So yes, I am satisfied.

21 Q. Do you think that once the template is
22 established, the Company should file them --
23 do you think it would make sense for the
24 Company to file them annually, in between
25 rate cases, so if there isn't a step

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1 adjustment, but there's five more years
2 before the next rate case, we would have the
3 documentation more real time?
4 A. (Dudley) Well, I did think about that when
5 you first mentioned that this morning. And
6 as you probably know, under Rule 308.9, the
7 utilities, the New Hampshire utilities are
8 already required to file a list of upcoming
9 capital projects annually. And Staff refers
10 to those reports as E22 reports. And
11 although the list is reviewed, I'm not aware
12 at any point in time in the past where such a
13 prudence review has been conducted, only
14 because what Staff would get if we asked for
15 the documentation at that time, the only
16 documentation we would get would be the
17 preliminary project documentation, which
18 involves -- in Eversource's case, it involves
19 the project authorization form, which is
20 their form of business case that acts as the
21 initial justification for the project.
22 That's all we would have to go on. Although
23 it does include analysis and again provides
24 the reasons for initiating the project, we
25 would not know how the project progressed at

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1 that time until year end when the project is
2 finished and is deemed by the Company to be
3 used and useful. So I'm not sure how that
4 type of review would help anything, unless we
5 were to adopt a process where we would review
6 those projects at year end annually, if
7 that's what you're suggesting.

8 Q. No, I don't think that's what I'm suggesting.
9 I was struck by the overwhelming nature of
10 the review that you had to do for us to be
11 able to make a determination on prudence for
12 all the investments for the past seven years
13 at one time. And so what I was thinking is,
14 while the E22 is forward-looking and says
15 these are the projects we expect to be
16 completed in the next year or start in the
17 next year, my understanding of the template
18 is a structure that documents projects that
19 have been completed and can be used to
20 determine prudence once the plant is put in
21 service. Do I have that right so far?

22 A. (Dudley) Yes. In terms of the rate case, my
23 understanding is that Staff likely cannot
24 raise those issues without a rate case
25 filing. However, I'll rely on Staff's

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1 attorneys to elaborate on that.

2 Q. I'm not suggesting that we would make a
3 prudency determination in between rate cases.
4 I'm just suggesting that if we have the
5 information on file, then you don't have to
6 start from square one and go back seven years
7 if there's another ten years in between rate
8 cases. It's just -- it's a record at the
9 Commission that can be used the next time
10 they file a rate case, you know, that we were
11 aware of along the way. Not that we would
12 make any determination or use it along the
13 way, but that it would be in place.

14 A. (Dudley) I would agree with that. It would
15 be a separate process that we would have to
16 talk about. But I think it would be helpful.
17 But I certainly wouldn't be opposed to that.

18 Q. All right. Well, maybe you could just talk
19 about it when you're talking about the
20 templates and the formation of it.

21 So tell me -- and any of the panelists
22 can jump in at any time. Tell me about the
23 structure of the -- I haven't looked at the
24 step one or the 2019 step filing yet. But
25 what did you do to support that filing?

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1 Maybe Ms. Menard can take that one.

2 A. (Menard) Sure, I can start. The way we first
3 started it was we had a discussion with Staff
4 to determine a presentation format that was
5 better than what we had filed in the rate
6 case. And so we worked with Mr. Chagnon, Mr.
7 Demmer and Mr. Dudley on, you know, what are
8 the ways that they wanted to evaluate
9 projects. And so we had come up with
10 different ways to look at variance
11 analyses -- so a variance against the initial
12 pre-construction estimate, a variance against
13 the final cost, a variance against the last
14 supplement -- to try to understand -- and
15 these are my terms, but certainly either Mr.
16 Dudley or Mr. Chagnon could jump in and help
17 out -- but to try to understand some of the
18 reasons for variances, why they occur. And
19 in addition to laying it out in that format,
20 we'd also try to put a very brief description
21 of the variance. So it could have been maybe
22 the scope changed. Maybe there was a -- you
23 know, maybe there was more work that needed
24 to be done than was initially estimated
25 because of some reason. So we tried to put

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1 some generic descriptions as to why the
2 project may have varied from its initial
3 estimate.

4 And once this information is filed,
5 Staff then is looking at making some samples,
6 testing some samples. And we will then
7 provide those samples, to include the initial
8 project authorization, any supplemental
9 documentation, and also some detailed
10 timeline of costs over time; so how costs
11 were incurred over time.

12 So I think we tried to work to
13 understand the way that a project would be
14 evaluated from Staff's point of view and
15 tried to take a first pass at -- I know there
16 will be more permutations of this going
17 forward, but at least it was a first pass to
18 try and present it in a way that worked for
19 both.

20 Q. Mr. Dudley, do you have anything you want to
21 add to that?

22 A. (Dudley) Yeah, I would agree with what Ms.
23 Menard just said. However, I would point out
24 that this process, this review process, is a
25 defined process. It's a little more

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1 formalized than what we've done in the past,
2 you know, in that supporting documentation is
3 submitted by the Company on the step
4 adjustment projects after they submit a list.

5 As Ms. Menard pointed out, you know, we
6 compile a sample list from that initial
7 filing, and then we ask for the project
8 documentation based on that. And we have 90
9 days. We have a 90-day review period in
10 which to investigate those projects and any
11 issues that we may discover. So this is
12 really a process, as far as I know, that has
13 existed before, but it is something that we'd
14 like to continue going forward. But it's a
15 little more formal than what we've done in
16 the past.

17 Q. Okay. Ms. Menard, are you the person that I
18 should ask about -- well, I think I asked Mr.
19 Horton this morning about the number of times
20 that you decide not to proceed with a project
21 when the difference in budget between the
22 conceptual budget and the reconstruction
23 budget is significant.

24 Do you re-evaluate whether the project
25 should go forward at that point? Or once

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1 you've decided to go forward, does it usually
2 go forward?

3 A. (Menard) Sure. Sure, I can take a stab at
4 that. So we have various steps along the way
5 in our process. From the time an issue is
6 identified, it goes through an engineering
7 process where, you know, engineers will
8 propose projects to address an issue on the
9 system. And we have limited capital dollars
10 in which to address issues. So those
11 projects are prioritized.

12 Once a project is deemed that it will
13 rise to the top and will fit within our
14 budget constraints, then pre-engineering is
15 done. And there's a process where the
16 engineers will present their proposals, and
17 it goes through an internal review process.
18 There are multiple steps along the way for
19 that engineering review and challenge
20 sessions to happen. We also have a solutions
21 design committee that will review the
22 proposed solution itself. And I would -- to
23 get into more of the engineering side of it,
24 I could probably pass that off to Mr. Lajoie,
25 who will be a panelist later in the session.

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1 But I can just kind of give you an overview
2 of the process itself.

3 Once a project is proposed and
4 pre-engineering is done, it will be presented
5 to a committee to make sure that the solution
6 is appropriate and that the costs are
7 something we can fit into our overall
8 program. And it gets challenged along the
9 way. And if for some reason a project
10 changes from its initial, you know, estimate
11 to -- you know, as we're going from
12 pre-engineering to maybe further engineering
13 is happening and there's more costs that's
14 uncovered than initially thought, at that
15 point along the way, the project review and
16 approval committee will stop and say: Does
17 this project still make sense?

18 So there are these check-ins along the
19 way where a committee of various disciplines
20 will stop and review the projects and make
21 that determination of should we still move
22 forward or not. I will say we don't have a
23 lot of discretionary projects where we're
24 just doing work on the system. Usually the
25 project is to address an issue on the system

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1 that needs to be done. And there are
2 alternatives that are proposed with each
3 project. And so presumably this solution
4 that was picked was the best option of all,
5 from both an engineering and technical and
6 cost perspective.

7 I have been a member of these committees
8 in the past, and I will say that there are
9 some that would -- we would postpone because
10 maybe the project costs are too high and, you
11 know, we think maybe a different alternative
12 can be done. But I can't quantify how many
13 or what percentage of it happens. But, you
14 know, there would be a small percent where we
15 have seen that happen in the past.

16 Q. Okay. So I think what I heard you just say
17 is that along the way engineers reviews
18 happen to determine whether the project still
19 makes sense. But for the majority of
20 projects, they're not optional, and so very
21 few get eliminated. Maybe they get postponed
22 for another budget year. And if that's the
23 case, what are some measures that the Company
24 has in place to ensure cost control?

25 A. (Menard) So I'll speak from more of a

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1 larger-type project. Let's say it's a
2 substation or, you know, maybe a rebuilt
3 circuit or something like that, you know, a
4 very specific project. We assign a project
5 management manager to a project. And that
6 project manager has a team of people that
7 support that project, and a team of cost
8 analysts behind that project manager. And
9 every month, project costs are reviewed
10 through a monthly project review committee.
11 And at that point we would have -- we would
12 have a chance to identify any issues that
13 come up, any risks to the project, and an
14 understanding of where we are within the
15 budget itself. We have change-order
16 processes that have to be signed off by
17 management. You know, there are various cost
18 controls that we do have in place and
19 check-in points that project managers and
20 their teams have to present projects either
21 at a work plan meeting every month, project
22 review meeting, and various things like that.

23 Q. Do you envision the change-order process
24 being one of the steps that would be included
25 in the template?

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1 A. (Menard) Well, the template itself, as it
2 stands today, is really just here is the
3 initial project cost and here is the revised
4 project cost, which we would call a
5 "supplement." And so certainly if we do have
6 a supplement, meaning there is a change from
7 the initial cost, there would and should be
8 change orders to back those costs, those
9 increase in costs up. And in that supplement
10 we would usually identify the reasons for the
11 cost increase. You know, typically the
12 change order is if we're dealing with a
13 contract that's in place. You know, there
14 could have been a reason why we had this
15 design and then for some reason we had to
16 change it to this design. And so we would
17 have to pull a change order in place to
18 change the contract with that vendor or
19 something. So, you know, if that were the
20 case, if that were a reason why the project
21 changed and there was a supplement, then,
22 yes, I would assume there would be change
23 orders, and certainly that would be part of
24 the supporting documentation. I don't know
25 that it would necessarily be part of the

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1 template, but it would be part of the
2 supporting documentation behind that.

3 Q. That's what I meant, supporting
4 documentation.

5 A. (Menard) Yeah.

6 Q. It would be part of that review process,
7 though?

8 A. (Menard) Yes.

9 Q. Okay.

10 A. (Menard) And, you know, another thing would
11 be project -- or after-action report or
12 lessons learned type of thing. And so I
13 would include that as part of the project
14 documentation as well.

15 Q. Okay. Just give me one sec to look at my
16 notes, please.

17 (Pause in proceedings)

18 COMMISSIONER BAILEY: Okay. I
19 think that's all I have. Thank you.

20 BY CHAIRWOMAN MARTIN:

21 Q. I have a question about the template
22 development as it relates to the business
23 process audit. It looks -- well, I heard
24 testimony before that the hope is to have a
25 consultant inform the template development

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1 process. But it also appears to be the plan
2 that it will be -- the template will be filed
3 prior to May -- or developed prior to May of
4 2021.

5 Will you develop a template, to the
6 extent you don't yet have a consultant on the
7 audit, and then revise it based upon the
8 consultant's input? Or is it possible there
9 may not be a template in place for May 2021?

10 A. (Horton) I can start and then others can
11 chime in. And Ms. Menard I think touched on
12 this.

13 But just to clarify, we have already
14 begun to work with Staff around what that
15 template will include. We worked together on
16 the template for the filing for the 2019
17 step, the capital associated with that. And
18 we had discussed as well continuing to work
19 on that, you know, together and
20 collaboratively for the May 2021 filing,
21 associated with 2020 additions. So we see it
22 as an iterative process, at first between us
23 and Staff and the OCA, and then as we get
24 input from the business process audit. To
25 the extent there are other recommendations

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1 that are appropriate to incorporate, we would
2 do that. But the timing would be that, you
3 know, we may have made changes to the
4 template that we're using now for the May
5 2021 filing and then again for the May 2022
6 filing.

7 Q. Is that Staff's understanding as well?

8 A. (Dudley) Yes. And I would agree with what
9 Mr. Horton just said.

10 Of course, we don't have an opportunity,
11 Madam Chair, to discuss with consultants how
12 this would look or what it would be because
13 we haven't issued an RFP yet. We hope to do
14 that after the Commission issues its order.
15 But part of one of the things that we
16 anticipate early on is that once the
17 consultant is hired and begins work, that we
18 may have some pretty good recommendations in
19 time for the May deadline. At least that's
20 one of our expectations.

21 Q. Okay. And that report from the consultant
22 will be filed with the Commission?

23 A. (Dudley) My understanding is, yes, it will
24 be.

25 Q. Okay. Thank you. I don't have any other

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1 questions.

2 CHAIRWOMAN MARTIN: Mr.
3 Fossum, Ms. Amidon, any follow-up -- I'm
4 sorry -- Mr. Mueller?

5 MR. FOSSUM: I do not have any
6 at this time, no.

7 MR. MUELLER: Nor do -- no
8 follow-up.

9 CHAIRWOMAN MARTIN: Okay.
10 Thank you, everyone. So I think that
11 concludes what we were planning to cover for
12 today; is that right?

13 [No verbal response]

14 CHAIRWOMAN MARTIN: All right.
15 Is there anything we need to cover before we
16 close for the day?

17 [No verbal response]

18 CHAIRWOMAN MARTIN: Okay. I'm
19 not seeing anyone. All right. Then thank
20 you, everyone. We managed to get through
21 today without many problems at all. I'm very
22 grateful for that. We will continue this
23 hearing tomorrow, October 27th, at 10:00 a.m.

24 COMMISSIONER BAILEY: Thanks,
25 everyone.

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(Whereupon the Afternoon Session of
Day 1 of the hearing was adjourned at
2:42 p.m.)

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ATTACHMENT F

1

1 STATE OF NEW HAMPSHIRE
2 PUBLIC UTILITIES COMMISSION

3 October 29, 2020- 10:08 a.m. DAY 3

4 [Remote Hearing conducted via Webex]

5 RE: DE 19-057
6 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
7 D/B/A EVERSOURCE ENERGY
8 Notice of Intent to File Permanent Rates
9 [Hearing on Settlement Agreement]

10 PRESENT:

11 Chairwoman Dianne Martin, Presiding
12 Commissioner Kathryn M. Bailey

13 Jody Carmody, Clerk
14 Eric Wind, PUC Remote Hearing Host

15 APPEARANCES:

16 Reptg. Public Service Co. of NH, d/b/a
17 Eversource Energy:
18 Matthew J. Fossum, Esq.

19 Reptg. The Way Home:
20 Raymond Burke, Esq. (NHLA)
21 Stephen Tower, Esq. (NHLA)

22 Reptg. Clean Energy:
23 Elijah D. Emerson, Esq. (Primmer...)

24 Reptg. AARP:
 John Coffman, Esq.

 Reptg. Residential Ratepayers:
 D. Maurice Kreis, Esq.
 Office of Consumer Advocate)

 Reptg. Commission Staff:
 Suzanne Amidon, Esq.
 Scott Mueller, Esq.
 Brian Buckley, Esq.

COURT REPORTER: SUSAN J. ROBIDAS, NHLCR NO. 44

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2

1 I N D E X

2
3 WITNESS PANEL: PENELOPE McLEAN CONNOR
4 DOUGLAS HORTON
5 ERICA MENARD
6 RICHARD CHAGNON
7 KURT DEMMER

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15 WITNESS PANEL: PENELOPE McLEAN CONNOR
16 DOUGLAS HORTON
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19 AMANDA NOONAN

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ATTACHMENT F

[WITNESS PANEL: CONNER|HORTON|MENARD|CHAGNON|DEMMER]

4

1 P R O C E E D I N G S

2 CHAIRWOMAN MARTIN: All right.

3 Let's go on the record. We're here this
4 morning to continue the hearing in DE 19-057
5 regarding the Eversource Energy Petition for
6 Permanent Rates. We already made the
7 necessary findings to hold this hearing
8 remotely. However, I will remind everyone
9 that if you have an issue during the hearing,
10 you should call (603)271-2431. And if the
11 public are unable to participate, the hearing
12 will be adjourned and rescheduled.

13 Okay. Let's take roll call
14 attendance of the Commission. My name is
15 Dianne Martin. I am the Chairwoman of the
16 Public Utilities Commission, and I am alone.

17 Commissioner Bailey.

18 COMMISSIONER BAILEY: Good morning.
19 Commissioner Kathryn Bailey, and I am alone
20 as well.

21 CHAIRWOMAN MARTIN: All right. And
22 let's take appearances next, starting with
23 Mr. Fossum.

24 MR. FOSSUM: Good morning,

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[WITNESS PANEL: CONNER|HORTON|MENARD|CHAGNON|DEMMER]

5

1 Commissioners and assembled parties. This is
2 Matthew Fossum, here for Public Service
3 Company, doing business as Eversource Energy.

4 CHAIRWOMAN MARTIN: All right.
5 Thank you.

6 And Mr. Kreis.

7 MR. KREIS: Good morning,
8 Commissioners, and good morning fellow
9 litigants. I am D. Maurice Kreis, the
10 consumer advocate, speaking to you today from
11 the world headquarters of the Office of the
12 Consumer Advocate. And of course, I'm here
13 on behalf of the Company's residential
14 customers.

15 CHAIRWOMAN MARTIN: All right.
16 Thank you.

17 Ms. Amidon.

18 MS. AMIDON: Suzanne Amidon for
19 Commission Staff. And with me today is Scott
20 Mueller and Brian D. Buckley. And for your
21 information, Attorney Buckley will be
22 conducting the examination of the first
23 panel.

24 CHAIRWOMAN MARTIN: Okay. Thank

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6

1 you for letting me know. And I'll just go
2 through the other counsel I see on the
3 screen. If I miss anyone, let me know.
4 Let's see. Mr. Coffman.

5 MR. COFFMAN: Good morning, Your
6 Honor. Appearing on behalf of AARP, I'm John
7 Coffman.

8 CHAIRWOMAN MARTIN: All right.
9 Thank you.

10 Mr. Burke.

11 MR. BURKE: Good morning,
12 Commissioners, and good morning to the other
13 parties. Raymond Burke from New Hampshire
14 Legal Assistance, representing The Way Home.
15 And with me today, appearing as my
16 co-counsel, also from Legal Assistance,
17 Stephen Tower.

18 CHAIRWOMAN MARTIN: Okay. Mr.
19 Emerson.

20 MR. EMERSON: Good morning,
21 Commissioners. This is Eli Emerson from
22 Primmer, Piper, Eggleston & Cramer, on behalf
23 of Clean Energy New Hampshire. Just as a
24 note for the Commissioners, at 1:30, if the

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1 hearing is still going on, I have to leave,
2 and Kelly Buchanan from Clean Energy New
3 Hampshire will be representing CENH from that
4 point forward. Thank you.

5 CHAIRWOMAN MARTIN: All right.
6 Thank you for letting us know that.

7 I think everyone else on the screen
8 as co-counsel has already been identified.
9 But if I did miss anyone, please speak up
10 now.

11 [No verbal response]

12 CHAIRWOMAN MARTIN: Okay. All
13 right. For preliminary matters, I have the
14 Company's motion for confidential treatment.
15 I did -- the Company raised this on the first
16 day of hearing, and no one objected at that
17 time. Does anyone have an objection at this
18 time? I just want to make sure that we've
19 heard from everyone as to whether's there's
20 an objection.

21 [No verbal response]

22 CHAIRWOMAN MARTIN: Okay. Seeing
23 none, the Commission has considered the
24 motion and grants the request for

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[WITNESS PANEL: CONNER|HORTON|MENARD|CHAGNON|DEMMER]

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1 confidential treatment of the attachments and
2 information identified in Appendix A of the
3 motion.

4 All right. Anything else we need
5 to cover before we start with witnesses?

6 [No verbal response]

7 CHAIRWOMAN MARTIN: Okay. Seeing
8 none, let's get the first panel of witnesses
9 sworn in. Ms. Robidas.

10 (WHEREUPON, PENELOPE McLEAN CONNER,
11 DOUGLAS HORTON, ERICA MENARD, RICH
12 CHAGNON and KURT DEMMER were duly sworn
13 and cautioned by the Court Reporter.)

14 PENELOPE McLEAN CONNER, SWORN

15 DOUGLAS HORTON, SWORN

16 ERICA MENARD, SWORN

17 RICH CHAGNON, SWORN

18 KURT DEMMER, SWORN

19 CHAIRWOMAN MARTIN: Okay. Thank
20 you.

21 Mr. Fossum, would you like to
22 begin?

23 MR. FOSSUM: I will. So the
24 Company witness panel this morning is Mr.

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[WITNESS PANEL: CONNER|HORTON|MENARD|CHAGNON|DEMME]

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1 Horton, Ms. Menard and Ms. Conner. As Mr.
2 Horton and Ms. Menard have previously
3 testified in this hearing, I'll just have
4 them identify themselves and move on to Ms.
5 Conner, just to give a flavor.

6 DIRECT EXAMINATION

7 BY MR. FOSSUM:

8 Q. So with that, Mr. Horton, could you just
9 please state your name and position and
10 responsibilities for the record again.

11 A. (Horton) Yes. Doug Horton, vice-president of
12 distribution rates and regulatory
13 requirements. My group is responsible for
14 all rate and regulatory filings at the
15 Commission.

16 Q. And Ms. Menard, likewise, could you state
17 your name, position and responsibilities for
18 the record again.

19 A. (Menard) Good morning. My name is Erica
20 Menard. I'm manager of revenue requirements
21 for Eversource Energy. And in my position I
22 am responsible for rates and regulatory
23 matters and revenue requirement calculations
24 for a variety of rates presented before this

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[WITNESS PANEL: CONNER|HORTON|MENARD|CHAGNON|DEMMER]

10

1 Commission.

2 Q. Thank you. Now, Ms. Conner, could you also
3 now please state your name, your position and
4 your responsibilities for the record.

5 A. (Conner) Yes. Penni McLean Conner. I am the
6 senior vice-president of the customer group
7 at Eversource. In that role, I have
8 responsibilities for ensuring that our
9 customers receive high-quality service, and
10 that involves directly providing them service
11 for call center, metering, billing, credit
12 and collections, meter reading; including,
13 also, my team delivers our energy-efficiency
14 programs, supports customers who are
15 installing new services, program managers
16 that work with our new customer connects, and
17 provide support via social care. So those
18 are responsibilities that I have.

19 Q. Thank you. Ms. Conner, have you previously
20 testified before this Commission?

21 A. (Conner) I have, yes.

22 Q. Thank you. Ms. Conner, back on May 28, 2019,
23 did you submit testimony and attachments as
24 part of the Company's initial filing in what

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11

1 has been marked as Exhibit 11?

2 A. (Conner) Yes.

3 Q. And that same testimony, what has been marked
4 is the -- apologies. Is that same
5 testimony -- is the confidential version of
6 that same testimony what has been marked as
7 Exhibit 12?

8 A. (Conner) Yes.

9 Q. And for both those exhibits, was that
10 testimony prepared by you or at your
11 direction?

12 A. (Conner) Yes.

13 Q. And do you have any corrections to that
14 testimony this morning?

15 A. (Conner) No.

16 Q. And do you adopt that testimony as your
17 testimony for this proceeding?

18 A. (Conner) Yes.

19 Q. Ms. Conner, did you also, on March 4th, 2020,
20 file testimony and attachments as part of the
21 Company's rebuttal and included in what has
22 been marked as Exhibit 48?

23 A. (Conner) Yes.

24 Q. And was that testimony prepared by you or at

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12

1 your direction?

2 A. (Conner) Yes.

3 Q. Do you have any corrections to that
4 testimony?

5 A. (Conner) No.

6 Q. And do you adopt that as your testimony for
7 this proceeding?

8 A. (Conner) Yes.

9 MR. FOSSUM: Thank you. Now, I
10 know that this panel is intended to look at
11 metering issues. I know that earlier -- I'll
12 note that earlier in the week there was some
13 discussion of the requirements of Sections 3
14 and 4 relative to metering, and so I won't
15 belabor those, but I do have a couple of
16 brief questions.

17 BY MR. FOSSUM:

18 Q. Turning first to Mr. Horton. As a follow-up
19 to some questions earlier in the week, do you
20 recall a question from Commissioner Bailey
21 relating to the service life of the Company's
22 analog -- that is, the pre-AMR meters?

23 A. (Horton) I do.

24 Q. There was the question of -- relative to that

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13

1 question, do you know the general service
2 lives of those meters?

3 A. (Horton) Yes. I looked into it. My
4 understanding is generally the expected
5 service life of those meters was
6 approximately 30 Years. There was also some
7 discussions around, you know, what was the
8 age of those meters at the time when we
9 replaced them with AMR, and through this
10 process we had presented information. The
11 meters, more than 60 percent of the meters
12 that were in service at that time were over
13 20 years old. And across the system, the
14 average life was about 26-1/2 years old. So
15 the pre-AMR meters were approaching the end
16 of their useful life at the time the meters
17 were replaced.

18 Q. Thank you. Likewise, with respect to the
19 depreciation of the meters, do you recall a
20 question about the depreciation term of nine
21 years that was agreed to in the settlement?

22 A. (Horton) I do.

23 Q. And there was a question about when that
24 nine-year depreciation life began. Do you

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14

1 have some additional clarity to provide in
2 response to that question?

3 A. (Horton) I do. So, for this settlement
4 agreement, if we were to apply the whole life
5 method of depreciation, which is also a term
6 within the settlement agreement, the general
7 average life that would -- for the meters
8 from today would have been 11 years of the
9 meters that were left.

10 The way that a depreciation study is
11 run, it's not, you know, a clear, straight
12 line. There's more that goes into it. And
13 it's based on the dispersion of expected
14 retirement. Some will be retired -- or
15 expected to be retired sooner than that,
16 others later than that. But generally it was
17 an average life of 11 years. So the nine
18 years is really an acceleration of two years
19 from that amount. The nine years, in other
20 words, starts essentially today, not from the
21 date the meters were installed.

22 Q. Thank you. Now turning to Ms. Conner. It's
23 not directly related to metering, but
24 somewhat related. There were questions --

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15

1 and I understand you were not on the panel
2 earlier this week. But there were questions
3 earlier this week about elimination of the
4 supplier block provision, as stated in
5 Section 14.2 of the settlement agreement.

6 Could you please explain that enrollment
7 process and how that block might have worked,
8 just for clarity.

9 A. (Conner) Absolutely. So when a customer
10 enrolls with a new supplier, we receive an
11 enrollment via EDI, and we process that. If
12 the customer made that in error, it would --
13 the customer would need to contact their
14 supplier, have that reversed, and it would
15 not be effective until the next read date.
16 So there is a bit of time. We have
17 implemented in Massachusetts and Connecticut
18 the option for customers for a block. This
19 has generally been requested by customers who
20 are tired of suppliers calling them and
21 encouraging them to go on competitive supply.
22 However, as Staff appropriately noted, there
23 is a major difference between Massachusetts
24 and Connecticut and New Hampshire. In

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16

1 Massachusetts and Connecticut, we're required
2 to provide the suppliers on a regular basis a
3 listing of customer contact information so
4 that suppliers can market to them. This
5 block by customers protects them from this
6 marketing. And so we have had customers
7 request that.

8 In our hearings, Staff asked that if we
9 were going to pursue a block in New
10 Hampshire, then we would also need to provide
11 a block for customers who are very happy with
12 their competitive supplier and
13 correspondingly didn't want to be
14 accidentally dropped from them. That process
15 would have required programming. So in the
16 end, we felt like it is not a concern here in
17 New Hampshire as it was in Massachusetts and
18 Connecticut about customers receiving robo
19 calls and outreach from marketers that was
20 not to their liking because we don't provide
21 that information. So we simply dropped the
22 provision to offer that block to customers.

23 Q. Thank you. And lastly, to follow up on items
24 that were raised earlier this week, there was

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17

1 some discussion earlier this week on the
2 customer survey that's mentioned in Section
3 11.4 of the agreement that were deferred
4 until you could respond to them. And so now
5 that you are here, could you please explain,
6 generally speaking, how the Company does its
7 customer surveys now and how this survey
8 would fit into that.

9 A. (Conner) I'd be happy to. So we use a
10 variety of tools to capture the voice of the
11 customer. But in regards to our survey
12 tools, we complete both an ongoing voice of
13 the customer survey, a perception survey that
14 asks a series of questions that are in
15 alignment with J.D. Power that cover the six
16 categories that J.D. Power looks at that are
17 important to customers, based on J.D. Power
18 research, which includes reliability,
19 pricing, billing and payment, customer
20 service, citizenship. And so we do that
21 survey on an ongoing basis to understand
22 overall customer perceptions.

23 We also do transactional surveys, such
24 as if we have a storm event, as we're

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18

1 preparing for as we look at some weather
2 coming in this week, if that does occur,
3 after the storm event we do survey our
4 customers, a sample of our customers, to
5 understand their perceptions on our response
6 to that, our ability to provide them with
7 information.

8 What we're proposing here is we're
9 really exploring how customers feel about
10 reliability. And so our proposal here would
11 be to take the information we've gleaned from
12 our ongoing perception surveys and our
13 transactional surveys as they are associated
14 with outages and use that to develop a more
15 granular survey that probes into customers'
16 feelings and concerns and feedback on
17 reliability in our maintenance programs. We
18 would propose to do these surveys with our
19 different classes of customers: Our
20 residential, our commercial, our large
21 commercial customers. We would also plan to
22 leverage our online panel, which we have
23 stood up and has representatives from
24 residential and commercial in New Hampshire.

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19

1 And the benefit of this online panel is we
2 can have the panel be moderated and actually
3 equate it to a focus group. We wouldn't rule
4 out perhaps doing additional focus groups or
5 focus meetings with stakeholder groups. We
6 are open to feedback and input on how the
7 Staff would like to see this process. But
8 that is our thinking about how we would
9 explore gaining an understanding of New
10 Hampshire customers and their feelings about
11 our quality and reliability.

12 Q. Thank you. And I believe you mentioned near
13 the end of your response, but just for
14 clarity, ultimately the survey that's
15 conducted would be done consistent with input
16 from the Staff and the OCA; is that correct?

17 A. (Conner) That is correct.

18 Q. Thank you. Just one last question, and in
19 line with the questions I ask everybody. Is
20 it your opinion and the Company's position
21 that the terms in the settlement agreement
22 that you've spoken about are just and
23 reasonable and in the public interest?

24 A. (Conner) I do.

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20

1 Q. Thank you.

2 MR. FOSSUM: That's what I have for
3 direct this morning.

4 CHAIRWOMAN MARTIN: All right.
5 Thank you.

6 Mr. Buckley, do you have direct?

7 MR. BUCKLEY: Yes, I do. Just a
8 brief direct for both Mr. Chagnon and Mr.
9 Demmer, and I will start with Mr. Demmer.

10 DIRECT EXAMINATION

11 BY MR. BUCKLEY:

12 Q. If you could, just please state your name and
13 position with the Commission.

14 A. (Demmer) My name is Kurt Demmer. I'm a
15 senior analyst for the Electric Division for
16 the New Hampshire PUC.

17 Q. Thank you, Mr. Demmer.

18 And moving to Mr. Chagnon, could you
19 please briefly state your name and position
20 with the Commission.

21 A. (Chagnon) Yes. Good morning. Richard
22 Chagnon, and I'm the assistant director of
23 the Electric Division here at the New
24 Hampshire Public Utilities Commission.

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21

1 Q. Thank you, Mr. Chagnon. And now, Mr.
2 Chagnon, are you familiar with Section 4 of
3 the settlement agreement, which describes the
4 advanced metering functionality and
5 feasibility assessment; Section, 3.3 of the
6 settlement, which provides for a specific
7 accounting treatment of the Company's
8 existing stock AMR meters; and Section 3.4 of
9 the settlement, in which the Company, Staff
10 and OCA agree to work collaboratively,
11 potentially with the help of an independent
12 accounting firm to verify the accuracy of the
13 accounting for and number of meter
14 retirements?

15 A. (Chagnon) Yes, I am.

16 Q. And do you believe that the settlement's
17 resolution of the issues described in those
18 provisions is in the public interest and will
19 result in just and reasonable rates?

20 A. (Chagnon) Yes, I do.

21 Q. And now, Mr. Chagnon, would you like to
22 comment further on those provisions in the
23 settlement agreement?

24 A. (Chagnon) Yes. Thank you. Staff believes

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22

1 that the advanced metering feasibility
2 assessment is a good step forward, bringing
3 better information to the perpetual
4 discussion taking place in multiple venues
5 regarding metering and time-of-use
6 capabilities, such as grid mod, electric
7 vehicles, rate cases, et cetera. It does not
8 lock in a future course, but rather helps us
9 understand the options available, including
10 those options which may not have been
11 addressed in the Connecticut analysis, such
12 as examining whether the existing broadband
13 or cellular communication networks can be
14 used for communication with devices other
15 than Company meters which might offer
16 advanced metering functionality.

17 Staff does appreciate the Company's
18 willingness to continue to review the
19 accounting treatment of the retirements of
20 the meters. As the settlement states, that
21 is an unresolved issue in the minds of the
22 settling parties, and we look forward to
23 resolving that in the months to come. Thank
24 you.

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23

1 MR. BUCKLEY: That's all from
2 Staff. Thank you.

3 CHAIRWOMAN MARTIN: All right.
4 Thank you.

5 Commissioner Bailey.

6 COMMISSIONER BAILEY: Thank you.

7 INTERROGATORIES BY COMMISSIONERS:

8 BY COMMISSIONER BAILEY:

9 Q. Good morning, everyone.

10 Mr. Horton, do you know what the average
11 service life of an AMR meter is?

12 A. (Horton) I believe, subject to check, and
13 Penni may be able to help, I believe it's 20
14 years is the assumed depreciable life.

15 Q. Okay. And I didn't really understand what
16 you were saying when you said something about
17 the average life of the AMR meters were 11
18 years, and we were going to depreciate over
19 the next 9 years the remainder of the meters,
20 the AMR meters. So if we start today and
21 depreciate over nine years, and the first one
22 was installed in 2013, that was seven years
23 ago. So you have seven years of depreciation
24 on the books for these AMR meters?

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24

1 A. (Horton) Yes. So just to clarify, what I was
2 trying to explain is, on the one hand, if we
3 had just implemented the whole life method of
4 depreciation and not had a separate
5 accommodation or provision in the settlement
6 related to nine years, I was trying to
7 clarify what the difference was. I'm getting
8 some feedback. I don't know if that's --

9 Q. Oh, let me put myself on mute.

10 A. (Horton) Okay. That seems better. Thank
11 you.

12 So I was trying to -- there was
13 confusion earlier in the week, and I probably
14 caused it, around what does the nine-year
15 depreciation provision stand for, how much of
16 an acceleration is that. And what I was just
17 trying to clarify in the direct by Mr. Fossum
18 was that it is a slight acceleration versus
19 sort of the status quo. But it's not
20 significant, really. If we were to just
21 implement the whole life method, there would
22 be roughly 11 years remaining of depreciation
23 expense built into rates. So in your
24 example, a meter that was installed in 2013

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25

1 will have seven years of depreciation. And
2 if we were just to implement the whole life
3 method, it would assume 11 years of
4 depreciation left, so that in total it would
5 be depreciated over 18 years; whereas, with
6 the execution of the settlement agreement, we
7 are accelerating from that roughly 11 years
8 remaining to 9 years, so that same asset
9 would depreciate over 16 years.

10 Q. Okay. So does that mean that you can't
11 install AMI meters before they're fully
12 depreciated?

13 A. (Horton) No. I always look at the decision
14 to install AMI meters is a decision that's
15 made on its own based on an evaluation of the
16 cost and the benefits of that. Oftentimes
17 when companies move to that, though, there's
18 a consideration given to the existing
19 metering that's in place and the remaining
20 costs of that, realizing that customers will
21 be paying for meters that are taken out of
22 service potentially prior to the end of their
23 accounting life, which is not something
24 that's atypical, especially for utilities.

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26

1 We replace assets all the time without regard
2 to their accounting life. It's a
3 different -- you know, the accounting of
4 the -- the accounting for the cost of an
5 asset is really an accounting and regulatory
6 cost recovery exercise; whereas, decisions we
7 make in the field to replace a pole when it's
8 broken, obviously we're not going to go look
9 and see if that pole's been fully
10 depreciated. We're going to make the
11 investment that's needed to run the system.
12 So the same theory is in place when we look
13 at metering. But oftentimes commissions and
14 companies and consumer advocates do take into
15 consideration the remaining value of the
16 existing meters because it will weigh on the
17 cost benefit analysis. So we as a Company
18 and, you know, as a Commission could decide
19 prior to the end of the accounting life when
20 is the right time to install AMI in New
21 Hampshire. I think this provision is trying
22 to accelerate, again, slightly, the
23 depreciation, such that that decision will be
24 less of a factor for us when making the

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27

1 decision to move to AMI.

2 Q. Okay. And so if you decide to move to AMI,
3 say in five years, so you still have four
4 more years of depreciation expense to
5 recover, what happens to that depreciation
6 expense?

7 A. (Horton) It would be part of the cost benefit
8 analysis that would go in. Recovery of that
9 remaining undepreciated balance would be part
10 of the costs considering, you know, the
11 deployment of AMI.

12 Q. In your example of a pole that gets broken
13 and replaced before its 40 years of useful
14 life, what happens to the uncollected
15 depreciation expense in that case?

16 A. (Horton) So the typical accounting for
17 utility assets generally like that is that we
18 would retire the plant that's retired --
19 excuse me -- that's taken out of service for
20 accounting purposes so that we would lower
21 our gross plant investment and our
22 accumulated reserve for depreciation by the
23 same amount. The way that's treated for
24 utilities is that's sort of all considered in

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28

1 the context of a rate case, in the context of
2 a depreciation study, where we have
3 accounting lives that have been established
4 through prior rate cases and prior
5 depreciation studies that differ from actual
6 experience.

7 And so in that example, you know, the
8 depreciation studies says we expect the pole
9 to last whatever it is, 40 years. And then
10 in the study the witnesses will evaluate:
11 What's the actual experience? How much is
12 being retired and for what reason? What are
13 the forces of retirement that are in effect?
14 And then, therefore, looking ahead, what's
15 the right depreciation rate that should be
16 applied? Because the idea is to try as best
17 we can to align recovery with the service
18 life. But that will change over time and for
19 a number of reasons and factors that we don't
20 know today. And so in my mind, it's really
21 just sort of a typical, standard utility
22 accounting exercise that all companies and
23 utilities face, and it's just sort of caught
24 up in the depreciation study. It's not

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29

1 anything unique or different. It's just
2 that, like I said, for meters in particular,
3 it's a consideration that everybody weighs
4 more heavily because it can be a significant
5 cost. And at times the benefits of going to
6 AMI relative to the benefits that exist for
7 AMR, or the electromechanical meters that
8 existed previously, you know, you need to
9 take that into account to ensure that the
10 incremental cost and incremental benefit
11 makes sense for customers.

12 Q. Okay. Ms. Conner, in your testimony you said
13 that there were three options to replacing
14 the meters, and one of them was AMR to AMI
15 bridge meter system. Why didn't you go with
16 that?

17 A. (Conner) So we did not go with the bridge
18 metering system because those meters, as we
19 evaluated the cost, were about double the AMR
20 metering, and the benefit seemed di minimus
21 for us to move forward with the bridge meter.

22 The other piece that occurs when you
23 move to the bridge meter is that that
24 particular meter is an Itron product. And it

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30

1 has a communications protocol built within it
2 that requires you then to move with the
3 communications backhaul that is also
4 Itron-proprietary. We felt that moving ahead
5 with a bridge meter that locks us in to a
6 communications backhaul at that time, plus
7 the cost of the bridge meters, that it was
8 not feasible to go that route.

9 Q. Okay. Can we talk a little bit about the
10 feasibility study and what exactly we're
11 going to get from that? Can you, somebody,
12 Mr. Horton, Ms. Conner or Ms. Menard, explain
13 to me what you think we're going to learn
14 from that study?

15 A. (Horton) I can start. I think I agree with
16 how Rich described it in the initial outset,
17 which is to say that, you know, there's a lot
18 of things to consider in a rollout to AMI.
19 And we're really trying to use this study to
20 lay out those considerations as it's specific
21 to New Hampshire. You know, there is -- this
22 is an ongoing dialogue that continues to come
23 up. I think it will help all of us if we
24 have an analysis that's specific to our

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31

1 service territory in New Hampshire, our
2 customers in New Hampshire, the existing
3 state of public policy initiatives which are
4 different in each state.

5 So I think what we're going to get is a
6 comprehensive evaluation of the path forward
7 to AMI and what considerations and challenges
8 we expect to face here in New Hampshire. But
9 then, also, some discussion and consideration
10 around if there are things that can be done
11 in the interim, or things that can be done
12 differently, leveraging potentially existing
13 communication infrastructure, other means to
14 achieve some advanced metering, those are
15 separate things. Looking at the
16 communication infrastructures that exist, is
17 that possible, and why not? And then I think
18 separately to evaluate what things can be
19 done in the interim, leveraging existing
20 technologies and the metering infrastructure
21 that we do utilize today.

22 A. (Conner) If I may build upon that. I would
23 expect this evaluation to provide us with
24 some clarity and some business information

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32

1 that allows us to make decisions going
2 forward on the benefits of AMI, both from a
3 customer perspective, but from an operational
4 perspective. As this AMI technology has
5 matured, we're increasingly gaining
6 operational benefits that can be defined,
7 such as Volt/VAR optimization. So I would
8 expect this study to identify those
9 operational benefits, monetize those
10 benefits, identify the qualitative benefits
11 that customers will receive. It will also
12 evaluate, as Mr. Horton noted, the
13 environment from a policy perspective and
14 from an environment perspective in New
15 Hampshire. By "environment," I mean the
16 terrain. The communications backhaul for
17 metering in New Hampshire will be different
18 because of the terrain and the mountains that
19 we must concur with and ensure that we have
20 good coverage to bring data back. Unlike
21 data from the SCADA system, the AMI data is
22 going to be coming back on some interval
23 basis; likely every 15 minutes is fairly
24 common in the industry. So we're going to

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33

1 need a backhaul system that is secure, put
2 that into place. And that may differ because
3 of just the terrain in New Hampshire.

4 Also from a policy perspective, what we
5 have increasingly started to see is that
6 visibility on the edge of the grid is
7 increasingly important, and it's increasingly
8 important because of the installation of
9 distributed energy resources and
10 behind-the-meter demand assets. This is
11 something that New Hampshire -- and I notice
12 we have Clean Energy -- has started to see an
13 increase in the space as policy promotes more
14 of these clean energy resources being placed
15 on the grid. There's going to be an
16 increasing need for visibility at the edge of
17 the grid, and AMI provides us that visibility
18 to ensure that we can adequately support
19 additional distributed energy resources
20 coming on to the grid.

21 Q. So it sounds like, rather than a study to
22 determine whether it is feasible to
23 transition to AMI, it's more of a study
24 assuming we're going to transition to AMI,

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34

1 what's the best way to do it?

2 A. (Conner) I think it's both the best way to do
3 it and the appropriate timing. So it would
4 also consider the movement forward from a
5 policy perspective, the timing around the
6 infrastructure. There may be some natural
7 moments, as Mr. Horton mentioned. There may
8 be just a moment where there's a large
9 population of meters that are, at the moment,
10 end of life, and it might make sense to
11 capture that opportunity. So it will look at
12 those factors of both the feasibility and the
13 timing of that, yes.

14 A. (Horton) I think I said this earlier in the
15 week. I mean, my belief, I do think at some
16 point in our future we'll be installing AMI
17 in New Hampshire. I don't know when that is.
18 But I also don't want to paint too rosy of a
19 picture. It's still very expensive. And the
20 incremental benefits are, you know, tangible
21 in many respects, and then also subject to a
22 lot of interpretation and assumption in
23 others. So the assessment will help to
24 inform that for New Hampshire, you know, what

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1 do we think is a reasonable cost benefit
2 analysis now. And we'll work with the
3 consultant to figure out, you know, how we
4 can establish a road map or what are the key
5 levers of considerations for that into the
6 future. But I just don't want to overlook
7 the fact that it was expensive when we looked
8 at it in 2013. The technology has evolved
9 significantly, but it's still a very
10 expensive proposition for customers. It's
11 something that we just need to be aware of.
12 In Connecticut, when we did the analysis,
13 like I said, it was a positive cost benefit
14 for customers. Very different system. Very
15 different state of affairs there. But it was
16 slightly positive. So we have to see what
17 the numbers say. But I just want to -- you
18 know, I'm pointing out the obvious; it is
19 still very expensive.

20 Q. Okay. So back to a question I had earlier in
21 the week about Paragraph B. "The assessment
22 shall include an assumption that AMR meters
23 had not been deployed." What is that going
24 to get us in this analysis?

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1 A. (Horton) With that, so there are incremental
2 benefits that are -- if we were sitting here
3 today looking at it with the meters that
4 still had, you know, walk-up meter readers,
5 hand-held devices to read the meters, manual
6 entry, and we were going to AMI today or into
7 the future, there are incremental benefits
8 that are captured from that analysis. That's
9 a scenario that would show incremental
10 benefits to the investment. The cost would
11 be the same to go to AMI today. From AMR to
12 AMI, the costs will be I think at least
13 generally the same. But the benefits that
14 AMI would enable would be different. So the
15 benefit cost ratio is a different outcome in
16 that. And I think there was interest by the
17 parties to understand what that would be;
18 whereas, where we've already installed AMR
19 infrastructure into our -- in New Hampshire,
20 we're capturing, many of the benefits that
21 exist that would go to AMI. We're no longer
22 doing the manual meter reading, at least for
23 the vast majority of our customers. We've
24 realized and recognized those cost savings

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1 and efficiencies; they're in the cost of
2 service. Customers are now getting the
3 benefit of that. And so that means that the
4 incremental benefit from our jumping-off
5 point today is less and different than if we
6 were going from electromechanical meters to
7 AMI. In my view, it's a data point. It's an
8 informational -- it's something that the
9 settling parties were interested in having us
10 evaluate, and so that's why that's there.

11 Q. So basically it's just going to artificially
12 increase the benefits because we already have
13 AMR; is that right?

14 A. (Horton) I don't see it that way. I think,
15 again, it's a piece of information that the
16 settling parties were interested in knowing.
17 The decision to move forward with AMI won't
18 be based on that. It will be based on the
19 cost and benefits of doing it from where we
20 are today, and that's what all parties are
21 going to have to weigh and consider.

22 Q. Okay. Thank you.

23 Mr. Demmer or Mr. Chagnon, do you have
24 anything that you want to add to that?

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1 A. (Chagnon) Only that there were many options
2 that the parties considered to look at. That
3 was just one of them to satisfy all of us.

4 Q. Okay. I'm just going through some of my
5 other questions that I think have been
6 answered by that discussion. If I could have
7 just a minute, please.

8 (Pause in proceedings)

9 Q. Okay. Are the parties asking the Commission
10 to find in this, as a result of this
11 settlement, that the investment in AMR
12 metering was prudent?

13 A. (Horton) So I'm not a lawyer. I don't know
14 what finding needs to be made. But the
15 settlement does not -- there was no finding
16 within the settlement that the AMR
17 investments are imprudent. There was clearly
18 differences of opinions amongst the parties
19 of that, and we've made a number of
20 concessions by all of us in order to
21 establish a path forward for, you know, going
22 forward processes and things of that nature.
23 So...

24 Q. Did you say there's nothing in the settlement

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1 that the parties agreed that the AMR meter
2 investment was imprudent or prudent?
3 A. (Horton) The settlement agreement, we didn't
4 agree it was imprudent. And there was not a
5 provision in the settlement that says -- I
6 mean, just like any of the other investments,
7 there's no -- there was disagreement amongst
8 the parties about the prudence of certain
9 investments during the course of the
10 proceeding. We don't agree with that. We
11 didn't agree with that. And the settlement
12 agreement doesn't have either party agreeing
13 or disagreeing within the settlement
14 agreement to the prudence of those
15 investments. There are concessions made on a
16 number of fronts and things that we could
17 live with that allowed us to reach the
18 comprehensive settlement agreement and
19 consensus of all parties. Frankly, I think
20 if we weren't able to make those concessions,
21 which was very difficult by all parties
22 making those concessions, those would be
23 things that we'd be litigating before you. I
24 think the settlement agreement and the

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1 compromise that we've reached, the way the
2 settlement is structured is a, you know,
3 compromise by all parties to resolve the
4 issues that have been presented in the case,
5 including the prudence of investments that we
6 made for AMR and other things.

7 COMMISSIONER BAILEY: Okay. I'd
8 like to make a request that the lawyers, in
9 their closing arguments, address the prudence
10 issue that the Commission has to make when we
11 add things to rate base.

12 Madam Chair, I think that's all on
13 this section. Thank you.

14 CHAIRWOMAN MARTIN: Okay. Thank
15 you. I would have the same request as
16 Commissioner Bailey for counsel at closing,
17 as to whether we need to make -- we, the
18 Commission, need to make a prudence finding;
19 and if so, can we do that without something
20 in the settlement agreement to that effect.

21 Okay. Let me start with my
22 question for Ms. Conner about the blocking.

23 BY CHAIRWOMAN MARTIN:

24 Q. You were explaining customer enrollment and

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1 the competitive energy supply. And you said
2 if a customer did that in error, that could
3 be fixed. But I guess I wasn't clear on how
4 the customer would enroll. Can you just walk
5 through that more specifically?

6 A. (Conner) So in New Hampshire, the way the
7 customer would enroll is that they would
8 respond to broad-based marketing outreach.
9 Again, we do not provide the customer list in
10 New Hampshire. So, typically, suppliers in
11 New Hampshire use more broad-base channels,
12 think radio or perhaps print media, to
13 communicate their offerings. And a customer
14 would respond to the supplier. The supplier
15 would then submit an EDI, electronic data
16 interchange request, per protocols defined by
17 New Hampshire to us, and that allows for an
18 enrollment at the next meter read. If then
19 the customer said, once they got their
20 bill -- so you could imagine it could be a
21 month later they get their bill and they see
22 they're on their new supplier and they
23 realize that, no, I didn't intend to do that.
24 They might call us. They might call their

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1 supplier. Either way, we would direct them
2 to their supplier to get removed from that
3 service. The supplier then would send us
4 another EDI to remove them, and that would
5 again take another month or so. As I said,
6 in Massachusetts and Connecticut, because we
7 do and are required to share the customer
8 list data, the suppliers then actually
9 reaches out directly to customers on a more
10 personal level. And some customers have
11 found that to be annoying and have asked --
12 and at customers' request and complaints
13 about this, we built in this blocking
14 mechanism that a customer could request, call
15 us and request that their data not be shared
16 with suppliers.

17 So, really, as we start to fully
18 understand the New Hampshire situation, it's
19 not an issue for New Hampshire customers
20 because we are not supplying the data. The
21 request from the Staff was that if we were
22 going to offer this block to customers, then
23 correspondingly we would need to allow them
24 the reverse block; that if I really love my

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1 supplier, that I cannot accidentally be
2 tripped up and sign up for another supplier
3 or -- and that would have required
4 programming. So in the end, we all agreed to
5 remove that request.

6 Q. Okay. Thank you. That was helpful. But is
7 it ever the case that the switch or the EDI
8 request is done in error by the supplier as
9 opposed to the customer?

10 A. (Conner) It could be, yes. There are many
11 reasons that there could be an error. I
12 suppose the supplier could do some fat
13 fingering and there would be some information
14 that is incorrect when they submit the
15 customer to us. Or perhaps the customer --
16 in the case of New Hampshire, this does
17 happen -- that they have a couple of
18 accounts. Perhaps they have both residence
19 and they might have a barn that's on a
20 separate account. Perhaps they intended for
21 both of those to be on there. So there are
22 reasons that the customer may say this is
23 isn't exactly what I wanted to sign up for.

24 Q. Aside from a customer who has multiple

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1 accounts, are you aware of that happening in
2 New Hampshire?

3 A. (Conner) Not off the top of my head, no.
4 There is the process of deceptive switching,
5 where suppliers might be preying on elderly
6 customers who were not aware. We have had
7 some of those situations in other states,
8 where suppliers have preyed on -- suppliers
9 perhaps who have also been fined for preying
10 on customers who perhaps where English isn't
11 their first language or perhaps they're going
12 door-to-door and knocking. We have had that
13 issue in some other states, that customers
14 have signed up and then they realize, no,
15 that's not what I intended to do. And so
16 that is something that we're trying to,
17 certainly as we communicate to customers,
18 always, that if they are dealing with a
19 competitive supplier, that there is an
20 opportunity to save money, but you do need to
21 make sure you're asking all those questions,
22 understanding who that supplier is, making
23 sure they're registered and have good
24 reviews, those type of things.

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1 CHAIRWOMAN MARTIN: And I just see
2 that Commissioner Bailey has dropped off, and
3 so we need to pause. Let's go off the record
4 and try to get her back on. Why don't we
5 take a five-minute recess.

6 (Brief recess taken.)

7 CHAIRWOMAN MARTIN: We're going to
8 extend the recess to 11:20.

9 (Brief recess was taken at 11:06 a.m.,
10 and the hearing resumed at 11:25 a.m.)

11 CHAIRWOMAN MARTIN: All right.

12 Let's give it a try. Back on the record.

13 BY CHAIRWOMAN MARTIN:

14 Q. Now, Ms. Conner, I apologize for interrupting
15 you. And I wanted to say thank you for your
16 response. That was very helpful.

17 All right. I had a question about Bates
18 Page 7, Section 4.1. There is a statement in
19 there about the functionalities provided by
20 AMR infrastructure are limited when compared
21 to those provided by advanced metering, and
22 it goes on from there.

23 Is this -- does the Company agree with
24 that statement, or is this one of the areas

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1 that remains in dispute?

2 A. (Conner) The functionality around AMR is
3 different than AMI. That is a correct
4 statement. The AMI does offer additional
5 benefits. Happy to continue.

6 I think it's important to reflect where
7 we were at in 2013. We were looking at
8 metering infrastructure that was very old,
9 electromechanical metering infrastructure
10 that was very old. In fact, 57 percent of
11 the meters in New Hampshire were over 20
12 years old, and there was a population of
13 225,000 meters that were over 40 years. So
14 we were facing a metering population that was
15 beyond useful life. What happens as meters
16 age is they start to slow down. Customers
17 don't seem to mind that. But it is a reality
18 of what happens as electromechanical meters
19 get old.

20 So I was dealing with a metering
21 infrastructure that was very old. I was
22 dealing with a hand-held meter-reading system
23 that was also obsolete that needed to be
24 replaced. I was concerned very much about

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1 safety. We had 100 meter readers in the
2 field. I had just dealt with one who had
3 ended up out from work because they fell
4 through a well that was just covered over by
5 leaves in the fall. So keep in mind, we're
6 walking through customers' premises and
7 working through to get their meter reads, and
8 there are sometimes unseen hazards.

9 So from a safety perspective, both from
10 physically walking and from the amount of
11 driving that our meter readers were doing,
12 there was a concern and safety element that I
13 was working with. And then I was looking at
14 customer satisfaction. So we had customers
15 experiencing a higher level of estimated
16 meters; the reason being, if we have a storm
17 event, let's say snow, we're not able to
18 manually meter read. So there were a higher
19 percentage of customers getting estimates.
20 With AMR, that is obviated. With AMI, that
21 would be obviated.

22 So back in 2013, we looked at this
23 installed metering infrastructure that was
24 facing obsolescence, was obsolete in many

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1 cases with 225,000 electromechanical meters
2 over 40 years. We needed to make a decision
3 about how to handle this obsolescence and
4 address the safety. We looked at AMR. We
5 looked at AMI. We also looked also at the
6 bridge meters, as we discussed with
7 Commissioner Bailey. We decided to move
8 forward with AMR, in that it allowed us to
9 deliver high-quality, accurate meter readings
10 to our customers. It enabled us to provide a
11 safe working environment for our employees,
12 and it did allow us to secure the savings
13 associated from moving from manual meter
14 reading to AMR. And those savings, as Mr.
15 Horton noted, have been baked into our
16 revenue requirements going forward. So
17 customers are now seeing the benefit of those
18 savings, as they should.

19 We did look at AMI at the time. AMI
20 continues, as that technology evolves, as the
21 metering infrastructure evolves, it becomes a
22 better and better proposition. In fact, in
23 2013, it was a rare case, unless you had some
24 additional government subsistence -- and some

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1 utilities did get grants to convert, and you
2 saw a number of them do that back during that
3 Obama era. But without that, these business
4 cases were typically not cost-effective, and
5 it's because the meters were very expensive.
6 And then you had the communications
7 infrastructure that must be put into place.
8 It has to be separate than your SCADA
9 infrastructure.

10 This is important because, as you are
11 aware, cyber security, energy is a top, top
12 target for bad actors. And so the security
13 piece here becomes important, and actually,
14 going forward is increasingly more important.
15 We certainly don't want to provide the
16 convenience for a bad actor to infiltrate our
17 system from the convenience of their sofa in
18 their home because we have two-way metering.
19 And so the communications infrastructure has
20 to go in.

21 AMI starts to make sense for customers
22 when we have -- when we're moving towards a
23 system where we've got time-varying rates,
24 where customers have a load that can be moved

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1 to benefit from time-varying rates. The
2 reality is, in New England, unlike where I
3 grew up in the south, we don't have a large
4 investment in essential central AC. So when
5 you start looking at who has the
6 discretionary load to actually benefit from
7 time-varying rates, it becomes a much smaller
8 population. Time-varying rates enforced on
9 customers, we've always advocated at
10 Eversource they be optional. Time-varying
11 rates become something that become really
12 onerous for customers if they were required
13 to move to that. So, but at the time, we
14 were looking at policy, where New Hampshire
15 was at. We had a very low penetration and
16 nothing in the future about more distributed
17 energy resources coming onboard. We had a
18 situation where there wasn't discussion
19 around time-varying rates. At the time, New
20 Hampshire would have been, and still would
21 be, the very first to move forward in our
22 state territory for AMI. Moving to AMI not
23 only means changing out the meters, but it
24 means changing out the communications

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1 infrastructure. It requires a meter data
2 management system to store all those reads.
3 We collect seven pieces of data one time a
4 month from every one of our meters. It
5 increases exponentially if I'm collecting 50
6 pieces of data, which is what AMI does, every
7 15 minutes. I have to collect that data, I
8 have to validate that data, I have to store
9 that data, I have to present that data to
10 customers. So then the final piece that AMI
11 needs to be really effective is a CIS system
12 that can support that. We don't have any of
13 those pieces.

14 So when we looked at AMI and we looked
15 at the cost -- and I will be candid. We gave
16 some figures in there around the cost of the
17 communications, the MDM. Those were, as I
18 look at it today, very unrealistic. But the
19 reality was very low. But the reality was
20 magnitude of scale, whether it was 100
21 million or it was 300 million, as we think it
22 would be today, it is a significant
23 investment that we knew would take time to
24 move through and get agreement on and ensure

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1 it was in alignment with the policies. And
2 yet, I was dealing with an infrastructure
3 that needed to be dealt with now. I was
4 dealing with safety concerns that needed to
5 be dealt with. So that is why we made the
6 move to AMR. We have delivered as we
7 committed to those savings, and that has now
8 been imputed into our revenue requirements.
9 Customers are seeing the benefits. And that
10 is why we didn't move to AMI back in 2013.

11 Today the world is different. AMR --
12 AMI technology has reduced in price. The
13 sophistication and the ability to install
14 meter data management infrastructure has
15 become more commonplace. So it will be a
16 system that is more likely that there's
17 knowledge and expertise about how to put them
18 in and how to leverage it. And in fact, at
19 the time that we looked at New Hampshire, as
20 Mr. Horton noted, we believe it's a matter of
21 when is the right time, when do we have the
22 policies that drive this need, when is it the
23 right time for consumers. Then we can --
24 this business case that we're working on will

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1 help us define both the benefits, and there
2 are many, and more operational benefits that
3 we're starting to see from AMI as we develop
4 these use cases. As more and more utilities
5 across the country enter into AMI, we're
6 starting to get new use cases that we
7 couldn't have imagined in 2013.

8 So what New Hampshire will benefit from
9 as we look at this business case now is a lot
10 of new benefits that are coming to surface as
11 you address AMI. So I wanted to have the --
12 I'm glad I had the opportunity just to set
13 the groundwork of what I was looking at in
14 2013 and why we made the decision to go to
15 AMR.

16 Q. All right. Thank you. So it sounds like,
17 though, there is no dispute. The Company
18 doesn't dispute that statement at this time,
19 that the AMR infrastructure is more limited.

20 A. (Conner) No, that's a correct statement. The
21 AMR infrastructure is not a two-way
22 communication infrastructure.

23 Q. Okay. Thank you for that.

24 You mentioned cyber security and

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1 confidentiality concerns. Those are going to
2 be reviewed as part of the feasibility
3 assessment. But at a high level, can you or
4 someone else on the panel describe what the
5 concerns are?

6 A. (Conner) It's the fact that you've got a
7 two-way communication at the meter, at the
8 service point at everyone's home. So now I'm
9 not just sending a signal to get information.
10 It's actually going two ways. I'm sending a
11 ping to the computer, to the meter, saying I
12 need data, and the meter is sending back
13 information over communications
14 infrastructure. You've provided a gateway at
15 the consumer's home that in theory we
16 obviously would need to ensure could not be
17 penetrated by a customer to allow them to
18 create, let's say a virus or something like
19 that. So cyber security, that communications
20 backhaul, the best practices are it is an
21 isolated backhaul. It has the encryption.
22 It has the security procedures to ensure that
23 we keep that data safe. It is not a shared
24 communications backhaul. It is not a public

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1 communications backhaul.

2 Q. Okay. Thank you.

3 The settlement agreement doesn't appear
4 to provide a timeline for the assessment,
5 unless I've missed it. Is there a timeline,
6 or is there an expectation to when this will
7 be done?

8 A. (Horton) I can speak to that. No, I don't
9 believe there's a timeline specific to that.
10 I'll just note that we are trying to leverage
11 to whatever extent we can, realizing it's
12 going to be different from Connecticut. But
13 we do have a consultant that we worked
14 closely with to develop a business case in
15 Connecticut, and I think there's some
16 efficiency there to be gained if we were to
17 utilize that same consultant, which will
18 degrade over time. So at least from the
19 Company's perspective, our interest is to
20 move forward with this once we get approval
21 of the settlement agreement and then begin to
22 work with Staff and the OCA on the scope, the
23 scope and the scenarios, and then just move
24 forward with it as quickly as reasonably

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1 possible, in light of all the other work that
2 staff and the OCA have on their plates.

3 Q. What was the timeline in Connecticut? How
4 long did it take for the --

5 A. (Horton) I don't know specifically. I think
6 it was around six to eight months. We filed
7 that in July. I know we were working on it
8 at the beginning of the year, but I do think
9 there was work already underway at that
10 point. So, you know, it was a fairly
11 sizeable effort.

12 A. (Conner) That is correct, Doug. It was
13 around nine months we started before this
14 filing.

15 Q. Nine months, including the development of the
16 scope and all, or just for the assessment?

17 A. (Conner) That was for the assessment and then
18 developing all the testimony and the work
19 around that. So there was -- I do think that
20 there will be some efficiencies, as Mr.
21 Horton mentioned, in that the Company wanted
22 to make sure that so many of these
23 assumptions were vetted. So now we have done
24 that vetting of assumptions. Let's say, for

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1 example, there were some assumptions in there
2 around the displacement of phone calls
3 associated with high bills because we would
4 have AMI and the visibility of the meter
5 reads along the way, the visibility of how my
6 bill was going along the way. We've already
7 vetted that assumption. And so we would just
8 be double-checking versus going through the
9 whole piece of starting with trying to get
10 the data. So, again, as Mr. Horton said,
11 there is some benefit in this recent
12 analysis. We've completed the vetting. What
13 the Company has done I think would
14 fast-forward the work associated with this
15 effort.

16 Q. So it sounds like it's reasonable to expect
17 that this will be done in under nine months.

18 A. (Conner) I would expect --

19 A. (Horton) I expect it to be, yeah.

20 A. (Conner) Yeah.

21 Q. Okay. And then after it is complete, what's
22 the plan to implement the results?

23 A. (Horton) I think that depends on what --
24 well, the result, I think, is going to be

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1 information. And so I think it's going to
2 depend on what the result tells us, and then
3 we can start to figure out what would be
4 implemented. In other words, you know, I'm
5 not anticipating the result of this is
6 necessarily a plan that would be presented to
7 replace AMI, you know, beginning in '22,
8 right, to install AMI. That's not what this
9 is intended to produce. Because, again, I
10 think the reality is it's an expensive
11 proposition, and we're all concerned about
12 bill impacts to customers.

13 I think what it's going to do is provide
14 a lot more information about what the
15 functionality is that exists, what the
16 functionality could be with AMI, and what are
17 the -- what's a reasonable path forward, as
18 well as what are other limitations or
19 considerations or opportunities in New
20 Hampshire that would be specific and unique
21 to New Hampshire. We've talked about the
22 geography. We've also talked about the
23 different level of adoption of DG and other
24 public policies. There's also considerations

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1 that were discussed as part of the proceeding
2 around the opt-in nature of additional
3 functionality that some AMI metering
4 infrastructure does offer; whereas in New
5 Hampshire, it's an opt-in consideration to
6 enable the communication with in-home devices
7 to the meter. And even how does that work
8 when we go to select an AMI infrastructure,
9 in light of the legislation that exists.
10 These are all things that were discussed that
11 I think we need to consider in this
12 assessment.

13 So to your specific question, I think we
14 don't know what the next step's going to be.
15 I think the output from it is information
16 that we are all interested in having, and I
17 think would be helpful to the Commission as
18 well as we continue to move through these
19 issues in a number of different dockets.

20 Q. Okay. Thank you.

21 Mr. Chagnon, what's Staff's expectation?

22 A. (Chagnon) Staff's expectation is the same as
23 Mr. Horton, what he just said. It's
24 information that we can just know going

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1 forward, but it doesn't necessarily mean it
2 creates an action or a change right away.

3 Q. Okay. Thank you.

4 I have one more question on Bates
5 Page 7. There's a provision for after the
6 retirement review, the accounting review.
7 There's supposed to be collaboration, and
8 there's a potential to hire a consultant to
9 do an independent review. And then in the
10 last sentence, and Commissioner Bailey raised
11 this, it says that nothing precludes Staff or
12 the OCA from petitioning the Commission after
13 all of that has happened from reviewing the
14 accounting.

15 I guess this would go to Staff. What
16 scenario would that occur in? We've already
17 had collaboration. We've had the independent
18 accounting. Where do you see that happening?

19 A. (Chagnon) That was put in just so that we
20 would have a backup, you know, that Staff or
21 OCA or any party wouldn't be locked in to
22 what the result is. If we indeed thought
23 otherwise, then we would bring it forward.
24 So it's just so that it didn't close the door

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1 on anything that we thought we needed to
2 bring to the Commission.

3 Q. Okay. Thank you for that.

4 CHAIRWOMAN MARTIN: I don't have
5 any other questions.

6 Commissioner Bailey, do you have
7 any follow-up questions?

8 COMMISSIONER BAILEY: I do have one
9 follow-up question. I think I touched on
10 this the last time, in that same area that
11 you just mentioned.

12 BY COMMISSIONER BAILEY:

13 Q. So if the accounting review exposes a
14 deficiency in the way the meters were
15 accounted or, you know, all the retirements
16 were or were not in, and it would have
17 affected rates, is it too late to do anything
18 about it?

19 A. (Horton) Want me to try to address that?

20 A. (Chagnon) Please do.

21 A. (Horton) So obviously coming out of this
22 case, the Commission will issue a decision
23 approving the rates that are in effect.
24 That's clear. I think what this provision

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1 acknowledges is that all parties are
2 comfortable and confident that that's the
3 right thing to do. I think everybody has
4 testified the settlement is producing just
5 and reasonable rates. So that's period, you
6 know, end of statement. But we have this
7 issue that's lingering, that we want to make
8 sure that Staff and the OCA are comfortable?

9 And there's the potential that the
10 accounting issues, when we get through this
11 exercise, could result in an adjustment to
12 the accounting, which then could result in a
13 change to the rates. I testified, and I
14 believe that if that were to happen, it would
15 be small and that we'd be able to resolve
16 what the right resolution of that is. And I
17 think that's why we had that last statement
18 in there. However small it is -- and it may
19 not be, I suppose -- Staff wants to have the
20 ability, or other parties, to petition the
21 Commission to do something. I'm confident
22 that we'll be able to -- first I'm confident
23 that we'll be able to resolve the open
24 questions in Staff's and the OCA's mind

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1 through this process and that we'll -- and
2 I'm confident that there will be no other
3 changes coming. But in the event there are,
4 I think we would work together to try to
5 figure out what the solution is. Maybe it's
6 a change that's reflected in the step
7 adjustment. Maybe it's a change that's
8 reflected in the RRA. I think we have to
9 wait to see to get through the first step of
10 the process. And I think, really, to some of
11 the questions you've been asking on other
12 topics, if we didn't have that in there, it
13 would have been sort of like, so what. What
14 are we going to do we if we get through this
15 and there is an issue and Staff didn't -- and
16 we didn't have this provision to allow
17 parties to try to do something with it? One
18 way of saying so I'm not anticipating there
19 to be a problem to come out of this. I
20 believe the rates that we're approving are
21 just and reasonable -- you're approving are
22 just and reasonable. But we do have this
23 process we need to follow through, and there
24 could be a potential to have some other

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1 adjustment. And we'd work through that at
2 that time.

3 Q. Thank you. That was very helpful.

4 COMMISSIONER BAILEY: That's all I
5 have, Madam Chair.

6 CHAIRWOMAN MARTIN: Okay.

7 Mr. Fossum, do you have any
8 redirect?

9 MR. FOSSUM: I believe I just have
10 one.

11 REDIRECT EXAMINATION

12 BY MR. FOSSUM:

13 Q. Mr. Horton, you were asked a couple questions
14 about the prudence of the AMR investment. Do
15 you recall those questions?

16 A. (Horton) Yes, I do.

17 Q. Do you have, having had a few minutes to
18 think about it, do you have some additional
19 clarity to provide in response to
20 Commissioner Bailey's question on the
21 prudence of that investment?

22 A. (Horton) Yes. Just to be more firm and
23 clear, and also recalling Mr. Chagnon's
24 testimony from earlier in the week, I know he

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1 was asked a question, and so I want to just
2 echo and be more clear. The settlement
3 agreement that we've reached here resolves
4 all of the issues of imprudence for
5 investments that have been made up through
6 and including the test year. And so that's
7 really the clear and succinct way of
8 answering the questions that I was asked on
9 that issue. So that would include the AMR
10 investments, as well as other investments
11 that were questioned over the course of the
12 proceeding.

13 Q. Thank you. I believe...

14 MR. FOSSUM: I believe that's all I
15 have.

16 CHAIRWOMAN MARTIN: Okay.

17 Mr. Buckley, any redirect?

18 MR. BUCKLEY: Madam Chair, Staff
19 has no redirect for this panel.

20 CHAIRWOMAN MARTIN: Okay. Then we
21 can move on to the next panel, which has some
22 of the same members, but it looks like we are
23 adding Mr. Colton and Ms. Noonan.

24 And Ms. Robidas, once they have

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1 joined us, if you can swear them in.

2 (WHEREUPON, ROGER COLTON AND AMANDA
3 NOONAN were duly sworn and cautioned by
4 the Court Reporter.)

5 ROGER COLTON, SWORN

6 AMANDA NOONAN, SWORN

7 CHAIRWOMAN MARTIN: Thank you.

8 Mr. Fossum, would you like to
9 begin?

10 MR. FOSSUM: Thank you. I'll note
11 Mr. Horton and Ms. Conner have been
12 previously qualified, and their testimony has
13 been addressed, so I won't be addressing that
14 now.

15 So this panel, we are directing
16 ourselves to a couple of items that we didn't
17 really spend much time on in the overview,
18 speaking to what's in Sections 12 and 13 of
19 the settlement regarding the fee-free credit
20 proposal and the New Start program.

21 DIRECT EXAMINATION

22 BY MR. FOSSUM:

23 Q. Ms. Conner, Mr. Horton, are you both familiar
24 with those provisions?

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1 A. (Conner) Yes.

2 A. (Horton) Yes.

3 Q. Taking them in the order that they appear in
4 the agreement then, Section 12 is discussing
5 this fee-free credit and debit card program.

6 Ms. Conner, could you, beyond what's
7 specified in the agreement, could you provide
8 a little detail about what that program will
9 look like.

10 A. (Conner) What we're offering for customers
11 here is on a one-time payment, as they may
12 decide to make a payment, they would have the
13 option to -- today they have the option to
14 pay with a credit card or debit card, but
15 there is a convenience fee associated with
16 that payment. We would, in this settlement,
17 eliminate that fee for making that one-time
18 payment either by credit or debit card. And
19 we know that this, based on customer
20 feedback, is a top dissatisfier for
21 customers, the fact that there is a
22 convenience fee. Obviously, as we look at
23 the world today, moving towards cashless,
24 particularly now in the pandemic, has become

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1 even more common. So this offering, I think,
2 will be of great value. And we're very
3 pleased to work with Staff to develop a
4 settlement on it.

5 Q. And just to be clear, the version of that
6 program that's being implemented now, is that
7 to be in an end-state for that program, or
8 could it be that there might be additional
9 changes in the future?

10 A. (Conner) I would envision that we'll continue
11 to monitor and evaluate this program. I know
12 that Ms. Noonan has identified a series of
13 metrics that we will look at to understand
14 the benefits of this program going forward,
15 and I think that is very prudent. I also
16 know that Staff is very interested in us
17 offering this program for recurring payments.
18 So in the case of New Hampshire, if a
19 customer is on recurring payments, which is
20 92,000 customers, offering them the
21 capability of establishing a credit card or
22 debit card for that recurring payment is of
23 interest to the Staff. That is not included
24 in this settlement, but certainly something

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1 that as we moved forward and get an
2 understanding of the adoption rate and the
3 cost we can further discuss if it's the right
4 time and right approach for New Hampshire
5 customers.

6 Q. Thank you. And turning now to the following
7 section, Section 13. Could you, beyond
8 what's specified in the agreement, could you
9 discuss the program that's being implemented
10 through this section.

11 A. (Conner) I'm sorry. The arrearage
12 forgiveness program?

13 Q. Yes. Section 13, New Start arrears
14 management program.

15 A. (Conner) New Start arrears management. I'm
16 very excited about this. I believe that
17 having this capability to allow our customers
18 an arrears management program, that if they
19 qualify and are coded hardship, that they can
20 move on -- and it's proven as a best
21 practice -- that it allows a customer to,
22 over the course of the year, demonstrate that
23 they can pay their monthly, average monthly
24 energy bill going forward. It creates -- you

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1 know, we'll partner with agencies, such as
2 The Way Home, to get outreach and education
3 for our customers to support them in this.
4 But at the completion of that year-long
5 payment, their arrears that they would have
6 had gets completely forgiven. And we always
7 look forward to those customers continuing to
8 move forward and hopefully not needing that
9 type of program in the future. However, we
10 also know that sometimes more bad things
11 happen, as we've seen with this pandemic. So
12 that program that we're proposing here would
13 allow customers, if they qualify, to enter
14 into an arrears forgiveness arrangement that,
15 as they paid their current bills, they could
16 have their one-twelfth each month of their
17 arrears forgiven. If they miss a payment,
18 they are allowed to make that up and continue
19 on with the program. And then we still have
20 some details to work out and look forward to
21 a collaborative that has been recommended,
22 that we will stand up very quickly at the
23 beginning of the year to work out the finer
24 details with this.

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1 Q. On that last point, could you explain a
2 little more your expectations for that group
3 that you said will be "stood up quickly," how
4 that group -- how you envision that
5 functioning?

6 A. (Conner) Well, I envision it being a
7 collaborative process where we start a
8 stakeholder group that would develop the
9 final recommendations of the program. It
10 would address some of the nits. These are
11 small details, and we just ran out of running
12 room during the agreement process to do all
13 of those minute details. But we would work
14 with the group to finalize those details and
15 make it make sense for New Hampshire.

16 I have found, you know, this is -- we
17 operate and offer these programs in
18 Massachusetts and Connecticut. And actually,
19 only 13 states, now 14 with New Hampshire,
20 have arrears forgiveness. But more are very
21 interested in this, doing this. But each one
22 of them makes the business rules that make
23 sense for them. And that's what we'll work
24 with New Hampshire on is what makes the most

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1 sense for business rules for New Hampshire
2 customers. I know that Staff and the various
3 advocate groups have that intimate knowledge
4 of their customers, and we'll look forward to
5 being in a collaborative and looking at those
6 and doing the fine details on it.

7 Q. And do you also envision this group to
8 provide sort of continuing input and
9 information on the program?

10 A. (Conner) Well, as part of this, we plan to
11 have a regular filing of a series of metrics,
12 which I think also is a very good idea to
13 understand the participation rates, what the
14 success rates are, how it impacts or reduces
15 our truck rolls associated with credit. So
16 there's some good benefits I think will be
17 teased out here, a good understanding of
18 customer behavior associated with this. And
19 I believe we'll gain learnings about how we
20 communicate and educate on this, perhaps how
21 we combine it with our energy-efficiency
22 programs, so that we can reduce the share of
23 wallet that our hardship customers have
24 associated with energy. So I do envision

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1 that ongoing we'll take learnings from the
2 program and use it to enhance the program
3 going forward.

4 Q. Very good. Thank you.

5 MR. FOSSUM: That is what I have
6 for direct on these topics.

7 CHAIRWOMAN MARTIN: All right.
8 Thank you.

9 Mr. Burke.

10 MR. BURKE: Thank you, Madam Chair.

11 DIRECT EXAMINATION

12 BY MR. BURKE:

13 Q. Mr. Colton, could you please state your name,
14 your position and your role in this case.

15 A. (Colton) My name is Roger Colton. I am a
16 principal in the firm of Fisher, Sheehan &
17 Colton, Public Finance and General Economics.
18 I have been retained to provide expert
19 testimony for The Way Home, an intervenor in
20 this proceeding.

21 Q. Thank you. And could you tell us, have you
22 previously testified before this Commission?

23 A. (Colton) I have previously testified before
24 the New Hampshire Commission, and I've worked

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1 on behalf of the Commission. My testimony
2 has related primarily to low-income issues,
3 both customer service issues, rate
4 affordability issues or bill affordability
5 issues, and energy efficiency or
6 usage-reduction issues.

7 Q. Thank you. And did you prepare written
8 direct testimony with the attachments that
9 were filed on behalf of The Way Home in
10 connection with this proceeding that were
11 dated December 20th, 2019?

12 A. (Colton) I did.

13 Q. And has that direct testimony been marked for
14 identification purposes as Exhibit 24 for
15 this hearing?

16 A. (Colton) It has.

17 Q. And do you have a copy of Exhibit 24 in front
18 of you now as we speak?

19 A. (Colton) I do.

20 Q. And was this testimony prepared by you or at
21 your direction?

22 A. (Colton) It was.

23 Q. And Mr. Colton, does this direct testimony,
24 premarked as Exhibit 24, accurately reflect

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1 your opinion at the time you prepared it,
2 based on facts known to you at that time?

3 A. (Colton) It was. It did.

4 Q. And do you have any corrections to note or to
5 make today to your direct testimony?

6 A. (Colton) I do not.

7 Q. So if I asked you all of the questions that
8 you were asked in Exhibit 24 as to the
9 original Company proposal, would your answers
10 be the same today?

11 A. (Colton) They would be.

12 Q. And do you adopt Exhibit 24 as your sworn
13 testimony today?

14 A. (Colton) I do.

15 Q. Broadly speaking, and without going into
16 specifics, what subject matters did you
17 review and cover in your direct testimony
18 with regard to the Company's proposal, as it
19 was filed on May 28, 2019?

20 A. (Colton) Broadly speaking, my testimony
21 addressed primarily the arrearage management
22 program that the Company proposed. I
23 addressed the need for the arrearage
24 management program. I addressed certain

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1 structural aspects of how an arrearage
2 management program should be designed and
3 developed. I addressed certain issues
4 involving the actual implementation of the
5 arrearage management program, and I raised
6 some cost recovery issues. Outside of
7 arrearage management, I further addressed
8 certain customer service issues which weren't
9 addressed in the settlement. So I'll just
10 leave it that I did raise some customer
11 service issues.

12 Q. Thank you. And Mr. Colton, did you also
13 prepare written rebuttal testimony that was
14 filed on behalf of The Way Home, dated
15 March 3rd, 2020, which has been marked for
16 identification as Exhibit 42 for this
17 hearing?

18 A. (Colton) Yes.

19 Q. And do you have a copy of Exhibit 42 in front
20 of you now as we speak?

21 A. (Colton) I do.

22 Q. And was this rebuttal testimony prepared by
23 you or at your direction?

24 A. (Colton) It was, yes.

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1 Q. And similar to the questions about --
2 (connectivity issue)

3 (Court Reporter interrupts.)

4 Q. -- the questions that I asked about the
5 direct testimony, is this Exhibit 42, does it
6 accurately reflect your opinion at the time
7 you prepared it, based on facts known to you
8 at this time -- at that time? Excuse me.

9 A. (Colton) Yes.

10 Q. And do you have any corrections to make to
11 your rebuttal testimony today?

12 A. (Colton) I do not.

13 Q. So if I asked you all of the questions that
14 you were asked in Exhibit 42, would your
15 answers be the same today?

16 A. (Colton) They would be.

17 Q. And do you adopt Exhibit 42 as your sworn
18 testimony today?

19 A. (Colton) I do.

20 Q. Thank you. And broadly speaking, without
21 going into specifics, what subject matter did
22 you address in your rebuttal testimony?

23 A. (Colton) In my rebuttal testimony, I again
24 addressed the proposed arrearage management

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1 program. There were not specific
2 disagreements in my rebuttal testimony. My
3 rebuttal testimony was devoted to the
4 reporting requirements that I would recommend
5 in order to track the operation and impacts
6 of the proposed arrearage management program.

7 Q. Thank you. I would like now to draw your
8 attention to -- (connectivity issue)

9 (Court Reporter interrupts.)

10 A. -- the document that has been marked for
11 identification as Exhibit 58 in the
12 settlement agreement and the attachments
13 which are the primary subject of these
14 hearings.

15 Mr. Colton, are you familiar with
16 Exhibit 58 and the terms of the settlement,
17 specifically as they relate to the New Start
18 program, which is covered at Bates Pages 27
19 through 29, and in Appendix 7, at Bates 64 to
20 67?

21 A. (Colton) I am, yes.

22 Q. And do you have a copy of Exhibit 58 in front
23 of you?

24 A. (Colton) I do. I have a copy of Section 13

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1 and Appendix 7 in front of me.

2 Q. And did you -- oops, excuse me.

3 And did you participate in the
4 discussions and negotiations that led to the
5 settlement agreement marked as Exhibit 58?

6 A. (Colton) I did.

7 Q. And would you be in a position to answer
8 questions about the New Start program as it's
9 described in Exhibit 58?

10 A. (Colton) Yes.

11 Q. Thank you. Just a few more questions.

12 Mr. Colton, do you support the approval
13 of the New Start program as described in
14 Exhibit 58?

15 A. (Colton) I do. I believe that the -- yes.
16 The answer to your question is yes.

17 Q. And as I think you were about to do, could
18 you please briefly describe why you support
19 the approval of New Start as it's described
20 in Exhibit 58 and why you believe the program
21 is important specifically for low-income
22 customers.

23 A. (Colton) Sure. As we started out in one of
24 the early questions you asked me, you asked

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1 if I had appeared before the New Hampshire
2 Commission before. And I indicated that I
3 had not only appeared as a witness before the
4 New Hampshire Commission, but I've worked
5 with this Staff, and indeed in a
6 collaborative involving the Staff, the
7 Community Action Agencies, the utilities, and
8 The Way Home.

9 We've put -- we, in New Hampshire, the
10 stakeholders in New Hampshire, have put a lot
11 of effort into promoting bill affordability
12 for income-eligible customers in New
13 Hampshire. What we've learned in the last
14 few years, however, is that, even if you
15 adequately address the affordability of bills
16 for current service on a going-forward basis,
17 bills could remain unaffordable because of
18 pre-existing arrears. People don't make
19 separate payments toward their bills for
20 current service and for their bills for
21 pre-existing arrears. People make payments
22 toward their total bills. And so a Company
23 such as Eversource needs to address not only
24 the bill for current service, but needs to

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1 address the arrearages as well.

2 In my experience in New Hampshire, I
3 believe that by addressing the bills for
4 current service, as has been done through the
5 years, in combination with an arrearage
6 management program, bills will be made
7 affordable both from the perspective of the
8 customer who might otherwise have an
9 inability to pay, and from the perspective of
10 the utility, in the sense of inability to
11 collect. So it will provide -- "it," being
12 an arrearage management program, will provide
13 benefits to the customer base, to the
14 low-income customer base, to the
15 non-low-income customer base, and to the
16 utility itself. It is a good idea. It
17 should be pursued. It should be approved.

18 Q. Thank you. And I would like to now draw your
19 attention to Appendix 7 of Exhibit 58, at
20 Pages 64 to 67. This appendix describes the
21 metrics that the Company will report with
22 respect to the New Start program that Ms.
23 Conner mentioned a moment ago. Do you
24 support the reporting of those metrics as

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1 they're described in Exhibit 58?

2 A. (Colton) I support both the metrics that have
3 been proposed, and I support the timing of
4 the reporting which was addressed in the
5 settlement.

6 Q. And could you briefly explain, in your
7 opinion, why the data collection and
8 reporting is important and why you support
9 this provision of Exhibit 58?

10 A. (Colton) Sure. I believe that what's being
11 proposed in New Hampshire is the right way to
12 approach a proposal such as this. What we're
13 trying to do through -- or what Eversource --
14 I say "we" -- but what Eversource is trying
15 to do through a proposal such as the
16 recommended AMP is not simply to provide
17 dollars to low-income customers because
18 they're low income, we're trying to
19 accomplish a specific outcome. We believe
20 that there are customers who have arrearages,
21 who, unless we address those arrearages, will
22 face an inability to retain service. And so
23 the metrics that are being proposed allow the
24 Company, allow the Commission, allow the OCA,

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1 and allow stakeholders such as The Way Home,
2 to be able to measure and follow or track the
3 outcomes, not merely the expenditures on the
4 program, but what the program is actually
5 accomplishing. And I believe that having
6 that outcome-based approach to an ongoing
7 review of the AMP is an appropriate way to
8 design and implement a program such as this.

9 Q. Thank you. Now drawing your attention to
10 Paragraphs 13.5 and 13.6 on Bates Pages 28
11 through 29 of the settlement agreement.
12 These paragraphs discuss the creation of a
13 stakeholder group to develop a comprehensive
14 program design and to assist in the
15 long-term monitoring and evaluation of the
16 program. Is that correct? Is that your
17 understanding of these paragraphs?

18 A. It is. That is my understanding.

19 Q. And do you support the creation of a
20 stakeholder group?

21 A. Absolutely.

22 Q. And in your opinion, why is it important to
23 create a stakeholder group that is charged
24 with the development and monitoring of the

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1 program?

2 A. (Colton) I agree with the testimony that was
3 previously given just a few minutes ago by
4 the Company's witness, in that there are
5 details in the implementation of a program
6 such as this which simply can't be or cannot
7 be worked out in a litigated case. The
8 details of the operation and the actual
9 implementation require frequently a
10 discussion amongst stakeholders about what
11 should be done. But it also requires the
12 monitoring of how the program is being
13 implemented and how the intended
14 beneficiaries are reacting to the program.
15 And there needs to be a group that can
16 respond to the data that we just talked about
17 a minute ago that's being developed and
18 reported, and factoring that data into how
19 the program itself will be implemented. And
20 that absolutely needs to be done at the first
21 level through a collaborative process such as
22 the work group.

23 Q. Thank you, Mr. Colton. And finally, do you
24 believe that the creation of the New Start

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1 program as described in Exhibit 58 is in the
2 public interest and will aid in establishing
3 just and reasonable rates?

4 A. (Colton) I do.

5 Q. Thank you.

6 MR. BURKE: Madam Chair, no further
7 questions from me at this time.

8 CHAIRWOMAN MARTIN: All right.

9 Thank you.

10 Ms. Amidon.

11 MS. AMIDON: Thank you.

12 DIRECT EXAMINATION

13 BY MS. AMIDON:

14 Q. And good afternoon, Ms. Noonan. We heard Ms.
15 Conner mention you in her testimony here
16 today. I would like to take care of the
17 preliminary matters first.

18 By whom are you employed, and what is
19 your position?

20 A. (Noonan) Good morning. I'm employed by the
21 New Hampshire Public Utilities Commission as
22 the director of Consumer Affairs -- Consumer
23 Services and External Affairs.

24 Q. Have you previously testified before the

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1 Commission?

2 A. (Noonan) Yes, I have.

3 Q. And did you participate in the investigation
4 of this petition?

5 A. (Noonan) Yes, I did.

6 Q. Could you please summarize the aspects of the
7 petition that you examined.

8 A. (Noonan) Certainly. My focus was on three
9 areas. The first was the proposal known as
10 the fee-free program, which is applicable to
11 residential customers, and would eliminate
12 the fee incurred when paying a utility bill
13 via credit card. The second was the
14 introduction of an arrears management program
15 called New Start for those residential
16 customers who would be considered financial
17 hardship, as defined in the Commission's
18 rules. And the third area was a review of
19 the proposed tariff language changes.

20 Q. Thank you. And did you file testimony before
21 the -- with the Commission in December, which
22 is identified as Exhibit 31 in this docket?

23 A. (Noonan) Yes, I did.

24 Q. Do you have any corrections to that

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1 testimony?

2 A. (Noonan) No, I have no correction.

3 Q. And would you attest that your testimony
4 accurately represents your opinions based on
5 the facts that you had available at the time
6 you prepared it?

7 A. (Noonan) Yes, I would.

8 Q. Thank you. Please address each item that you
9 addressed in your testimony. And I guess we
10 should start with the fee-free program, if
11 you would, please.

12 (Court Reporter interrupts.)

13 A. (Noonan) Certainly. Well, as I just
14 mentioned a moment ago, the fee-free program
15 would allow residential customers who pay
16 their utility bill via a credit card to do so
17 without incurring a fee. How customers make
18 payments continues to evolve -- has evolved
19 and continues to evolve. And credit card
20 payments are simply another payment channel.
21 No other payment channel currently -- writing
22 a check, an automatic debit, an electronic
23 payment via the bank's online billing
24 system -- have fees associated with the

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1 payment. So I would support the
2 implementation of the fee-free program in New
3 Hampshire so as to not penalize those
4 customers who opt to pay their bill via
5 credit card. I view it simply as another
6 payment channel. As we continue to evolve
7 with technology, I'm sure there'll be more in
8 the future. But here's where we are today.

9 As the Company expressed its concerns
10 about the cost of implementing the program,
11 the settlement agreement would implement the
12 program only for non-recurring payments
13 first. Ms. Conner alluded to this earlier.
14 We'll be collecting some data. The Company
15 will be monitoring and reporting on
16 participation levels and costs to help Staff
17 and Commission and other interested parties
18 later evaluate whether expansion of the
19 program would be appropriate.

20 CHAIRWOMAN MARTIN: Ms. Amidon,
21 you're on mute still.

22 MS. AMIDON: Technology baffles me.
23 Thank you.

24 BY MS. AMIDON:

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1 Q. Next I'd like you to describe the New Start
2 program. And if you could address the issue
3 of eligibility, because Mr. Colton said
4 something that I wasn't sure the Commission
5 understands when he said "low income and
6 others who may not be low income." And I'm
7 paraphrasing at this point, so I'm not trying
8 to attribute any specific characterization to
9 him. But if you could also spend some time
10 talking about eligibility for the program and
11 how you see the program working here.

12 A. (Noonan) Sure. The New Start program, as has
13 already been mentioned, is an arrears
14 management program. Ms. Conner explained
15 briefly how it worked earlier. But simply
16 put: For every on-time monthly payment an
17 enrolled customer makes, a portion of the
18 customer's past-due balance is forgiven.
19 Eligible customers include any customer that
20 falls under the "financial hardship"
21 definition in the Commission's rules. The
22 rule number is 1202.09. And briefly, it's
23 any customer or member of the customer's
24 household who receives benefits from an

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1 income-eligible program. So it could be the
2 fuel assistance program, the electric
3 assistance program, the gas assistance
4 program, Neighbor Helping Neighbor or any
5 successor program to that. Any state,
6 federal or local welfare assistance type of
7 program that provides assistance to the
8 customers based on a financial determination
9 of eligibility.

10 The goals of the program are to help
11 those customers who are eligible under that
12 rule definition to develop consistent
13 payment, bill payment habits while protecting
14 their account from service disconnection, and
15 to provide those customers with a fresh
16 start. Other benefits of the program, and
17 you heard Mr. Colton talk about the outcomes
18 of the program, but these are other less
19 tangible benefits, are improved --
20 enhanced -- improvements or enhancements to
21 communications between the utilities, their
22 customers and social service agencies, as
23 well as potential improvements in the
24 customer's safety, health and nutrition. The

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1 program should also reduce -- that will be
2 one of the metrics measured -- the utilities
3 cost per collections, field visits,
4 disconnections, reconnections, potential
5 impacts on lead-lag carrying costs and
6 uncollectible accounts.

7 I support the implementation of New
8 Start in New Hampshire. Eversource has
9 considerable experience with the program in
10 both Connecticut and Massachusetts. That
11 forms the basis for the program outlined in
12 Appendix 7 of the settlement. And I
13 recommend adoption in New Hampshire.

14 To ensure this program meets New
15 Hampshire-specific needs, though, because we
16 all recognize every state is a little bit
17 different. The settlement calls for the
18 creation of the stakeholder group that's been
19 discussed. That group will work with
20 Eversource to develop a comprehensive program
21 designed to kind of fill in the details, so
22 to speak, that are missing from that
23 high-level overview in Appendix 7, and to
24 assist in the long-term monitoring and

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1 evaluation of the program to ensure that it
2 meets the needs of New Hampshire's customers.

3 Q. Thank you. And thank you also for clarifying
4 that, the eligibility requirement for the
5 program. That was helpful.

6 Finally, you addressed your concerns
7 about a competitive supplier provision in the
8 tariff concerning blocking. I thought your
9 testimony was very clear in this regard, and
10 I wondered if you would summarize your view
11 of this matter and how the Company addressed
12 it.

13 A. (Noonan) Certainly. I think, as Ms. Conner
14 explained earlier this morning, in
15 Connecticut and Massachusetts, the utilities
16 are required to provide the suppliers with a
17 list of customers for marketing purposes.
18 And in those states, customers have the
19 ability to say I don't want to be on that
20 list that you provide periodically to the
21 suppliers. Because New Hampshire has no such
22 requirement, as we started to discuss how
23 this worked and what was driving it and how
24 it would be implemented, it became clear that

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1 the purpose for this in other states didn't
2 match the regulatory paradox in New
3 Hampshire. And so there is no release of a
4 customer list to competitive suppliers in New
5 Hampshire, and so there would be no need to
6 have this similar requirement for removal
7 from what's basically a marketing list for
8 the supplier. We did discuss that if there
9 was an enrollment block, it should be for all
10 customers, not just default service
11 customers. Because if you're happy with
12 where you are, you shouldn't be able to
13 have -- or your service should be protected
14 from being changed without your
15 authorization. After some conversation about
16 the feasibility and the ease of doing that,
17 there was general agreement to defer that
18 issue and to drop this provision from the
19 tariff.

20 There are also concerns about the
21 potential as proposed of the impact this
22 might have on the competitive energy supply
23 market, and particularly as we move towards
24 community power aggregation, how that would

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1 interact with an enrollment block where
2 community power aggregation is now opt-out
3 versus opt-in. So...

4 CHAIRWOMAN MARTIN: Ms. Amidon,
5 you're on mute.

6 BY MS. AMIDON:

7 Q. Ms. Noonan, you have reviewed the provisions
8 of the settlement agreement as it pertains to
9 the fee-free, the New Start, and this tariff
10 provision regarding competitive suppliers;
11 have you not?

12 A. (Noonan) Yes, I have.

13 Q. And do you believe that the settlement
14 agreement terms meet the public interest and
15 results in just and reasonable rates?

16 A. (Noonan) Yes, I do.

17 Q. Thank you. Do you have any additional
18 comments you would like to make?

19 A. (Noonan) No I, have nothing else to add at
20 this time.

21 Q. Okay.

22 MS. AMIDON: Thank you very much.

23 CHAIRWOMAN MARTIN: All right.

24 Thank you.

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1 Commissioner Bailey.

2 COMMISSIONER BAILEY: Thank you.

3 INTERROGATORIES BY COMMISSIONERS:

4 BY COMMISSIONER BAILEY:

5 Q. Ms. Conner, why did you have a fee for
6 customers who opted to pay by credit card in
7 the past?

8 A. (Conner) We applied a fee because of the cost
9 associated with credit card payments. So if
10 we think about the various payment channels
11 that Ms. Noonan identified, we have customers
12 who have an auto pay which links to their
13 bank, probably our lowest cost method. We're
14 talking between 2 and 3 cents maybe to
15 process that type of payment. We have
16 customers who mail in a check. And that has
17 gotten super efficient over the years and is
18 now down to about 10 cents a payment. We
19 have customers that perhaps walk in to one of
20 our walk-in locations. That price is about
21 50 cents. But when it comes to fee free on
22 credit cards and debit cards, we have to work
23 with the service provider, who works back
24 through with the credit card companies to

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1 establish a rate. And that rate is typically
2 in the 1 to 1-1/2, even up to 2 percent cost.
3 So if it is a \$100 bill, then if it were a
4 1 percent fee we were paying for that, it
5 would be a \$1 fee. So you can see that the
6 cost for a credit card or debit card payment
7 is higher than our other channels,
8 particularly when you think about less than 2
9 to 3 cents for an electronic payment, or 10
10 cents for a check payment. But we also
11 recognize that this is an increasingly
12 popular channel. We recognize that as we
13 looked at the customers in New Hampshire,
14 that we have customers such as the ones we
15 were just talking about, hardship customers,
16 who perhaps in an effort to avoid disconnect
17 are using a credit card to pay that and
18 paying the fee. We felt that offering this
19 one-time fee-free payment allowed us to meet
20 the needs of customers who want to avoid that
21 convenience fee and open up this channel.
22 Q. And when you say "a one-time opportunity," or
23 whatever you just said, you mean that they
24 pay each month and they have to start over

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1 again each month. That's what "one time"
2 means, not that they only have one
3 opportunity to pay by credit card; right?

4 A. (Conner) That is correct, Commissioner
5 Bailey. What would happen is -- and
6 customers like, for example, use the mobile
7 app that we've offered. This is becoming
8 increasingly popular. So they receive their
9 bill alert. They can pay their bill, and at
10 that moment they can choose to pay that bill
11 with a credit card or a debit card. But the
12 information would not be retained. So they
13 would have to re-enter that every time versus
14 a customer -- as I mentioned, we have 92,000
15 customers on auto pay. They have stored
16 their payment information on our system so
17 that we can draft from that checking account.

18 Q. Okay. So the \$375,000 in program-related
19 costs, is that to cover the costs from the
20 credit card company charges?

21 A. (Conner) That is correct. Based on the
22 adoption rate that we envision, we did adjust
23 that from our original filed adoption rate
24 because of our experience in offering this in

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1 Connecticut. Connecticut is the first state
2 in our jurisdiction where we have secured
3 fee-free credit cards, and we have
4 experienced a lower adoption rate than we had
5 previously filed originally. So in the
6 settlement, we adjusted that adoption rate.

7 We also, though, had an increase in the
8 fee. The vendor cost moved from \$1.40 in our
9 original filing to \$1.48 per payment. That
10 is because what our vendor has identified is
11 they charge us per payment based on their
12 analysis of the average dollar amounts
13 customers are paying with a credit card. And
14 the realization is the balances are higher
15 that they're paying with a credit card than
16 was assumed, and so that adjustment was
17 incorporated in.

18 But, yeah, even with that, our refiled
19 settlement shows a decrease from our original
20 filing of 745,000.

21 Q. Okay. In Paragraph 12.3, at the bottom of
22 Bates Page 26 of Exhibit 58, it says, "If the
23 actual costs resulting from customers'
24 adoption of the fee-free option exceeds the

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1 \$375,000 allowed in rates in the first year,
2 the Company shall increase the amount in
3 rates to an amount reflecting the estimated
4 cost, but not more than \$520,500, effective
5 February 1st, 2022."

6 Can you tell me how that will be
7 implemented? I mean, just assume
8 hypothetically that you need to increase it
9 to \$520,000. Is there a rate that will be
10 adjusted to accommodate that increased
11 expense, or will that go in your RRA? How
12 does that get recovered?

13 A. (Horton) I can speak to that. That would
14 be -- my personal belief is that would be an
15 adjustment to the base rate as of
16 February 1st. And what that was originally,
17 as Ms. Conner said, we had an estimate in the
18 costs, recovering an amount in our base rates
19 that would then be reconciled based on actual
20 experience. Through the course of the
21 settlement, we adjusted that for a number of
22 reasons, as Ms. Conner said. But we were
23 also acknowledging that that first year is
24 lower. The adoption rate is lower. The

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1 costs are lower as a way to help mitigate the
2 initial bill increase. The settling parties,
3 we agreed to incorporate our estimate of the
4 first year with the first implementation of
5 rates in this proceeding, and then depending
6 on actual adoption rates, we have the ability
7 to increase that.

8 Stepping back just briefly, what we had
9 originally put in was an average annual
10 charge. And so over that period of time it
11 stepped up to a higher amount, and we
12 incorporated the average. So what we would
13 do is we're putting in the first year
14 estimate of 375,000. That's part of base
15 rates in this proceeding. Again, based on
16 our actual experience in customer adoption
17 level, if we determine that the costs are
18 higher than that 375, we would make a filing
19 with the Commission and adjust base rates to
20 get back to what the experience tells us is
21 the appropriate amount to put in rates, but
22 capped at that 520,000. And that would go
23 into effect on February 1, 2022.

24 MS. AMIDON: And Commissioner

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1 Bailey, this is Attorney Amidon. Mr. Chagnon
2 is also prepared to answer any questions
3 regarding rate recovery. I should have
4 mentioned that he's part of this panel for
5 that purpose. Thank you.

6 COMMISSIONER BAILEY: Okay. Thank
7 you.

8 Q. Well, Mr. Chagnon, I'll ask you the next
9 question then. So is that a one-time
10 opportunity for the Company until they file
11 the next rate case?

12 A. (Chagnon) Yes, it is. It's all reconciled in
13 the next rate case.

14 Q. So if the cost is \$600,000, on February 1st
15 they'd be allowed to increase their revenue
16 by up to \$520,500 on February 1st, 2022. But
17 they wouldn't be able to increase it if the
18 cost went up the next year until they filed
19 their next rate case; is that right?

20 A. (Chagnon) That is correct.

21 Q. Okay. Moving on to the New Start arrearage
22 management program, the idea that for every
23 monthly payment an enrolled customer makes, a
24 portion of the past-due balance gets

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1 forgiven. Does the required monthly payment
2 include a portion of past-due amounts, or is
3 it just current charges?

4 A. (Conner) The way we calculate the amount for
5 the monthly payment is we look forward on the
6 12 months forward and assume an average
7 amount, forecast out their billings for the
8 next 12 months, essentially, looking at
9 probably historical, obviously. And that
10 is -- we identify a monthly bill that they
11 should be able to pay. If they pay that, in
12 theory they're paying their current bills,
13 and then that arrearage then gets forgiven
14 over the next 12 months.

15 Q. So they're not contributing anything to the
16 arrearage?

17 A. (Conner) That is correct.

18 Q. Okay. At the bottom of Bates Page 27,
19 Paragraph 13.3, it says the Company shall be
20 permitted to recover a million dollars, I'm
21 rounding, in base rates annually, beginning
22 February 1st, 2022. What is that amount for?
23 Is that for the arrearages that have been
24 forgiven by this program?

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1 A. (Horton) That's right. That's our estimate
2 of the cost of the arrears that are forgiven.
3 We implement it on February 1, 2022, that
4 change in rates on February 1, 2022, because
5 of the fact that it will take us time to
6 develop the IT support and also to resolve
7 some of the remaining details as Ms. Conner
8 spoke to. And so our expectation is the
9 program will be an offering later in 2021 or
10 early in the 2022 time frame.

11 Q. Are arrearages that you don't collect
12 included in uncollectibles?

13 A. (Horton) Uncollectibles expense is calculated
14 based on when customers who don't pay their
15 bills, accounts are turned off and
16 receivables are deemed uncollectible. So
17 this program is an offering to try to
18 essentially reduce that over time by
19 encouraging good payment practices by
20 customers who struggle to pay their bills and
21 qualify to participate in the program.

22 Q. So the arrearage that gets forgiven because
23 the customer would never be disconnected,
24 theoretically, would not be included in the

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1 uncollectible amount that you're collecting
2 otherwise; is that right?

3 A. (Horton) Correct. You have that right.

4 Q. How much -- do you have any indication or
5 expectations about how much of -- how much
6 this will reduce your uncollectibles?

7 A. (Conner) We do not. That's one of the
8 reasons that we wanted to and supported the
9 recommendations to have regular updates.
10 This was something that we've put into place
11 in other states so that you could see the
12 data associated with arrears forgiveness, and
13 because each state implements it differently.
14 So we don't have an expectation on that.

15 Q. Well, what was your experience in the other
16 states where you've implemented it? Is that
17 collectibles?

18 A. (Conner) So we have a differing experience.
19 We haven't linked it to without it would
20 there have been a difference in
21 uncollectibles. Rather, we've looked at it
22 from the success rate of customers
23 participating, the avoided truck rolls
24 associated with that. And then of course

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1 there are some non-monetary benefits, such as
2 health and wellness and choices customers are
3 making. And so -- but it's interesting. The
4 success rate varies. It's something that we
5 did discuss during the hearings and the way
6 the programs are designed and the
7 complementary programs that are with it.

8 So in Massachusetts, for example, you
9 have, just as we would in New Hampshire, you
10 would have a -- we would encourage customers
11 to participate in the energy efficiency
12 programs that would allow them to certainly
13 optimize their energy usage, reduce
14 unnecessary wasted usage associated perhaps
15 with the home not being fully insulated as it
16 could be. But Massachusetts also has a
17 low-income discount rate. So there is -- so
18 the success rate will differ.

19 In Connecticut, for example, they have
20 some differing rules about the total amount
21 that can be forgiven. They have differing
22 rules about who can participate that is
23 broader than just hardship customers, and so
24 they have a different success rate associated

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1 with it. We've also seen, as is recommended
2 in this settlement, that as you reduce the
3 amount of arrears as the trigger, customers
4 are more likely to be able to succeed. When
5 we see the arrears get so large, at some
6 point customers just can't see a way out of
7 that. So reducing that amount has become
8 something we've seen as a benefit.

9 Q. Is there any data to indicate in Connecticut
10 or Massachusetts that fewer low-income
11 customers are being disconnected as a result
12 of the program?

13 A. (Conner) Well, certainly we have the data
14 that indicates that the customers who are
15 protected, we assume that they avoided
16 disconnects associated with the program.

17 When it comes to the disconnects that
18 are completed, the reality is that we have
19 more customers eligible for disconnect than
20 resources probably would ever allow us to,
21 you know, and would we ever want to redo
22 every customer that was eligible. Although,
23 AMI does introduce that capability, by the
24 way.

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1 But I think that that's where we run
2 into the challenges of trying to tick and tie
3 the exact impact. But I do believe that as
4 we get more data -- and I know I provided
5 information in the filings that Charlie
6 Herrick has developed with the National Law
7 Foundation. I got the name not exactly
8 correct. But anyway, he has published a
9 study. He has some data in there that
10 demonstrates some of the benefits associated
11 with the arrearage management programs across
12 the country.

13 Q. Mr. Colton, do you have any information to
14 share as a result of your experience with
15 these programs elsewhere?

16 A. (Colton) Yes. And just to make the record
17 clear, Charlie Herrick works for the National
18 Consumer Law Center here in Boston.

19 I do. I've worked with arrearage
20 management programs throughout the country.
21 And one of the things that I mentioned
22 upfront was that AMP doesn't provide simply
23 benefits to the participants, but it provides
24 benefits to customers, irrespective of their

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1 income. And you're touching on what I
2 intended to say by that. The
3 non-income-eligible customers don't receive
4 direct benefits. But some of the benefits
5 that have been experienced, and that all
6 three witnesses -- Ms. Conner and myself and
7 Ms. Noonan -- have talked about are a
8 reduction in uncollectibles; a reduction in
9 collection costs, whether it be truck roll
10 rates or the issuance -- the issue of
11 disconnect notice -- anyway, the provision of
12 a disconnect notice. One of the big benefits
13 is a reduction in working capital, because as
14 people reduce their arrears, the Company
15 doesn't have to carry those arrears for as
16 long.

17 One thing that hasn't been mentioned is
18 fewer people have final bills because the
19 participants have their housing stabilized.
20 And by having their housing stabilized, the
21 Company is able to preserve a revenue stream
22 that it might otherwise lose. One of the
23 things that Amanda, Ms. Noonan, talked about
24 was the improved communications between the

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1 utility and social service agencies, which
2 not only benefits the participants, but
3 benefits all customers.

4 And there is data. I do a lot of work
5 in Pennsylvania, where customers who both
6 participate in the affordability program and
7 in the arrearage management program move from
8 being hundreds and hundreds of -- \$5-, \$6-,
9 \$7-, \$800 in arrears to paying between 85 and
10 95 percent of their bills. In New Jersey,
11 the evaluation that was found or that was
12 performed for the board of public utilities
13 for the state regulatory commission found
14 that participants were paying -- that many
15 participants, most participants, were paying
16 more than 90 percent of their bill, and many
17 participants were paying more than
18 100 percent of their bill over time. So the
19 combination of customer payments and public
20 assistance benefits was more than covering
21 their bill. So the experience in -- well,
22 one last state. Colorado, which has a
23 similar program, found that the improvement
24 occurred in a couple of ways. Number one was

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1 what's called the payment coverage ratio, so
2 low-income customers were paying a higher
3 percentage of their bill. No. 2 was the
4 payment regularity ratio. So instead of
5 making six payments a year, customers were
6 making eight and nine payments a year. And
7 one was the continuity of payments. So
8 customers, instead of making a payment in
9 month one, skipping months two and three, and
10 then making it all up in month four were
11 paying, making a payment in month one and a
12 payment in month two and a payment in month
13 three. So the risk of nonpayment to the
14 utility and therefore to everybody else was
15 reduced. And this all gets reflected not
16 explicitly, but in the next rate case. And
17 what it means is that the overall revenue
18 requirement that the Company will need to ask
19 for will be lower. Whether or not we can
20 tell you that it's \$17 or \$170, we know that
21 the reduction is more than zero and that it's
22 likely substantial.

23 Q. Thank you.

24 Can you, probably Ms. Conner, talk about

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1 some of the rules associated with the
2 program, or is that something to be figured
3 out by the stakeholder group? For instance,
4 a customer, you know, goes along and makes
5 the monthly payment for six months and then
6 misses the seventh month. Does that mean
7 that customer is off the program? Do they
8 have any ability to get back on the program?
9 What are those kind of details?

10 A. (Conner) So some of those details,
11 Commissioner Bailey, have indeed been worked
12 out, that customers who miss two payments
13 could come back on to the program, but they
14 would need to make up those missed payments.
15 So let's say that we've identified that their
16 average monthly payment to cover their usage
17 would be \$100. If they missed month seven
18 and eight, so now they haven't paid \$200,
19 they would need to make that up to
20 re-establish on to the program. Also, if the
21 customer we've discussed, if the customer
22 completes the program successfully, then
23 there is a period at which they would not be
24 eligible to start again on the program. And

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1 subject to check, I believe we settled on 12
2 months in regards to that amount. And then
3 the amount of arrears, of how much the
4 customer is in arrears, is that we were,
5 subject to check -- let me just double-check
6 here on my notes. We had -- our settlement
7 assumes \$150 threshold of arrears for a
8 customer to qualify for the program and 60
9 days in arrears. So those are some of the
10 levers that have already been developed. But
11 there's the enrollment after shut-off. Those
12 details the group needs to decide on. So
13 there's still some nits. And those
14 particular nits impact our programming. So
15 I'm so pleased that we're going to kick this
16 off very quickly and we're going to have a
17 short time frame to resolve this so that we
18 can get the program in place and offer this
19 as quickly as possible.

20 Q. So if a customer is successful and pays 12
21 months and their arrears are forgiven, and
22 then they get into trouble again the next
23 year, what happens?

24 A. (Conner) My understanding is that the

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1 customer would have to be out for 12 months
2 before they could start a new enrollment.

3 Q. So they could get disconnected in those 12
4 months if they stopped paying?

5 A. (Conner) Yes, they could get disconnected in
6 those 12 months if they completely stopped
7 paying.

8 Q. Okay. Let's talk a little bit about the
9 stakeholder group. Who do you expect to
10 participate in the stakeholder group?

11 A. (Conner) Well, I would anticipate engagement
12 by interested parties, Staff, The Way Home.
13 Certainly our regulatory team would be
14 involved in this stakeholder process, along
15 with the OCA, and maybe the community
16 aggregators.

17 Q. Ms. Noonan, do you have an expectation of who
18 will participate? And then I want to ask
19 about why Staff is not a voting member. But
20 who do you expect to participate? And do you
21 expect the participation will be adequate to
22 represent all the different interests?

23 A. (Noonan) Sure. So my expectation is that the
24 parties to the settlement that are interested

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1 in this topic will be part of the stakeholder
2 group. We didn't want to limit the
3 stakeholder group to only the parties that
4 participated in this proceeding and signed on
5 to the settlement. So Ms. Conner referenced
6 the Community Action Agencies, they may be
7 interested in participating. There are other
8 community-based advocacy groups, such as
9 Listen, I think it's called the Front Door in
10 Nashua, other groups that provide assistance
11 to this targeted population of
12 financial-hardship customers that have
13 insight and knowledge to add to how to
14 implement this in a way that makes sense to
15 New Hampshire, all those small details that
16 we're talking about at this point. So
17 that's -- of those groups who will
18 participate, it's hard to say. But my hope
19 is certainly that some number of them do
20 participate in the group.

21 Q. Is there any concern that nobody will
22 participate except OCA and Staff and the
23 Company?

24 A. (Noonan) I don't have that concern. I

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1 suspect that at a minimum, Community Action
2 Agencies and New Hampshire Legal Assistance,
3 on behalf of The Way Home, will participate.
4 Mr. Tower is nodding his head, so I think
5 that's a safe assumption. And certainly
6 we'll do outreach to other folks to see if
7 they're interested as well.

8 Q. Okay. Thanks. Why is Staff not a full
9 member of the group? Why does Staff's
10 position not count, Ms. Conner?

11 A. (Conner) So this is something that we worked
12 through on the settlement, that Staff would
13 be on the working committee. Eversource
14 would lead it. And the request for them to
15 be a non-voting member was requested by the
16 Staff.

17 Q. Okay. Ms. Noonan, can you explain why that
18 is?

19 A. (Noonan) Sure. I think that Staff viewed
20 this similarly to the -- I'm going to get the
21 wrong acronym -- I think it's the EESE Board,
22 where Staff participates in the meetings,
23 Staff contributes to the meetings, but Staff
24 is not a voting member of that group. The

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1 stakeholders that are most closely involved
2 with the actual community that participates
3 in this program are the voting members of the
4 group. And that was the basis for this, and
5 to put this commitment and responsibility out
6 to the people that work with this constituent
7 base every day.

8 Q. Okay. The report that we're going to get 120
9 days after the order if we approve the
10 settlement agreement, it's going to describe
11 areas of consensus and areas of disagreement.
12 Will the Commission approve the final program
13 design?

14 A. (Noonan) That would certainly be my
15 expectation.

16 A. (Horton) Mine as well. That was Doug Horton.

17 Q. So if there are disagreements on the program
18 design, the Commission will have to sort that
19 out and make decisions about it. Everybody
20 agrees with that?

21 MR. BURKE: Commissioner Bailey,
22 sorry to interrupt. I think Mr. Colton might
23 have been trying to say something, but he was
24 on mute. I just wanted to flag that in case

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1 he had something to add to your last two
2 questions.

3 COMMISSIONER BAILEY: Thank you.
4 Mr. Colton.

5 A. (Colton) I agree with that, that the
6 agreements -- that the Commission will have
7 the final say.

8 Q. All right. Thank you.

9 COMMISSIONER BAILEY: That's all
10 the questions I have, Madam Chair.

11 CHAIRWOMAN MARTIN: Okay. Ms.
12 Robidas, are you in a position to continue or
13 do you need a break? You're okay? Okay.
14 Then I'll ask my questions now.

15 BY CHAIRWOMAN MARTIN:

16 Q. We heard testimony that in the current
17 program, there is a convenience fee and that
18 the related charge is 1 percent to 2-1/2
19 percent. So is the current convenience fee a
20 fixed fee, or is it variable based upon the
21 actual charge?

22 A. (Conner) The convenience fee is a fixed fee
23 that we have negotiated based on a series of
24 bids that we put out an RFP for pricing on

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1 this. So it is a fixed fee. As I mentioned,
2 it then has some options for the provider to
3 review those fees to adjust it. Yeah, so
4 it's a fixed fee for the customers.

5 Q. Can you clarify, then, the 1 percent or 2-1/2
6 percent, how that factors in?

7 A. (Conner) I'm sorry for creating that
8 confusion, Chairwoman Martin. I was trying
9 to explain and describe the magnitude of
10 scale on the various payment channels. So
11 the numbers are for illustrative purposes.
12 They are not exact to the decimal point.

13 So as I mentioned, if a customer is on
14 auto pay and we're drafting from their
15 checking account, that is one of our lowest
16 cost methods, and it's a couple cents
17 typically in utilities to cover that cost.
18 If they pay by check, it's typically around
19 10 cents. And if they're paying by credit
20 card, the fee that we're paying behind the
21 scenes is typically in the range, once
22 negotiated, of between 1 and 2 percent, as I
23 mentioned. That cost varies depending on the
24 amount of payments. And our vendors have

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1 reminded us obviously as we expand the
2 program. So if we were to expand it to
3 include, for example, recurring payments, and
4 we would expect an increase in the volume,
5 then we would also expect some lowering of
6 the total cost. But it depends on the amount
7 of customers you're serving, the amount of
8 customers that would be choosing that
9 channel. And then we put that out for bid,
10 and those bids come back to us. So I was
11 just trying to give you a magnitude of scale
12 using a \$100 bill. So a \$100 bill, if
13 they're paying by check, it costs us 10
14 cents. If they're paying by auto pay, it
15 costs us 2 to 3 cents. And if they're paying
16 by credit card, it could be between \$1 and
17 \$2.

18 Q. Okay. And on -- why is it limited to the
19 one-time -- I know it could be done monthly.
20 But why is the agreement limited to the
21 one-time payment versus automatic or
22 recurring?

23 A. (Conner) Very good question. And so as we
24 looked at the refiled settlement, our

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1 penetration rates we're assuming in year one
2 is 5 percent, and it ramps up over the four
3 years of 8.9 percent. And that, again, was
4 informed by our experience in Connecticut.
5 Our original filing had that ramp-up rate
6 increasing more steeply. And obviously, that
7 penetration rate impacts the cost. So as I
8 mentioned, the cost in the refiled settlement
9 is actually lower by 745,000.

10 But let's talk about if we were to offer
11 recurring. And I had my team pull this data
12 together. As I mentioned, we have 92,000
13 customers on recurring payment. If every one
14 of those customers said I am going to change,
15 instead of it coming out of my checking
16 account, it's going to come out of a credit
17 card, then that would be 12 payments a year
18 that we would be covering the cost of, and it
19 adds another 1.5 million to the cost. So
20 instead of the total program being
21 2.081 million, it would be that plus another
22 1.5 million. Now, I would submit that not
23 all 92,000 are going to do that.

24 So let's assume only half of them do

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1 that. You're still adding 750,000. It's the
2 fact that if it is recurring, it's going to
3 occur 12 times a year. When we actually
4 believe if it's a one-time payment, the
5 average customer is probably only going to do
6 maybe three payments a year using that
7 channel. So it just exposes it to a lot more
8 cost. And we were concerned about the burden
9 on rates.

10 Q. Okay. Thank you. There was mention about
11 the \$150 in the arrears forgiveness program
12 and the 60 days. How were those arrived at?
13 Is there data to support that?

14 A. (Conner) So we've been involved in the
15 arrearage management programs at Eversource,
16 and I'm sure Mr. Colton may have further to
17 build on to this, but we've been involved,
18 gosh, since I've been with the Company, since
19 2002. And the programs have evolved. We've
20 learned a lot of best practices. We've
21 learned that the one-year horizon really is
22 the best. We used to have much longer ones.
23 We've learned that reducing the threshold
24 allows for -- that lower arrears allows for

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1 customers to be able to see that and be able
2 to say, you know, I can make that happen,
3 it's not so daunting, versus waiting until it
4 gets so huge that they feel like it's just
5 untenable and they're going to need to --
6 they're just not ever going to be able to
7 catch up. So that was with discussions and
8 collaboration with The Way Home and Staff to
9 develop the final selection of 150.

10 Q. Mr. Colton or Ms. Noonan, if you want add,
11 please?

12 A. (Colton) With respect to your question about
13 whether there is data behind that \$150, the
14 answer is yes. In my direct testimony, I
15 provided an empirical basis for setting the
16 number. I believe that my recommendation was
17 \$120, but through discussions \$150 was agreed
18 upon.

19 And what you want is, you want a couple
20 of things. You want the arrearage
21 forgiveness to kick in before someone might
22 otherwise lose their service to a
23 disconnection. The original proposal was
24 \$300. But the data in my direct testimony

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1 showed that there were a lot of customers --
2 I don't remember the exact number right
3 offhand. But there were a significant number
4 of customers who would have had service
5 disconnected before they would have become
6 eligible for arrearage forgiveness, and we
7 wanted to avoid that. On the other hand, you
8 don't want to set the numbers so low that
9 somebody who just happens to miss a payment
10 can be -- can enter the arrearage management
11 program and have that payment go away. The
12 arrearage management program is intended to
13 address customers who are getting so far
14 behind, that they're beginning to pose a risk
15 of nonpayment in the future, not only of
16 their past-due arrears, but of their bills
17 for current service going forward. So that
18 number needs to be not too high, but it needs
19 to be not too low as well. And there is --
20 that empirical analysis was presented in my
21 direct testimony.

22 Q. Thank you for that.

23 Ms. Noonan, did you want to add
24 anything?

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1 A. (Noonan) I think the only thing I would add
2 to the conversation is that, if you think
3 about an average monthly bill for a customer
4 using an all-in rate of between 18 and 19
5 cents, their bill is between \$130 and \$140 a
6 month. And so having \$150 past-due balance
7 that is 60 days past due, as Mr. Colton
8 pointed out, they are in jeopardy of being
9 disconnected. It's not so low that it's just
10 their current monthly bill, but they are now
11 in danger of being disconnected. But it is
12 still a manageable amount, hopefully a
13 manageable amount for the customer to try to
14 deal with as opposed to higher amounts, \$300,
15 \$400, \$500, which would be become
16 overwhelming to customers and a financially
17 difficult situation.

18 Q. Okay. Thank you.

19 Similar question on the \$12,000 annual
20 cap on forgiveness. What is that number
21 based on?

22 A. (Noonan) So we asked -- we looked at the
23 range of past-due balances owed by Eversource
24 customers in New Hampshire who were currently

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1 coded as financial hardship, and we selected
2 that balance as kind of a middle range. It
3 would cover the majority of customers, not
4 all of the customers. Some customers have
5 balances considerably higher, some customers
6 have balances considerably lower. But that
7 seems to encompass more than 50 percent. I
8 don't recall the percentage offhand of
9 customers with past-due balances currently.

10 Q. All right. Thank you. I was just surprised
11 by the size of that. But it sounds like it's
12 a number that customers actually have.

13 We heard testimony earlier about on-time
14 payments, and there was a discussion about if
15 you missed a payment entirely, what happens
16 then? What if your payment is just late?

17 A. (Conner) So I do want to take a moment while
18 we're on this to clarify if a customer misses
19 a payment or two payments, how they
20 re-enroll. I was incorrect. We have not
21 landed on the final rules on that, so we will
22 be developing that in collaboration.

23 If a customer is just late, that they
24 wouldn't have been considered -- we would --

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1 there is no issue with the payment being late
2 because we allow for two months before the
3 plan breaks, typically. So just being late
4 wouldn't cause them to break the plan.

5 Q. Okay. Thank you for clarifying that.

6 Back on the issue around stakeholder
7 group composition. It says any "interested
8 party," I think is the language, can
9 participate, or "any other interested
10 parties." And it sounds that Staff would be
11 non-voting, though all other interested
12 parties will be voting. Is there a plan to
13 come up with a way to manage that, given that
14 you don't know who the interested parties
15 will be?

16 A. (Noonan) I think one item for the stakeholder
17 group to address first is its rules of
18 governance and how it would manage votes and
19 how it would move forward and who the various
20 members are.

21 Q. But is it definitely planned to be a voting
22 group, and so out of it will come the result
23 of a vote? Or is that still out there for
24 debate?

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- 1 A. (Colton) If I understand your question
2 correctly, I think the expectation is it
3 would be a disappointment to all of the
4 parties who agreed to the stipulation if it
5 came down to having a decision made on a 5-4
6 vote. The expectation is that this working
7 group will work in ways that are similar to
8 other working groups that have been
9 constituted in New Hampshire, for example, on
10 low-income energy efficiency, and that the
11 notion of a vote isn't what people had in
12 mind. Again, at least from The Way Home's
13 perspective, if a decision came down to a 5-4
14 vote, that would be -- that would not be what
15 was hoped for through the working group. And
16 again, the working group is intended to be
17 constituted in a way similar to other working
18 groups. So I think the big expectation of
19 other members are the Community Action
20 Agencies, or probably the Community Action
21 Association would be the other primary
22 expected participant, without talking on
23 behalf of the CAPS, of course.
- 24 Q. Anyone else have a different perspective, or

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1 is that the understanding?

2 A. (Conner) You know, that would be my
3 perspective. I think Mr. Colton has it
4 correct. We are interested in, Eversource,
5 in designing a program and implementing a
6 program that makes sense for New Hampshire
7 customers. And we are really looking for the
8 input from stakeholders, the Community Action
9 Agencies, from The Way Home, from Staff, that
10 help us design a program that meets the needs
11 of New Hampshire, which is different than
12 other states. And so, as I said, the
13 programs that we manage in Massachusetts and
14 Connecticut vary. Even within Massachusetts,
15 the programs used to vary Eastern Mass. to
16 Western Mass. So it's about designing it for
17 what makes sense for your customer base. And
18 I agree, I don't expect this to be
19 contentious. Rather, I expect this to be
20 really gaining an understanding and coming to
21 the best decision. And I agree, I don't
22 expect anything to be a 5-4 vote. I would
23 expect we would come to agreement on
24 everything.

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1 Q. Okay. Thank you.

2 I have one last question. Eligibility.

3 We heard some testimony about that. What is
4 the process for reassessing eligibility, and
5 how often does that plan to be done?

6 A. (Conner) Well, today, customers can let us
7 know if they are eligible for hardship. We
8 code it once a year into the systems. We
9 also work with the agencies to get that
10 information. So it's good -- once we do code
11 them for hardship, that protection is good
12 for a year. So a customer can call us up,
13 and we will ask them questions trying to
14 identify whether they might qualify for
15 hardship. Because in these times,
16 particularly in these times, we really are
17 encouraging our customer service
18 representatives to help our customers,
19 because some of these customers with this
20 pandemic may have not qualified before and
21 may qualify now. So we're encouraging our
22 customers. We're having a conversation with
23 them, talking about the various ways they may
24 qualify and then encouraging them to reach

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1 out to those agencies. And they can provide
2 us with documentation that they are
3 income-eligible.

4 Q. Okay. Thank you.

5 CHAIRWOMAN MARTIN: Any redirect,
6 starting with Mr. Fossum?

7 MR. FOSSUM: Yes, just a couple.
8 And I think the questions that I have I think
9 Ms. Conner kind of got to, but I want to make
10 sure it's clear.

11 REDIRECT EXAMINATION

12 BY MR. FOSSUM:

13 Q. Ms. Conner, there were a couple questions
14 from the Commissioners about sort of the
15 operation of the program, missed payments,
16 disconnects, things like that. Do you
17 remember those lines of questions,
18 particularly from Commissioner Bailey?

19 A. (Conner) I do.

20 Q. And while you had given some information
21 about that, would it be fair to say that
22 while the items that you discussed around,
23 for instance, missed payments, that those
24 things have been talked about amongst the

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1 parties but are not memorialized in the
2 settlement itself?

3 A. (Conner) That is correct.

4 Q. And so those will be items that will be
5 subject to some further detail work with the
6 stakeholders.

7 A. (Conner) That is correct.

8 Q. Thank you.

9 MR. FOSSUM: That's all I have.

10 CHAIRWOMAN MARTIN: All right.

11 Mr. Burke, any redirect?

12 MR. BURKE: No, not for me at this
13 time, Madam Chair. Thank you.

14 CHAIRWOMAN MARTIN: Okay. Thank
15 you.

16 Ms. Amidon.

17 MS. AMIDON: No. Thank you.

18 CHAIRWOMAN MARTIN: Okay. Well,
19 thank you to all the witnesses. I think at
20 this point we will take a lunch break until
21 2:00. We'll go off the record.

22 (Lunch recess taken at 1:12 p.m, and
23 the proceedings resumed at 2:15 p.m.)

24 CHAIRWOMAN MARTIN: Okay. Let's go

1 back on the record.

2 Mr. Wind, do you know if we have
3 anyone here for public comment? If we do,
4 I'd like to take them before closings.

5 MR. WIND: I have not had anyone
6 successfully make contact with me. So no one
7 has contacted me through Webex, and I have
8 not received any communications from either
9 the Executive Director or the receptionist.

10 CHAIRWOMAN MARTIN: All right.
11 Thank you. Then I think we need to deal with
12 exhibits before we move to closing.

13 The settlement agreement provided
14 that all parties agree to admission of the
15 exhibits as full exhibits. So we will strike
16 I.D. on 5 through 58 and admit them as full
17 exhibits. However, I do note that those that
18 consist of prefiled testimony that was not
19 adopted by a witness present during the
20 meeting will be admitted as a full exhibit as
21 documentary evidence. I just wanted to put
22 that on the record.

23 Okay. Let's move on to closings
24 and start with Mr. Kreis.

1 MR. KREIS: I've gotten used to
2 being first now.

3 Let me just start by thanking you
4 for the ruling that you just made. I think
5 that admitting those non-attested-to exhibits
6 as documentary evidence I think is really the
7 right thing to do. So thank you.

8 I am just going to start right in
9 with the question that -- or the questions
10 that Chairwoman Martin and Commissioner
11 Bailey asked us explicitly to address, and
12 that is the question of whether Eversource's
13 investment in AMR meters, beginning in 2013,
14 as distinct from AMI meters, was prudent.
15 Chairwoman Martin's specific question was:
16 Do we need to make a prudency finding without
17 something in the settlement to that affect?
18 That something, of course, is an explicit
19 statement in the settlement agreement to the
20 effect that this investment was actually
21 prudent.

22 I have to be very careful about
23 what I say on this subject. My signature
24 appears on the settlement agreement. That

1 obligates me to advocate for your approval of
2 the settlement agreement without change or
3 modification. If you were to disallow some
4 or all of Eversource's AMR investment as
5 imprudent, you would be making a decision
6 that is inconsistent with the settlement
7 agreement. I do not recommend you take that
8 particular course of action.

9 At the same time, as an attorney, I
10 have an obligation to be candid with this and
11 any other tribunal before which I appear, and
12 I have to tell you that if this settlement
13 contained an affirmative agreement that
14 Eversource's AMR investments were prudent, I
15 would not have signed the settlement
16 agreement. Had this rate case been fully
17 litigated, we would have introduced the
18 prefiled written testimony of one of our
19 consultants, Paul Alvarez, that has been
20 marked for identification and just admitted
21 into the record in this proceeding as
22 Exhibit No. 27. Mr. Alvarez's written
23 testimony was an effort to make an
24 affirmative case that Eversource's AMR

1 investment, which began in 2013, should be
2 disallowed in its entirety on grounds of
3 imprudence. I am not relying on Mr.
4 Alvarez's testimony as record evidence here
5 in support of the settlement agreement. In
6 my judgment, you really ought to treat that
7 exhibit as an offer of proof on the question
8 of what Mr. Alvarez would have testified to
9 on this subject on the date it was filed,
10 December 20th of last year. I'm reasonably
11 certain that had Mr. Alvarez actually taken
12 the stand in this hearing, or if he were to
13 take the stand in the future should you
14 reject the settlement, he would be subjected
15 to vigorous cross-examination from my
16 colleagues representing Eversource. I also
17 can't rule out the possibility that Mr.
18 Alvarez would correct errors in his
19 testimony. But make no mistake. In a fully
20 litigated case, we would have introduced the
21 Alvarez testimony and made him available for
22 cross-examination. On behalf of Eversource's
23 residential customers, I bargained away my
24 opportunity to do that. I did that knowingly

1 and deliberately, based on my judgment that
2 overall the terms of the agreement result in
3 rates that are just and reasonable.

4 So my answer to Chairwoman Martin's
5 question is, no, you do not need to make a
6 prudency finding with respect to the AMR
7 investment. In fact, I would go so far as to
8 suggest that the record adduced here does not
9 even support such a finding. Well, how then
10 can you approve the settlement? The answer
11 is that the Commission resolves rate cases
12 all the time without making an affirmative
13 finding that each and every item in rate base
14 is the result of a prudent investment. There
15 is a pile of weighty questions that is, once
16 again, being, I guess, elided here: Who
17 carries the burden of proof when it comes to
18 prudency? Is a rate case decision res
19 judicata should someone in the future want to
20 revisit the prudence of investments in the
21 test year rate base reflected in the filing
22 that began this proceeding? Is the whole
23 notion of factual findings even applicable
24 here, given the Commission's recent and

1 troubling suggestion in Order No. 26,417 that
2 rate proceedings aren't even adjudicative in
3 nature and are instead examples of a third
4 flavor of decision-making, call it
5 strawberry, or more properly the so-called
6 "legislative proceeding"?

7 As to all of this, my earnest and
8 respectful recommendation is: Don't go
9 there. Approve the settlement agreement. We
10 agreed upon and explicitly set forth a just
11 and reasonable return on equity, a just and
12 reasonable capital structure, and a just and
13 reasonable overall revenue requirement. We
14 put the Company on a path toward AMI
15 deployment, even though advanced metering is
16 an important step in the inevitable march
17 toward the obsolescence of legacy electric
18 utilities, except perhaps as to literally
19 everything but poles and wires. Not meters,
20 not billing, not customer relationships, not
21 a dynamic retail marketplace. We accelerated
22 the depreciation of the AMR meters because we
23 can't wait to see the last of this technology
24 when AMI meters are so customer-empowering.

1 I commend to your favorable
2 attention certain key provisions of Section
3 14 of the settlement. In Section 14.3,
4 Eversource agreed to include a symmetrical
5 decoupling mechanism in its next rate case.
6 That is a big deal because Eversource already
7 has a decoupling mechanism: A
8 heads-I-win-tails-you-lose thing called the
9 "lost revenue adjustment mechanism" that
10 supposedly makes Eversource whole for revenue
11 lost to ratepayer-funded energy efficiency.

12 So what we'll get in the next rate
13 case is symmetry, not the upward ratchet we
14 have now, but a mechanism that in appropriate
15 circumstances can and will actually adjust
16 rates down. When this rate case began, I was
17 prepared to insist on symmetrical decoupling
18 now. But then, as everybody knows, the
19 pandemic happened. It is not good for
20 ratepayers to implement decoupling during a
21 pandemic, and that's the reason it's not here
22 in this settlement. And we actually deferred
23 the implementation of decoupling in the
24 recently concluded Liberty Utilities electric

1 rate case, DE 19-064, as well.

2 Meantime, Section 14.6 of the
3 settlement means we are finally going to make
4 near-term progress on a new and better
5 time-of-use rate option for residential
6 customers. I'm really enthusiastic about
7 that because, to be frank, although I never
8 hesitate to criticize Eversource when the
9 Company deserves criticism, I am deeply
10 respectful of the Company's rate analysts.
11 You know from having listened to Doug Horton
12 and Ed Davis and Erica Menard, who testified
13 here, that they are smart and capable folks.
14 We will need their help in getting the new
15 time-of-use rate right. And in Section 14.6,
16 they have committed themselves to providing
17 it. This is very good news for residential
18 customers, and indeed all Eversource
19 customers.

20 Here's my penultimate point: I
21 want to thank my colleagues from the Energy
22 and Utility Justice Program of New Hampshire
23 Legal Assistance, along with the relevant
24 folks from Eversource, for their work on

1 implementing an arrearage management program
2 for the first time. The pandemic has loomed
3 over this proceeding like the Sword of
4 Damocles, but this is another example of a
5 crisis that we should not waste. In other
6 words, this is an especially opportune moment
7 to launch a program that allows and
8 encourages the effective management by
9 responsible but economically stressed
10 customers of whatever arrearages they amass.
11 Since all customers ultimately cover the cost
12 of unrecovered revenue, this is good news for
13 all customers, regardless of their economic
14 status.

15 And finally, I would like to thank
16 my colleagues on the Commission Staff and my
17 colleagues at Eversource for their good work
18 and their good faith over the past couple of
19 months. The negotiations that led to this
20 settlement agreement were respectful, they
21 were thoughtful, and they were constructive.
22 Relations among the key players are better as
23 a result, and we are well poised for a good
24 near-term future of Eversource as a regulated

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1 New Hampshire electric distribution utility.
2 The rates and terms of service reflected in
3 the settlement agreement are just, reasonable
4 and in the public interest. So therefore, on
5 behalf of residential customers, I recommend
6 that you approve the settlement agreement
7 without change or modification. Thus
8 concludes my closing argument.

9 CHAIRWOMAN MARTIN: Thank you very
10 much.

11 Ms. Buchanan, are you planning to
12 make a closing?

13 MS. BUCHANAN: I am. Thank you,
14 Chairwoman Martin and Commissioner Bailey.

15 Chairwoman Martin, in regards to
16 your questions for the group to answer during
17 closing statements, I will defer to the
18 attorneys in the room today. However, Clean
19 Energy New Hampshire would like to thank
20 PSNH, Staff, OCA, and all of the parties for
21 coming together to agree on the settlement
22 agreement, which we support.

23 Though several of the issues which
24 were most important to us are not fully

1 resolved, such as electric vehicle make-ready
2 and demand charge alternatives, symmetrical
3 revenue, decoupling, updated efficient
4 streetlight tariff and time-of-day rate, we
5 are satisfied with the commitments included
6 in the settlement agreement to address and
7 resolve these issues. We look forward to
8 working with the Company and other parties to
9 make progress on these matters. Relevant to
10 our testimony, we are also supportive of the
11 DRAM being considerably reduced in scope as
12 the RRA and to ensure it will be included in
13 the net metering tariff.

14 In conclusion, Clean Energy New
15 Hampshire supports the settlement agreement
16 and encourages the Commission to approve it.

17 CHAIRWOMAN MARTIN: All right.
18 Thank you.

19 Mr. Burke.

20 MR. BURKE: Thank you, Chairwoman
21 Martin and Commissioner Bailey. I'll just
22 note at the outset that The Way Home did not
23 focus on the AMR issues, so we will also
24 defer to our other colleagues in this

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1 proceeding to further address how that should
2 be dealt with.

3 But I would like to say that The
4 Way Home does support the settlement
5 agreement that has been presented to you in
6 this hearing, particularly with respect to
7 the creation of the New Start program. And
8 The Way Home believes that it is appropriate
9 for you to approve the agreement and the New
10 Start program for the reasons the witnesses
11 have testified to today. The Way Home
12 submits that the record demonstrates that the
13 New Start program will help make bills more
14 affordable for low-income customers by
15 creating a mechanism for dealing with what at
16 times can be overwhelming arrearages. And in
17 doing so, the program will help customers
18 with a financial hardship avoid having to
19 make the dire choice between paying their
20 electric bills or paying for other basic
21 needs, such as food or medicine. Based on
22 the testimony of the witnesses in the record
23 before you, The Way Home would suggest that
24 the New Start program is a win for both

1 customers, and as you heard from the consumer
2 advocate a moment ago, and for the Company,
3 because it could lead to more predictable and
4 stable payment patterns, and may also reduce
5 collection costs and minimize the pressure on
6 working capital, among the other benefits
7 that you heard about today from the
8 witnesses.

9 In addition, you've heard some
10 testimony and comments about the impacts of
11 the pandemic on this proceeding. And we
12 would ask the Commission to take note of the
13 devastating economic impact that the pandemic
14 is having and will continue to have for some
15 time on low-income customers. We share the
16 consumer advocate's statements from a moment
17 ago about the impact of the pandemic on the
18 New Start program, and we would submit that
19 this is another factor that weighs in favor
20 of approving the program, in addition to
21 everything that's in the record before you in
22 this proceeding.

23 Finally, we would like to commend
24 the Company for being the first to propose an

1 arrearage management program in New Hampshire
2 through the New Start program, and we very
3 much appreciate the work of all the parties
4 in this docket that made this agreement
5 possible. We're looking forward to
6 continuing that work with the parties in the
7 New Start stakeholder group to help get the
8 program up and running should the Commission
9 approve this settlement. The Way Home
10 believes that the data we will receive and
11 the lessons we will learn through that
12 stakeholder group will be important to not
13 only monitor and evaluate New Start, but to
14 help build on this program in New Hampshire
15 so that other utilities might one day follow
16 the Company's lead on this issue.

17 In closing, The Way Home believes
18 that the New Start program is in the public
19 interest and will aid in establishing just
20 and reasonable rates, and for these reasons
21 we recommend that the Commission approve the
22 settlement agreement. Thank you.

23 CHAIRWOMAN MARTIN: Thank you.

24 And Mr. Coffman.

1 MR. COFFMAN: Yes. Thank you,
2 Chairwoman Martin and Commissioner Bailey.

3 On behalf of the AARP, I do
4 recommend that you approve this settlement
5 agreement. It was the result of a lot of
6 discussion, and it wasn't an easy decision of
7 AARP to sign this settlement. As you know,
8 we came into this with quite a bit of concern
9 once the pandemic hit, that this was really
10 not the time for a significant rate increase.
11 But after much discussion and much
12 negotiation, we have come to the opinion that
13 this settlement agreement has more to benefit
14 consumers than litigating this case would.
15 And I can just briefly go through what we see
16 as the things that make this beneficial for
17 consumers in order of probably their
18 significance to the association.

19 One would be the class cost of
20 service treats customers equally as the way
21 of the spread under the agreement. That is
22 much preferable to the way that Dominion
23 [Eversource] had filed its case.

24 We also are satisfied with the

1 customer charge. We do have a preference or
2 a particular focus on low-usage customers.
3 They include a lot of seniors, as well as a
4 lot of low-income folks, and people who do
5 like to conserve. So we think that there are
6 a lot of public benefits to keeping that
7 customer charge low. Obviously, it had
8 already gone up somewhat with the temporary
9 rate system that you have in New Hampshire.
10 But we were reassured that it was not going
11 up any further until at least the next
12 proposal, and that even the step increases
13 going forward will be put in place on a
14 volumetric basis. And that provided us some
15 comfort.

16 We are happy that there is a
17 stay-out provision. We are happy with the
18 New Start arrearage management or arrearage
19 forgiveness management program. AARP has for
20 many decades promoted an arrearage
21 forgiveness, and we're very pleased to see
22 that type of program being adopted by
23 utilities across the country. Particularly
24 this year, it seems to be gaining momentum as

1 a trend, and it is shown to be beneficial to
2 all parties when implemented right and a lot
3 of attention paid to it. So we're happy to
4 see that.

5 And I would not weigh in
6 necessarily on the prudence laws in New
7 Hampshire. I have 30 years of specializing
8 in this area of law, but this is my very
9 first New Hampshire case. But I would say
10 that generally we entered into this agreement
11 with the understanding that there was not a
12 specific provision regarding prudence, and we
13 do like the fact generally that commissions
14 are able to review the prudency, and future
15 commissions will be able to review the
16 prudency going forward.

17 So we support the agreement as is.
18 And this has been a very positive experience.
19 Everyone who I have dealt with through this
20 process has been courteous, friendly and
21 helpful, and I appreciate being a part of it.
22 Thank you.

23 CHAIRWOMAN MARTIN: Thank you. All
24 right. Ms. Amidon.

1 MS. AMIDON: Thank you.

2 This petition for permanent rate
3 changes, which is Eversource's first such
4 petition in 10 years, is a complex and
5 detailed proposal that includes significant
6 increases in distribution revenue, ambitious
7 capital spending programs, unique
8 distribution revenue recovery mechanisms and
9 undertakings, such as the New Start
10 forgiveness program and the EV charging
11 infrastructure program, that had not
12 previously come before the New Hampshire
13 Commission.

14 As may be expected, many parties
15 intervened, representing their own interests
16 on how Eversource should modify its proposal
17 and to address their concerns about the
18 filing. The Commission also received
19 hundreds of comments from customers concerned
20 about the rate increase. And in addition to
21 the complexity of the proposal, which
22 resulted in many hours and days of Staff and
23 intervenor review, and the efforts of
24 Eversource to respond to all the discovery

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1 and other requests for information, we are
2 currently in the middle of a pandemic.

3 In light of these factors, it's
4 notable that the settlement agreement before
5 you has unanimous support of all the parties
6 and balances the various interests of those
7 parties in a fair and reasonable manner. Are
8 all the parties totally satisfied with all
9 the terms? Staff and others would be happy
10 to accept more concessions from the Company,
11 but that is the nature of a settlement
12 agreement. And this settlement, as the
13 parties all agree, represents a set of
14 compromises and terms that, as a whole, are
15 in the public interest and result in just and
16 reasonable rates for Eversource and its
17 customers. Some parties have already
18 expressed their position supporting various
19 parts of the settlement agreement, so now it
20 is Staff's turn.

21 Some of the terms that we believe
22 are important are a number of measures
23 designed to improve the ability of Staff to
24 track and evaluate expenditures in the step

1 adjustments and the Company's capital
2 projects. These measures include developing
3 templates for the submission of information
4 to be reviewed by Staff that will set clear
5 expectations for the Company to provide
6 certain papers and certain documents in
7 connection with those investments to prove
8 that those investments were reasonably
9 developed and consistent with least cost
10 planning criteria.

11 Staff and the Company also agreed
12 to engage an independent auditor to conduct a
13 business process audit of the Company's
14 capital budgeting and expenditure procedure.
15 While the Commission could order such an
16 audit at any time, it's particularly
17 appropriate given the recent divestiture of
18 the Company, the long time since its last
19 rate case, and its merger with affiliates,
20 with Eversource, to have that business audit
21 be done at this point.

22 Another aspect of the settlement
23 agreement is the requirement for an
24 engineering review of proposals within the

1 so-called "GTEP" program and the examination
2 of the Company's vegetation management
3 practices, again in the context of least cost
4 planning. These provisions in the settlement
5 agreement, as well as those for a business
6 process audit that I just mentioned, are
7 promising examples of the Company's
8 willingness to work with Staff in a manner
9 that benefits customers.

10 Another key provision of the
11 settlement agreement is a term to allow
12 Eversource to use a reconciling mechanism to
13 cover the costs that may vary from year to
14 year for property tax, PUC assessment costs,
15 PUC and OCA consultant costs, lost revenue
16 due to net metering, in addition to certain
17 costs in the vegetation management program as
18 provided in the settlement agreement. This
19 reconciling mechanism addresses a number of
20 Staff's concerns and is consistent with a
21 similar provision that the Commission
22 approved for Unitil in connection with its
23 external delivery cost recovery mechanism and
24 is appropriate to approve for Eversource at

1 this time.

2 Staff also supports the significant
3 innovative undertakings that the Company has
4 agreed to conduct in the near future,
5 including the development of a new
6 time-of-use rate, provisions for municipal
7 ownership of municipal lighting and
8 maintenance of the lighting, and an
9 investigation of the EV charging
10 infrastructure.

11 Staff also supports the initiation
12 of the New Start arrearage management program
13 and the Company's agreement to create a
14 stakeholder group to help guide the program
15 design.

16 With respect to the Commission's
17 request that attorneys address prudence of
18 plant in service at the time of the test
19 year, Staff agrees that the Commission can
20 only provide rate recovery of investments
21 that were prudently incurred, used and useful
22 investments, as required by RSA 378:28.

23 As you heard from Mr. Chagnon on
24 redirect on Tuesday, and Mr. Horton today,

1 the settlement in this proceeding is a global
2 resolution of all issues, with all the
3 parties, including -- and it includes any
4 assertions related to imprudence. In other
5 words, the settlement agreement assumes that
6 all revenue requirements of capital
7 investment in the test year 2018 that is used
8 in the calculation of rates to recover such
9 revenue are for prudent utility plant, used
10 and useful, in service to the public.

11 The Commission encourages
12 settlement. Among its rules is PUC 203.20,
13 which provides that settlement discussions
14 are confidential. The settlement agreement,
15 signed by all the parties, also states that,
16 quote, "All offers of settlement and
17 settlement discussions relating to this
18 docket shall be confidential, shall not be
19 admissible as evidence in this proceeding,
20 and shall be without prejudice to the
21 position of any party or participant
22 representing any such offer or participating
23 in any such discussion."

24 At the Commission [hearing], the

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1 hearing [Commission] asked about one
2 provision in the settlement agreement and
3 inquired about the underlying issue. The
4 fact is that that provision was part of an
5 overall settlement where the terms and
6 conditions were carefully weighed and
7 represent a compromise of many, many issues
8 in this petition. The provision might be
9 likened to a "black box," but the black box
10 is a device that has been successfully used
11 in the context of other settlements to
12 achieve a just and reasonable resolution of a
13 contested case. The Commission has
14 previously approved such "black box
15 settlements": For example, in Eversource's
16 last rate case, Docket No. DE 09-035 and
17 Unitil's 2016 rate case, DE 16-384. The
18 Commission has appreciated the use of this
19 device to help achieve a settlement, and that
20 is -- and the purpose of this was -- and that
21 was the purpose it was used in this instance.
22 Again, the flexibility to do so allows Staff
23 and the parties to reach an agreement on all
24 aspects of this case, an achievement that

1 serves the public interest.

2 Based on the testimony of all
3 parties at the hearing, the settlement
4 agreement, in Staff's opinion, is in the
5 public interest and will result in just and
6 reasonable rates, and provides a fair return
7 to shareholders. Staff recommends that the
8 Commission approve the settlement agreement
9 as filed in resolution of all issues in this
10 proceeding.

11 As a side note, I would ask the
12 Commission, respectfully, if it could direct
13 the court reporter to provide expedited
14 transcripts so the order may be issued on or
15 before November 28th, as that is one term in
16 the settlement agreement. Thank you.

17 CHAIRWOMAN MARTIN: All right.
18 Thank you.

19 And Mr. Fossum.

20 MR. FOSSUM: Thank you very much.
21 It feels a little weird to start by thanking
22 the parties to this proceeding, given the
23 length of it and some of the difficulty along
24 the way. But I feel it very much appropriate

1 to do so. It's been a long road for this
2 case, made longer by the pandemic and the
3 need to shift how we work and how we live.
4 But in that time we have made meaningful
5 advances through important and respectful
6 discussions, and those have led to this
7 comprehensive settlement agreement that's
8 before you today. I believe this agreement
9 is remarkable because it is joined by every
10 party to this case. We each came to this
11 proceeding with widely different
12 perspectives, goals and values.

13 One of the metrics the Commission
14 generally uses in reviewing settlement
15 agreements is to look at the diversity of the
16 parties and interests in a case. In this
17 case, you have an incredible diversity of
18 opinion and position, and we've come together
19 to reach a mutually agreed-upon solution. I
20 believe it speaks to the value of this
21 agreement that each of these parties believe,
22 in the spirit of compromise, that it supports
23 their goals. The settlement resolves
24 immediate matters to this case, provides a

1 meaningful pathway to further future
2 developments that will help this Company,
3 Staff, the OCA and other parties, and
4 importantly, customers. And with that, I'll
5 turn to reviewing the agreement and why it's
6 our position that it serves the public
7 interest.

8 As to some of the specific terms
9 resolving the near-term issues on rates,
10 early in the agreement, Section 2 notes some
11 concessions made in both directions to reach
12 settlement. Each of these concessions, the
13 recovery of the regulatory asset and
14 deduction on the cost of service, were
15 present in the Company's initial filing,
16 thoroughly debated by the parties, and
17 ultimately agreed upon to make it possible
18 for the parties to arrive at a settled
19 revenue requirement in this case. These
20 mutual concessions were essential to reaching
21 an agreement and, in our opinion, represent a
22 fair and reasonable solution.

23 Additionally, the rate design in this
24 case was adjusted to provide for equal

1 percentage changes to the various customer
2 classes. There was an agreement to keep the
3 customer charge at the temporary rate level.
4 As noted by AARP just a few moments ago, this
5 is a fair and reasonable way to apportion
6 costs. We believe it is an important factor
7 for customers.

8 Further, this agreement provides clarity
9 around the handling of storm costs and
10 provides a measure of clarity and certainty
11 around vegetation management costs in the
12 near term. It has set an appropriate return
13 on equity and defined a reasonable capital
14 structure.

15 In the settlement, we adjusted how we
16 would handle the excess deferred income tax,
17 as you heard Mr. Horton testify, to drive
18 down the cost of recoupment and mitigate
19 impact to customers. In all, we believe
20 these terms are appropriate and support rates
21 that are just and reasonable.

22 With respect to the question raised
23 about the prudence of the AMR investment, the
24 short answer is that there is no need for a

1 separate finding on that issue. As noted by
2 the Staff, under RSA 378:28, we recover on
3 prudent investments. To the extent that the
4 AMR investment or other investments are
5 included in the revenue requirement that is
6 set in this settlement agreement, the
7 presumption is that those investments are
8 prudent and reasonable for recovery. There
9 is no need for an explicit finding on that
10 investment alone, just as there would not be
11 an explicit prudence finding on poles, wires
12 or other equipment. As described by the OCA
13 a few moments ago, the Commission resolves
14 these kinds of matters all the time without
15 such findings, and there's no need for one
16 here.

17 Transitioning now from the near term to
18 a view of future items, and looking first at
19 items in the shorter term, we believe this
20 agreement is reasonable because it provides
21 step adjustments that allow the Company an
22 opportunity for recovery on certain plant
23 placed in service to support customers after
24 the test year. The steps are reasonable and

1 in line with prior practice in New Hampshire.
2 Importantly, they are capped in amount and
3 limited to certain defined capital items.
4 The Company retains a meaningful burden to
5 control capital costs, as well as its
6 operation and maintenance costs going
7 forward, as those items outside the step are
8 not covered.

9 Additionally, the Company is pleased to
10 be able to implement the RRA. The items in
11 that recovery adjustment have been pared back
12 from what was initially proposed and now is
13 focused more on the kinds of costs that are,
14 as a general matter, outside the Company's
15 control. This is not to say that we can or
16 will send all defined costs through without
17 doing what we can to control them. As Mr.
18 Horton testified, it is in our interest, as
19 much as customers, to do what we can to keep
20 these costs low, including, for example,
21 seeking tax abatements when and where
22 appropriate. These terms would help assure
23 that there will be just and reasonable rates
24 going into future years.

1 Turning to the somewhat longer-term
2 items, here is where we believe there will be
3 significant benefit to a number of parties to
4 this case, as well as to this Commission, and
5 New Hampshire customers more broadly.

6 Looking at these provisions more or less as
7 they show up in the agreement, first, as
8 you've heard discussed, we'll be working with
9 the Staff and the OCA on a template for
10 presenting project information and
11 documentation that will ensure that it's
12 presented in a uniform and useful way. As

13 Commissioner Bailey pointed out, the Staff's
14 review of projects in this case was
15 difficult. In the hopes and with the intent
16 of minimizing similar issues in the future,
17 we will have an agreed-upon way to show and
18 provide that information to our mutual
19 benefit. Along that same line, there will be
20 a business process audit of the Company.

21 That audit will likely be the source of an
22 adjustments template and quite possibly will
23 provide other insights to assist the Company
24 and the regulators in doing the work that

1 they need to do.

2 There's some continuing work and
3 analysis around the handling of the
4 retirements of the Company's old meter stock,
5 and we look forward to resolving those open
6 questions. An outside party will conduct a
7 comprehensive review of advanced metering
8 functionality and what it will take to bring
9 those benefits to the customers of New
10 Hampshire. As you heard a couple times in
11 testimony, it's not a matter of if this is
12 coming, but when. This assessment will give
13 all parties useful information to guide the
14 next steps along that path.

15 Speaking of various assessments, there
16 will also be an engineering-based condition
17 assessment of the Company's New Hampshire
18 distribution infrastructure. As you've heard
19 in testimony, there are and have been some
20 differences of opinion on the state of the
21 Company's system and the need for value of
22 certain system investments. We look forward
23 to having an independent party conduct its
24 own condition assessment which we believe

1 will help bridge those differences. As part
2 of this assessment, we'll validate the
3 strategies we are using to address the aging
4 condition of the system to see that they are
5 consistent with the least cost principles.
6 We'll couple this assessment with a customer
7 survey on the value of reliability to ensure
8 that the voice of the customer is part of the
9 overall analysis, both in the pending least
10 cost integrated resource plan and beyond.

11 Also relative to the voice of the
12 customer, we are pleased that this settlement
13 allows for us to implement two programs that
14 you heard about today that we believe will
15 provide meaningful improvements in customer
16 satisfaction. First, on the fee-free credit
17 card option, we are pleased to be able to
18 remove this perceived barrier and better
19 align our processes with those of other
20 companies in the modern age. More
21 importantly, though, we are pleased and proud
22 to be able to bring to New Hampshire the New
23 Start program. This program, as you heard a
24 short a while ago, will bring real and

1 tangible benefits to customers struggling
2 with their bills and will help them keep
3 their heads above water and on the right
4 path. The program will allow us to more
5 effectively work with customers to achieve
6 outcomes that are beneficial for everyone.
7 Implementing the program will take some time
8 and it will take some collaboration. We are
9 ready to convene and support the stakeholder
10 group and help guide the deployment of this
11 program in New Hampshire.

12 Lastly coming out of this
13 settlement agreement, there will be some
14 additional dockets to look at focusing on
15 time-of-use rates and EV infrastructure. We
16 are prepared to work with the interested
17 parties on those items and to produce
18 proposals and advance those issues
19 meaningfully in New Hampshire. There are
20 other provisions, and the details are within
21 the settlement of course.

22 But it's fair to say that the above
23 proposals expressed in the settlement show
24 the depth and breadth of the issues at stake

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1 in this case and the means that the parties
2 found to address them. We're asking that
3 this settlement be approved as filed because
4 it provides a fair and reasonable resolution
5 to a vast number of issues, it sets just and
6 reasonable rates, and it provides a helpful
7 path to future benefits for New Hampshire
8 customers. Thank you.

9 CHAIRWOMAN MARTIN: All right.
10 Thank you, Mr. Fossum.

11 With that, we will close the record
12 and take this matter under advisement. I do
13 want to say that we appreciate how very
14 organized the presentation of this settlement
15 agreement was and the clear collaboration
16 between the parties to do that. So thank you
17 very much. I think this went very smoothly.

18 And with that, we are adjourned.
19 Have a good rest of the day.

20 MR. FOSSUM: Thank you,
21 Commissioners. Thank you everyone.

22 COMMISSIONER BAILEY: Thank you.
23 (Whereupon the Day 3 of the hearing was
24 adjourned at 2:52 p.m.)

C E R T I F I C A T E

I, Susan J. Robidas, a Licensed Shorthand Court Reporter and Notary Public of the State of New Hampshire, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of these proceedings taken at the place and on the date hereinbefore set forth, to the best of my skill and ability under the conditions present at the time.

I further certify that I am neither attorney or counsel for, nor related to or employed by any of the parties to the action; and further, that I am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in this action.

The foregoing certification of this transcript does not apply to any reproduction of the same by any means unless under the direct control and/or direction of the certifying reporter.

Susan J. Robidas, LCR/RPR
Licensed Shorthand Court Reporter
Registered Professional Reporter
N.H. LCR No. 44 (RSA 310-A:173)

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STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

September 20, 2022 - 9:03 a.m.**DAY 1**21 South Fruit Street
Suite 10
Concord, NHRE: **DE 22-030****EVERSOURCE ENERGY:**

Petition for Third Step Adjustment.

PRESENT: Cmsr. Pradip K. Chattopadhyay, Presiding
Commissioner Carleton B. Simpson

Tracey Russo, Clerk

APPEARANCES: **Reptg. Public Service Company of New
Hampshire d/b/a Eversource Energy:**
Jessica B. Ralston, Esq. (*Keegan Werlin*)
Cheryl Kimball, Esq. (*Keegan Werlin*)**Reptg. New Hampshire Dept. of Energy:**
Paul B. Dexter, Esq.
Jay E. Dudley, Electric Group
(*Regulatory Support Division*)

Court Reporter: Steven E. Patnaude, LCR No. 52

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12	DAVID L. PLANTE	
13	JAMES J. DEVEREAUX	
14	EDWARD A. DAVIS	
15	MARISA B. PARUTA	
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E X H I B I T S

(Marked for Identification Only)

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1	Prefiled Testimony and Supporting Attachments of Russel Johnson, David Plante, and James Devereaux, and the Prefiled Testimony and Supporting Attachments of Marisa Paruta and Edward Davis	<i>prefiled</i>
2	Response to Record Request RR 1-001, with attachments	<i>prefiled</i>
3	Nashua Work Center Renovation Response to DOE TS 1-005 Attachments & 1-007b Attachment [REDACTED - For PUBLIC Use]	<i>prefiled</i>
4	Nashua Work Center Renovation Response to DOE TS 1-005 Attachments & 1-007B Attachment {CONFIDENTIAL & PROPRIETARY}	<i>prefiled</i>
5	Emerald Street Substation Response to DOE 1-008, DOE TS 1-006, DOE TS 1-012, single page from DE 20-161, Eversource LCIRP, 3/31/21 Supplement, Appendix B-2, Page 109 of 158, captioned Loading and Capacity	<i>prefiled</i>
6	Pad Mount Transformer - Goffstown, Attachment TS 2-001(B)	<i>prefiled</i>
7	Purchase of Transformers, Att. DOE 1-4, pp. 394-450, Response to DOE 1-006	<i>prefiled</i>
8	Reliability Annual, Attachment DOE 1-014	<i>prefiled</i>

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E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
9	Maintain Voltage, Attachment DOE 1-4, pp. 367-380	<i>prefiled</i>
10	Replace Submarine Cable, Supplemental Response to TS 1-008, including Attachment TS 1-008	<i>prefiled</i>
11	Millyard Substation, Attachment DOE 1-010	<i>prefiled</i>
12	Responses to DOE First Set of Data Requests	<i>prefiled</i>
13	Responses to DOE First Set of Technical Session Data Requests	<i>prefiled</i>
14	Responses to DOE Second Set of Technical Session Data Requests	<i>prefiled</i>
15	Responses to DOE Third Set of Technical Session Data Requests	<i>prefiled</i>

1 P R O C E E D I N G

2 CMSR. SIMPSON: Good morning, everyone.
3 Welcome. I am Commissioner Simpson. I'll be
4 presiding over today's proceeding. I'm joined by
5 Commissioner Chattopadhyay.

6 We're here this morning in Docket DE
7 22-030 for a hearing regarding Public Service
8 Company of New Hampshire d/b/a Eversource
9 Energy's Petition for a Third Step Adjustment.

10 Let's take appearances, starting with
11 the Company.

12 MS. RALSTON: Good morning. On behalf
13 of Public Service Company of New Hampshire, doing
14 business as Eversource Energy, Jessica Ralston
15 and Cheryl Kimball, from Keegan Werlin.

16 CMSR. SIMPSON: Thank you. New
17 Hampshire Department of Energy.

18 MR. DEXTER: Good morning,
19 Commissioners. My name is Paul Dexter, appearing
20 on behalf of the Department of Energy. I'm
21 joined today by Jay Dudley, from the Electric
22 Division.

23 CMSR. SIMPSON: Thank you. I don't
24 believe we have any other parties in the room?

{DE 22-030} [Day 1] {09-20-22}

1 [No indication given.]

2 CMSR. SIMPSON: Okay. Exhibits 1
3 through 15 have been prefiled and premarked for
4 identification. Is there anything else we need
5 to cover regarding exhibits?

6 MS. RALSTON: Yes. Yesterday the
7 Company filed a letter stating that the Company
8 and DOE have agreed that the Company would defer
9 the costs associated with the Nashua Renovation
10 and Millyard Substation Replacement Projects to
11 its next rate case. This was done to reduce the
12 number of issues for today's hearing, in the
13 hopes we could conclude in one day. And the
14 Parties agreed the Company would recover these
15 costs through their next rate case proceeding.

16 So, related to this revision, the
17 Company submitted its Revised Witness List. And,
18 you know, DOE may wish to speak to this as well,
19 but, with this update, Exhibits 3, 4, and 11 that
20 were marked by DOE would no longer be relevant to
21 the hearing today. And Exhibit 4 was the only
22 premarked exhibit that included confidential
23 information.

24 CMSR. SIMPSON: Okay. Thank you. So,

1 in terms of the other recommended disallowances
2 in the Audit Report, the Company still intends to
3 conduct cross-examination with respect to those,
4 is that true?

5 MS. RALSTON: That is correct.

6 CMSR. SIMPSON: Okay. Just a moment.

7 *[Cmsr. Simpson, Cmsr. Chattopadhyay,*
8 *and Atty. Speidel conferring.]*

9 CMSR. SIMPSON: Is the Motion for
10 Confidential Treatment still live, given the
11 current status?

12 MS. RALSTON: It would not be
13 necessary, if the Commission agreed that these
14 projects would be deferred to the next rate case,
15 because that exhibit would no longer be
16 necessary.

17 So, I think DOE could withdraw
18 Exhibit 4, and then the motion would no longer be
19 relevant.

20 CMSR. SIMPSON: Okay. Attorney Dexter,
21 any comments on that?

22 MR. DEXTER: Yes. So, the Company's
23 counsel stated, in one sentence, that the
24 stipulation provided that "the costs for these

1 projects would be recovered in the next rate
2 case", and, in another sentence, stated that "the
3 costs for these projects would be deferred for
4 consideration in the next rate case", which I
5 view as two different things.

6 CMSR. SIMPSON: Uh-huh.

7 MR. DEXTER: My understanding of the
8 stipulation is that "the costs would be deferred
9 for review and potential recovery in the next
10 rate case." So, I wanted to clarify that. And,
11 hopefully, that's counsel's understanding as
12 well. And, if I misheard, --

13 MS. RALSTON: Yes, I agree. I think I
14 misspoke. That is our understanding as well.

15 MR. DEXTER: Okay. With that
16 understanding, then, no, we don't proceed -- we
17 don't plan to conduct either direct or cross on
18 those two projects. And, therefore, if the
19 Company is telling us that the Motion for
20 Protective Treatment is no longer necessary, we
21 have no reason to contest that.

22 CMSR. SIMPSON: Okay. And does the
23 Department intend to conduct cross-examination
24 with respect to the other projects that the

1 Department has recommended for disallowance
2 within the step adjustment?

3 MR. DEXTER: Yes.

4 CMSR. SIMPSON: Okay.

5 MR. DEXTER: As well as direct examine
6 of Jay Dudley.

7 CMSR. SIMPSON: Okay. Thank you.

8 So, we have many witness here today,
9 and we have a lot of documentation in the record.
10 Let's just discuss how the day should go, in
11 terms of timing. I want to be mindful of
12 everybody's time, and the hope that we can
13 adjudicate this within the day.

14 My intention is to take a break at
15 10:30 for about ten minutes. And then, we'll
16 take a lunch break somewhere in the noon to 12:30
17 timeframe, return, depending on when we do that,
18 1:00 to 1:30. And then conclude at sometime by
19 or before 4:30.

20 Is that acceptable to the parties, and
21 do you have any comments on the schedule for
22 today?

23 MS. RALSTON: No comments on the
24 schedule. But I did want to address one item

1 with respect to DOE's witness. I don't know if
2 this is the right time to do that?

3 MR. DEXTER: With respect to the
4 schedule, that all sounds acceptable. I believe
5 that we'll be able to wrap up what we have to do
6 in a couple of hours. So, I suspect that we'll
7 be able to finish at 4:30.

8 CMSR. SIMPSON: Okay.

9 MR. DEXTER: If not earlier.

10 CMSR. SIMPSON: And we'll hear your
11 comments on the witness right now.

12 MS. RALSTON: Okay. Thank you.

13 DOE has identified Mr. Dudley as a
14 witness for this proceeding. And we appreciate
15 the letter that was filed by DOE on Friday that
16 outlined its recommended disallowances that we
17 expect Mr. Dudley to speak to this morning.
18 However, without any written testimony, we would
19 just like to reserve our right to recall our own
20 witnesses following Mr. Dudley's testimony, in
21 case there is something that we need to respond
22 to.

23 We do have cross-examination prepared
24 for Mr. Dudley. But, without the written

1 testimony, it's been slightly challenging.

2 CMSR. SIMPSON: So, I did have a
3 question for you about that in the letter that
4 you filed a couple of weeks ago. You mentioned
5 your "rights under 541-A". Do you have anything
6 that supports that assertion, either an order or
7 case precedent?

8 MS. RALSTON: Not as of this morning, I
9 do not have anything. I can look for something
10 during a break, if you wish?

11 CMSR. SIMPSON: And, since the time
12 that that's been filed, and the Audit Report's
13 been available, has the Company conducted
14 discovery with respect to any questions that you
15 had that you could have found answers to prior to
16 the hearing?

17 MS. RALSTON: We have not. I don't
18 know that we have discovery questions on the
19 audit. And we just received Mr. Dudley's
20 recommended disallowances on Friday. So, there
21 really wasn't sufficient time to conduct
22 discovery on those.

23 So, instead what we have done is we
24 have prepared cross-examination based on what we

1 know and what we expect for today. And we are
2 planning to move forward. I just was hoping to
3 reserve the right to recall our witnesses, in
4 case we needed to respond through our witnesses
5 to Mr. Dudley's testimony.

6 CMSR. SIMPSON: Okay. We'll take that
7 under advisement. We're not going to rule on
8 that right now.

9 MS. RALSTON: Okay. Thank you.

10 MR. DEXTER: Can I make a brief
11 comment, Commissioner?

12 CMSR. SIMPSON: Please.

13 MR. DEXTER: I just want to point out
14 that we adhered to the procedural schedule that
15 was set out. There was nothing on the procedural
16 schedule for prefiled testimony. So, I just
17 don't want the record to sort of imply that, you
18 know, we were supposed to file written testimony
19 and we didn't. And nobody said that, I just want
20 to make that clear.

21 Secondly. We had a number of tech
22 sessions leading up to this. I don't remember
23 exactly how many, I would say three or four. So,
24 I don't think any of the recommendations that I

1 listed in my September 16th letter should have
2 come as any sort of a surprise to the Company.

3 That being said, I don't, you know, if
4 there's a need to recall the witnesses, I imagine
5 Department of Energy wouldn't have any problem
6 with that, after they have heard Mr. Dudley's
7 testimony. But, as you said, I guess we'll deal
8 with that when the time comes.

9 CMSR. SIMPSON: Okay. Great. Thank
10 you.

11 So, does anyone object to the witnesses
12 and the prefiled testimony or have any other
13 preliminary matters, before we swear the
14 witnesses in?

15 *[No verbal response.]*

16 CMSR. SIMPSON: Okay. Let's proceed
17 with the witnesses. Mr. Patnaude, would you
18 please swear in the panel.

19 (Whereupon **Russel D. Johnson,**
20 **David L. Plante, James J. Devereaux,**
21 **Leanne Landry, Paul Renaud,**
22 **Brian Dickie, Edward A. Davis,** and
23 **Marisa B. Paruta** were duly sworn by the
24 Court Reporter.)

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 CMSR. SIMPSON: Okay. I'll recognize
2 Attorney Ralston for the Company.

3 MS. RALSTON: Thank you.

4 **RUSSEL D. JOHNSON, SWORN**

5 **DAVID L. PLANTE, SWORN**

6 **JAMES J. DEVEREAUX, SWORN**

7 **LEANNE LANDRY, SWORN**

8 **PAUL RENAUD, SWORN**

9 **BRIAN DICKIE, SWORN**

10 **EDWARD A. DAVIS, SWORN**

11 **MARISA B. PARUTA, SWORN**

12 **DIRECT EXAMINATION**

13 BY MS. RALSTON:

14 Q I'll begin with Mr. Johnson. Would you please
15 state your full name, Company position, and
16 responsibilities?

17 A (Johnson) My name is Russel Johnson. I am the
18 Director of Distribution Engineering. I'm
19 responsible for distribution engineering in New
20 Hampshire, which includes optimizing customer
21 reliability and addressing the service needs of
22 the customers.

23 Q And are you familiar with the exhibit that has
24 been marked as "Exhibit 1", which is the

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Company's initial filing, including your joint
2 testimony and supporting attachments co-sponsored
3 with David Plante and James Devereaux?

4 A (Johnson) Yes, I am.

5 Q And what parts of that testimony were you
6 responsible for?

7 A (Johnson) My primary responsibilities with
8 respect to the Company's Step Adjustment Petition
9 are to support the Company's reliability
10 projects, including the Reliability Annual
11 Blanket Project.

12 Q And are you also familiar with the exhibits
13 marked as "Exhibits 5", "8", "9", "12", "13",
14 "14", and "15" --

15 A (Johnson) Yes.

16 Q -- that provide the Company's responses to data
17 requests, including responses you have sponsored?

18 A (Johnson) Yes, I am.

19 Q And do you have any corrections or amendments to
20 Exhibits 1, 5, 8, 9, 12, 13, 14, or 15?

21 A (Johnson) I do not.

22 Q And are you adopting those portions of
23 Exhibits 1, 5, 8, 9, 12, 13, 14, and 15 that you
24 have sponsored as part of your sworn testimony

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 today?

2 A (Johnson) Yes, I am.

3 Q And are you familiar with the project that is
4 included in the Company's filing and referred to
5 as the "Emerald Street Substation Project"?

6 A (Johnson) I am.

7 Q And can you please provide a brief overview of
8 why this project was necessary?

9 A (Johnson) Yes. As shown in Exhibit 5, the
10 project was undertaken for reliability reasons.
11 As described at Bates 027 and 028, which are
12 pages from the Technical Authorization Form for
13 the Emerald Street Project, the Company explained
14 that the project's objectives were to retire the
15 aged, obsolete, and underrated infrastructure;
16 mitigate flooding -- potential flood impacts; and
17 to install a second 115kV bus differential
18 protection scheme.

19 The document also identified the poor
20 condition of transformer TB-12, which, in fact,
21 failed during the construction phase of the
22 project.

23 Q Thank you. You also stated that you're
24 responsible for oversight of the Company's

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Reliability Annual Blanket Projects that is the
2 subject of Exhibit 8, is that correct?

3 A (Johnson) Yes, it is.

4 Q And can you please explain how the budget for
5 Annual Blanket Projects is determined?

6 A (Johnson) Yes. The budget for Annual Blanket
7 Projects or the Company's Reliability Annual is
8 determined based on historical costs.

9 Q And how does the Company account for variances
10 between the budget and the actual costs incurred
11 during the year?

12 A (Johnson) At the end of the year, the Company
13 executes a Supplemental Authorization Form that
14 captures the variance in costs, if warranted.
15 The variance reflects the actual costs incurred
16 during the calendar year.

17 Q Thank you. Next, I'll move to Mr. Plante. Would
18 you please state your full name, Company
19 position, and responsibilities?

20 A (Plante) Yes. Good morning. My name is David
21 Plante. And I'm the Manager of New Hampshire
22 Project Management and Construction for
23 Eversource. I'm responsible for managing the
24 Project Management and Construction Group, as

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 well as providing oversight of the capital
2 program for the transmission business in New
3 Hampshire. I have oversight of most of the large
4 transmission and distribution substation projects
5 in Eversource's New Hampshire service territory.

6 Q And are you familiar with the exhibit marked as
7 "Exhibit 1", which is the Company's initial
8 filing, including your joint testimony and
9 supporting attachments co-sponsored with Mr.
10 Johnson and Mr. Devereaux?

11 A (Plante) Yes, I am.

12 Q And what parts of that testimony were you
13 responsible for?

14 A (Plante) My primary responsibilities with respect
15 to the Company's Step Adjustment Petition are to
16 support project management and construction
17 details for specific projects included in the
18 filing.

19 Q Are you also familiar with the exhibits marked as
20 "Exhibits 5", "6", "11", "12", "13", "14", and
21 "15" that provide the Company's responses to data
22 requests, including responses that you have
23 sponsored?

24 A (Plante) Yes, I am.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q And do you have any corrections or amendments to
2 those exhibits?

3 A (Plante) I do not.

4 Q And are you adopting those portions of Exhibits
5 1, 5, 6, 11, 12, 13, 14, and 15 that you have
6 sponsored as part of your sworn testimony today?

7 A (Plante) Yes, I am.

8 Q With respect to Exhibit 15, did you prepare the
9 response to Data Request TS 3-002 that can be
10 found at Bates 4-10?

11 A (Plante) Yes, I did.

12 Q This data request response provided detailed
13 information for the difference between the total
14 costs associated with the Emerald Street
15 Substation Project and the total amount included
16 in the pre-construction authorization amount, is
17 that correct?

18 A (Plante) Yes, it is. I prepared this data
19 request response to explain the key drivers of
20 this cost differential in response to a follow-up
21 question from the Department of Energy. As shown
22 in Exhibit 15, at Bates 004, the main drivers of
23 the cost differential were the extended project
24 timeline, property taxes that were higher than

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 estimated, and additional environmental
2 remediation costs.

3 As the exhibit explains, the biggest
4 driver of the additional costs was the extended
5 timeline for the project. This extended timeline
6 was the result of a number of factors, including
7 COVID delays, the environmental contamination
8 cleanup of contaminants that were discovered very
9 late during the construction process, and
10 resource constraints from prior years.

11 Q And were these additional costs for the Emerald
12 Street Substation Project prudently incurred?

13 A (Plante) Yes, they were.

14 Q Thank you. Mr. Devereaux, would you please state
15 your full name, Company position, and your
16 responsibilities?

17 A (Devereaux) Yes. My name is James Devereaux.
18 I'm the Manager of Budgets and Investment
19 Planning. I am primarily responsible for all the
20 financial reporting, analysis, and oversight of
21 the Company's capital and O&M Program.

22 I also monitor capital budgets
23 throughout their life cycle around provide
24 reporting on a monthly basis to review costs and

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 identify projects that may need supplemental
2 funding authorization approvals.

3 Q Are you familiar with the Exhibit marked as
4 "Exhibit 1", which is the Company's initial
5 filing, including your joint testimony and
6 supporting attachments co-sponsored with Mr.
7 Johnson and Mr. Plante?

8 A (Devereaux) Yes, I am.

9 Q And what parts of that testimony were you
10 responsible for?

11 A (Devereaux) My primary responsibilities with
12 respect to the Company's Step Adjustment Petition
13 were to identify projects for inclusion in the
14 Step Adjustment and to provide the supporting
15 financial analysis.

16 Q And how did you identify the projects that are
17 included in this filing and presented in
18 Attachment RDJ/DLP/JJD?

19 A (Devereaux) I start by identifying distribution
20 projects that were placed in service during the
21 year 2021. I then exclude any projects that are
22 coded as "Complex Service", "Customer-other", and
23 "Customer-driven". These three categories are
24 excluded from the Step Adjustment because they

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 represent projects that are primarily the result
2 of new business or customer growth initiatives.
3 Therefore, consistent with the Settlement
4 Agreement approved in DE 19-057 and the
5 Commission's prior orders excluding new business,
6 revenue producing projects from the step
7 adjustment calculation, these categories of
8 projects were excluded.

9 This is the same process that was used
10 by the Company for its two prior step
11 adjustments.

12 Q Thank you. Are you also familiar with the
13 exhibits marked as "Exhibits 7", "10", "12",
14 "13", and "15" that provide the Company's
15 responses to data requests, including responses
16 you have sponsored?

17 A (Devereaux) Yes, I am.

18 Q And do you have any corrections or amendments to
19 those exhibits?

20 A (Devereaux) No, I do not.

21 Q And are you adopting those portions of Exhibits
22 1, 7, 10, 12, 13, and 15 that you have sponsored
23 as part of your sworn testimony today?

24 A (Devereaux) Yes.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q Thank you. All right. I'm going to move to some
2 of the witnesses that are over here.

3 So, Ms. Landry, would you please state
4 your full name, Company position, and
5 responsibilities?

6 A (Landry) Sure. Good morning. My name is Leanne
7 Landry. I'm the Director of Investment Planning.
8 I provide direct oversight of the financial
9 support function of the Operations Group of the
10 Company.

11 CMSR. SIMPSON: Ms. Landry, can you
12 make sure your microphone is on please?

13 *[Court reporter comment regarding the*
14 *use of the microphone.]*

15 CMSR. SIMPSON: And you might need to
16 move it just a little bit closer.

17 WITNESS LANDRY: Okay.

18 CMSR. SIMPSON: Thank you.

19 WITNESS LANDRY: Sure. Sorry about
20 that.

21 BY MS. RALSTON:

22 Q Ms. Landry, are you familiar with the exhibits
23 marked as "Exhibits 7" and "13", which provide
24 the Company's responses to data requests,

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 including responses you have sponsored?

2 A (Landry) Yes, I am.

3 Q And do you have any corrections or amendments to
4 those exhibits?

5 A (Landry) No, I do not.

6 Q And are you adopting those portions of Exhibits 7
7 and 13 that you have sponsored as part of your
8 sworn testimony today?

9 A (Landry) Yes, I am.

10 Q Thank you. Mr. Renaud, would you please state
11 your full name, Company position, and
12 responsibilities?

13 A (Renaud) Good morning. My name is Paul Renaud.
14 I'm the Vice President of Distribution
15 Engineering. And I'm responsible for
16 distribution engineering in Eversource's
17 Massachusetts and New Hampshire territories, as
18 well as capital investment planning.

19 Q And are you familiar with the exhibits marked as
20 "Exhibits 5" and "13" that provide responses to
21 data requests, including responses that you have
22 sponsored regarding the Emerald Street Substation
23 Project?

24 A (Renaud) Yes, I am.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q And do you have any corrections or amendments to
2 those exhibits?

3 A (Renaud) No, I do not.

4 Q And are you adopting those portions of Exhibits 5
5 and 13 that you have sponsored as part of your
6 sworn testimony today?

7 A (Renaud) Yes, I am.

8 Q Thank you. Mr. Dickie, would you please state
9 your full name, Company position, and
10 responsibilities?

11 A (Dickie) Yes. My name is Brian Dickie, Vice
12 President of New Hampshire Electric System
13 Operations. I'm responsible for transmission and
14 distribution grid operations, outage management,
15 and the Troubleshooter Line Department.

16 Q And are you familiar with the exhibits that are
17 marked as "Exhibits 5" and "13" that provide the
18 Company's responses to data requests, including
19 responses you have sponsored regarding the
20 Emerald Street Substation Project?

21 A (Dickie) Yes, I am.

22 Q Do you have any corrections or amendments to
23 those exhibits?

24 A (Dickie) No, I do not.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q And are you adopting those portions of Exhibits 5
2 and 13 that you have sponsored as part of your
3 sworn testimony today?

4 A (Dickie) Yes, I am.

5 Q Thank you. Mr. Davis, would you please state
6 your name, Company position, and
7 responsibilities?

8 A (Davis) Good morning. My name is Edward Davis.
9 I am the Director of Rates for Eversource Energy.

10 Q And can you please provide your responsibilities
11 in that position?

12 A (Davis) My responsibilities include rate design,
13 cost of service, and tariff -- tariff activities
14 associated with the Eversource Energy operating
15 companies, including Public Service of New
16 Hampshire.

17 Q And are you familiar with the exhibit that has
18 been marked as "Exhibit 1", which is the
19 Company's initial filing, including your joint
20 testimony and supporting attachments co-sponsored
21 with Ms. Paruta?

22 A (Davis) Yes, I am.

23 Q And what parts of that testimony were you
24 responsible for?

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 A (Davis) My primary responsibility is with respect
2 to the Company's Step Adjustment Petition to
3 support the resulting rate adjustments.

4 Q Do you have any corrections to the portions of
5 Exhibit 1 that you have sponsored?

6 A (Davis) I do not have any corrections. However,
7 updates for the rate calculation are necessary to
8 reflect a new rate effective date.

9 Q The Company's initial filing requested an
10 August 1st, 2022 rate effective data that would
11 allow for recovery of the Step Adjustment revenue
12 requirement over a 12-month period, is that
13 correct?

14 A (Devereaux) Yes, it is.

15 Q And due to the postponement of this hearing, the
16 earliest rate effective date is now anticipated
17 to be October 1st, is that correct?

18 A (Davis) Yes, it is.

19 Q So, have you calculated new rates that would
20 allow the Company to recover the revenue
21 requirement associated with the Step Adjustment
22 over a 10-month period beginning on October 1st?

23 A (Davis) Yes, I have. Based on current rates in
24 effect as of August 1st, 2022, a rate change

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 commencing October 1st would result in an overall
2 increase of 0.4 percent in total and 0.6 percent
3 to our residential classes. A residential
4 customer who consumes 600 kilowatt-hours would
5 see a monthly bill increase of \$1.21, or 0.6
6 percent, as initially filed, and \$1.16, at also
7 0.6 percent, based on changes.

8 Q Do those updated bill impacts reflect removal of
9 the revenue requirement associated with the
10 Nashua Renovation and Millyard Substation
11 Replacement Projects?

12 A (Davis) Yes, they do. And those are the changes
13 I was referring to. These updated bill impacts
14 reflect the adjustments agreed to as part of the
15 audit process.

16 Q Perfect. And do these updated rates result in
17 just and reasonable rates to customers?

18 A (Davis) Yes, they do.

19 Q And are you adopting those portions of Exhibit 1
20 that you have sponsored as part of your sworn
21 testimony today?

22 A (Davis) Yes, I am.

23 Q Thank you. And last, but not least, Ms. Paruta,
24 would you please state your full name, Company

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1 position, and responsibilities?

2 A (Paruta) Good morning. My name is Marisa Paruta.
3 And I am the Director of Revenue Requirements for
4 New Hampshire electric distribution company for
5 Eversource Energy, as well as the natural gas and
6 electric distribution company in Connecticut.
7 And, in that responsibility, I am responsible for
8 the coordination and implementation of all
9 revenue requirement calculations that impact
10 customers' rates, and any regulatory filings that
11 would also have similar impacts, including this
12 Step Adjustment.

13 Q Are you familiar with the exhibit that has been
14 marked as "Exhibit 1", which is the Company's
15 initial filing, including your joint testimony
16 and supporting attachments co-sponsored with Mr.
17 Davis?

18 A (Paruta) Yes, I am.

19 Q And are you also familiar with the exhibits
20 marked as "Exhibits 2", "10", and "13" that
21 provide the Company's responses to data and
22 record requests, including responses that you
23 have sponsored?

24 A (Paruta) Yes, I am.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q Do you have any corrections or amendments to
2 Exhibits 1, 2, 10, or 13?

3 A (Paruta) I do not have any corrections. But we
4 do have updates to the revenue requirements that
5 were presented in Exhibit 1, and that is at Bates
6 045. Those require necessary adjustments to
7 reflect what was agreed to by the Company during
8 the audit process and what was disclosed in the
9 Final Audit Report. And it also requires a
10 reflection of the deferral of the costs
11 associated with the Nashua Renovation and
12 Millyard Substation Replacement Projects that the
13 Company has agreed to this morning.

14 Q And, so, can you please provide the updated
15 revenue requirement amount?

16 A (Paruta) Sure. So, the removal of all of these
17 costs have resulted in a revenue requirements of
18 totaling 8.9 million. And this is the revenue
19 requirement that was used by Mr. Davis, my
20 colleague here, to determine the calculated and
21 updated rates, and the bill impacts as he just
22 provided.

23 Q Thank you. And are you adopting those portions
24 of Exhibits 1, 2, 10, and 13 that you have

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 sponsored as part of your sworn testimony today?

2 A (Paruta) Yes, I am.

3 MS. RALSTON: Thank you. The witnesses
4 are available for cross-examination.

5 CMSR. SIMPSON: Thank you, Attorney
6 Ralston. I'll recognize Attorney Dexter, for the
7 New Hampshire Department of Energy.

8 MR. DEXTER: Thank you, Commissioner.

9 **CROSS-EXAMINATION**

10 BY MR. DEXTER:

11 Q I think I'd like to start with what we just
12 heard, on the issue of updates. And to do that,
13 I'd like to go to Exhibit 1. Let me see if I can
14 find that. And I'd like to go to Page 45.

15 So, Exhibit 1, Page 45, at Line 15,
16 indicates that the Company is or I guess was
17 requesting a revenue -- rates to recover a
18 revenue requirement of \$9.3 million. Do I have
19 that right?

20 A (Paruta) Correct.

21 Q Okay. And the Company's original proposal, which
22 is what Exhibit 1 is, demonstrated a revenue
23 requirement of \$10.4 million, shown on
24 Line 3 -- 13, correct?

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 A (Paruta) Correct.

2 Q And the reason that \$9.3 million was requested,
3 rather than \$10.4 million, was because the
4 revenue requirement was capped in the underlying
5 Settlement Agreement that gave rise to this Step
6 Adjustment. Would you agree with that?

7 A (Paruta) That is correct.

8 Q Okay. Now, you mentioned some numbers regarding
9 an updated revenue requirement. And I believe I
10 heard you say that a revised revenue requirement
11 would equal "\$8.9 million", is that right?

12 A (Paruta) That is correct, rounded.

13 Q Rounded. Sure. And we don't have a revised
14 Bates 045 at this point to look at, is that my
15 understanding? Is my understanding correct?

16 A (Paruta) That's correct.

17 Q Okay. Okay. So, we'll do it a little bit on the
18 fly then.

19 So, you mentioned that, to get from the
20 \$10.4 million revenue requirement, on Line 13 as
21 originally filed, to the \$8.9 million revenue
22 requirement, as updated, that you adjusted for
23 three things, as I heard it: The Audit Report
24 and the stipulated removal of the Nashua building

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1 project and the Millyard Substation Project. Is
2 that right?

3 A (Paruta) That is correct.

4 Q Okay. Let's talk first about the audit
5 adjustments. The audit that you're referring to
6 was performed by the Department of Energy,
7 correct?

8 A (Paruta) Correct.

9 Q Okay. Could you tell me specifically what
10 adjustments are reflected in the \$8.9 million
11 requested revenue requirement having to do with
12 the audit?

13 A (Paruta) Sure. I think what might be helpful is
14 if we went to the actual Final Audit Report. And
15 I don't believe that's an exhibit.

16 MS. RALSTON: I don't believe it is an
17 exhibit. Do you have a copy of it, Ms. Paruta?

18 WITNESS PARUTA: I do have a copy.

19 MS. RALSTON: Okay. Are you able to
20 walk through which items you've reflected?

21 WITNESS PARUTA: Yes, I can.

22 **CONTINUED BY THE WITNESS:**

23 A (Paruta) So, it is filed to the docket. If we go
24 to Pages -- and I will scroll to the bottom where

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 we had the audit issues identified. And the
2 first audit issue did not result in any
3 adjustments to revenue requirements.

4 The second audit issue was an
5 "Overstatement of Plant in Service", and that
6 essentially was identified by the auditors. And
7 we agreed to the identified projects, as those
8 have been projects that were not fully placed in
9 service in 2021. And, so, we agreed to remove
10 from our step a total value of "\$472,856".

11 BY MR. DEXTER:

12 Q Now, Ms. Paruta, I just want to interrupt you for
13 a second.

14 A (Paruta) Sure.

15 Q So, I'm looking at the Audit Report that was
16 filed with the Commission I believe on
17 August 31st, and it is filed to the docket. So,
18 I want to point the Commissioners in that
19 direction. And, in particular, I'm looking at
20 Page 42 of the Audit Report, dealing with Audit
21 Issue 2. Is that where you are?

22 A (Paruta) Correct.

23 Q Okay. And, when you say that \$473,000 was
24 removed from the Step Adjustment, that figure

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 shows up on Page 43, correct?

2 A (Paruta) That is correct.

3 Q Okay. Now, if I were to have gone back to
4 Exhibit 1, Page 29, which is the list of all the
5 Step Adjustment projects that were originally
6 proposed, would I find this particular project on
7 that list, this lighting project?

8 A (Paruta) Yes. And, if you just give me one
9 minute, in our Exhibit 1, let me find that for
10 you exactly.

11 It is -- okay. If we go to Exhibit 1,
12 and Bates Page 029, are you there, Mr. Dexter?

13 Q Yes.

14 A (Paruta) Okay. And, if you go to Line --
15 apologies, it's quite small on my screen. It is
16 Line 11, that is the "55 W Brook LED Lighting"
17 Project. It's Project ID Number "217129". And
18 you will see, in the Column H, where we have the
19 "2021 Plant in Service" amount, and that number
20 is "289,086". So, that is --

21 Q So, I'm not following you. So, let me interrupt
22 for a second.

23 A (Paruta) Sure.

24 Q I think I'm on Page 29. Or maybe I'm on Page 30,

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 hold up. My apologies. Okay. And what line
2 again did you say?

3 A (Paruta) It's Line 11.

4 Q Line 11. Okay. So, I see "55 W Brook LED"?

5 A (Paruta) Correct.

6 Q Okay. Thank you. I was on the wrong page.
7 Sorry to interrupt.

8 A (Paruta) That's okay. So, that is the first
9 project. Which is, if you go to Column H, it
10 will show the amount of "289,086", which is the
11 plant in service that we agreed to remove.

12 The second project --

13 Q Okay. Before we leave this project, --

14 A (Paruta) Sure.

15 Q -- so, can you explain again why the auditors
16 suggested and you agreed to remove that, that
17 amount?

18 A (Paruta) That project was identified as one of
19 the many projects that the auditor thoroughly
20 reviewed, and they did an excellent job. On this
21 particular project, when they looked at the
22 detail, it was identified that the full project
23 was not yet placed in service. Portions of the
24 project were pushed to placed in service, the

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1 portion being the 289,086, but should not have
2 been, until the entirety of the project was
3 placed in service.

4 So, after speaking to the experts with
5 the Company, the decision was made, we agreed
6 with the auditors, and we did remove that from
7 this step filing.

8 Q Okay. And the expectation would be, I would
9 imagine, that the Company would seek approval for
10 this project in its next rate case?

11 A (Paruta) We will seek approval for the delta
12 between -- we have the specific 125-0 Fund, the
13 RSA 125-0 Fund that does apply to these projects.
14 So, we would only be seeking recovery for the
15 delta of that in the next rate case application,
16 correct.

17 Q Okay. Thanks. So that -- I guess that was the
18 first audit project that I asked you to explain.

19 A (Paruta) Correct.

20 Q So, I will let you continue.

21 A (Paruta) Yes. So, the second one is the
22 "Hooksett-1250 LED Lighting". And that one is
23 right above, a couple of rows above, on Line 9 --
24 excuse me -- and that is Project Number "21799",

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1 in the amount of, in Column H, "183,769.75",
2 which ties to the Final Audit Report as well.
3 And there were similar lines of discussion on
4 that LED lighting. So, the auditor pulled the
5 LED lightings in their totality in their detailed
6 review analysis during the audit. And, so, these
7 two were reviewed together. So, that explanation
8 does apply to both.

9 Q Okay. Thanks. And, so, back to the Audit
10 Report. That was Audit Issue Number 2, I
11 believe, correct?

12 A (Paruta) That is correct.

13 Q Okay. So, I think you were going to mention
14 another one?

15 A (Paruta) Yes. We can skip through Audit 3, there
16 was no impact to revenue requirements.

17 Going to Audit 4, the auditors reviewed
18 several of the vehicles and fleet vehicles that
19 were purchased and part of the '21 plant in
20 service. And, during that evaluation, it was
21 discovered that the fleet vehicles, once they
22 were purchases, were moved to a different state
23 affiliated company for use during our COVID,
24 specific to the safety, the One-to-One Person

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1 Truck Policy. So, those were transferred to
2 Massachusetts, and then, later, in 2021,
3 transferred back to New Hampshire. As a result
4 of that transfer that occurred, those vehicles
5 were transferred back to New Hampshire, and,
6 therefore, they were included within our step
7 adjustment in 2021, as really purchased vehicles/
8 purchased equipment in 2021, for purposes of New
9 Hampshire, being used and useful in our Area Work
10 Centers.

11 So, within that evaluation, what was
12 discovered, that the auditor had found that the
13 carrying value of those vehicles were based on
14 the bill of sales. So, that was incorrect. The
15 carrying value back to New Hampshire should have
16 been net of the depreciable value that occurred
17 while they were being utilized in Massachusetts.
18 So, we did agree to that.

19 And the Company is removing, from our
20 Step, "\$57,828" of vehicle value from the Step.

21 Q And that figure of 57,000 appears on which page
22 of the Audit Report?

23 A (Paruta) If you go to Page 47, in the "Audit
24 Conclusion", at the bottom.

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1 Q Yes. Okay. And, before we leave this vehicle
2 issue, there was a second audit issue raised that
3 the Company did not agree with, is that correct,
4 having to do with registration fees?

5 A (Paruta) Yes. That is -- that is correct.

6 Q Okay. And I won't get into the debate about
7 whether or not -- well, let me withdraw that and
8 ask you this.

9 The Audit Conclusion says that the
10 "Audit Department was not able to [quantify] the
11 dollar amount of the registration fees in the
12 third step." That appears on Bates Page 048.
13 Could you estimate, could you give us an estimate
14 of the magnitude of the registration fees that
15 the Company and the auditors don't agree on?

16 A (Paruta) We do not have an estimate. It's
17 embedded within the bill of title and the cost of
18 sale of each vehicle.

19 Q Uh-huh.

20 A (Paruta) The registration -- "registration fee"
21 that was included in the detail that was audited
22 by the auditors is actually the title that is
23 issued when the Company purchases those fleet
24 vehicles, regardless of the type of vehicle,

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1 truck, digger, bucket trucks. And, so, under
2 FERC regulation and FERC guidance, you are
3 allowed to capitalize all of the costs in order
4 for those assets to be made used and useful. The
5 Company cannot drive those assets off the lot of
6 the original owner in this case, whether it's a
7 dealership or manufacturing company that actually
8 builds those bucket trucks for us, we cannot
9 drive those off the lots until we issue and
10 receive title to ourselves.

11 So, those "registration fees" is
12 actually the title and the plate issuance in the
13 State of New Hampshire within the different towns
14 where those vehicles are then disseminated into
15 the Area Work Centers.

16 Q Okay. And I appreciate all that, and I have a
17 couple of follow-ups on that. But how many
18 vehicles are we talking about?

19 A (Paruta) It's a multitude of many different types
20 of vehicles. I don't have that data at my
21 fingertips. But there's what's called
22 "light-duty", "heavy-duty", "diggers". The
23 particular trucks that the auditors did review
24 was 16 Chevy Trax trucks. So, really, Trax

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1 trucks.

2 Q Right. But the auditor's issue here went to all
3 the vehicles, not just the ones they specifically
4 looked at?

5 A (Paruta) It certainly did.

6 Q Okay. Can you give us any estimate, whether
7 we're talking about a hundred vehicles or a
8 thousand vehicles? Anyone on the panel here?
9 Just trying to put this issue in perspective.

10 A (Paruta) Yes, I apologize. I don't have a total
11 of the vehicles that were purchased. We would
12 have had to go into every single work order, back
13 into the bill of sale, to determine the numbers
14 that were purchased for the year.

15 Q Fair enough. Do you have an estimate as to what
16 the registration fee amounts to?

17 A (Paruta) So, it's a few hundred dollars for just
18 a standard pickup vehicle. For a light-duty
19 vehicle, it's an average of \$1,200, because the
20 title and the plates that are distributed are
21 done so in order for it to be interstate, so that
22 these vehicles can be used outside of New
23 Hampshire and, you know, in times of mutual aid,
24 for example. And, for heavy-duty, it's about

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1 \$4,800.

2 Q Okay. And those are annual fees, correct?

3 A (Paruta) No. That is a one-time fee.

4 Q All these fees at issue are one-time fees?

5 A (Paruta) These are only the one-time payment
6 during the bill of sale.

7 Q And what about the annual -- are there annual
8 registration fees?

9 A (Paruta) There certainly are.

10 Q And how are those accounted for?

11 A (Paruta) Those are expensed.

12 Q Those are expensed, okay. Okay. So, that was
13 Audit Issue Number 4. Did your update today
14 include any other audit-related adjustments?

15 A (Paruta) Yes, it did. We had a audit adjustment
16 for Audit Issue Number 5, which is on Page 49.
17 For this particular one, we had an error that was
18 discovered within our filing that we agreed to
19 adjust for. It was an accounting adjustment, in
20 order for us to reflect the proper property tax
21 expense within the Step, we removed an adjustment
22 associated with an out-of-period adjustment that
23 was recorded in 2021. That amounted to, let me
24 go to my schedule, it was roughly 1.3 million.

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1 But let me get you the exact number, "1.366129".

2 And, in addition to that adjustment,
3 that was unwound out of the property tax expense
4 used in our calculation, we also had to identify
5 a portion of it that did relate to 2021 and
6 remove that from our property tax expense.

7 So, this was all discussed in great
8 detail with the auditor, and we agreed to make
9 that adjustment to our property tax expense that
10 was used in the calculation. So, having --

11 CMSR. CHATTOPADHYAY: Can I request,
12 can you repeat the number again?

13 WITNESS PARUTA: Sure. It's 1,366,129,
14 was the first part of the adjustment.

15 CMSR. CHATTOPADHYAY: Thank you.

16 BY MR. DEXTER:

17 Q Is that 1,366,000? Is that what you're saying?

18 A (Paruta) Correct.

19 Q Okay. So, I'd like to -- is the second part of
20 your explanation property tax related also?

21 A (Paruta) That's it for property taxes. It was
22 those two adjustments.

23 Q Okay. So, I'd like to see if I can understand
24 how that affects the Step Adjustment calculation.

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1 And to do that, if I were to go to Exhibit 1,
2 Page -- I think it's Page 46 or 47. Let me see.
3 Turns out it's Exhibit 1, Page 050.

4 A (Paruta) Correct.

5 Q There's a property tax calculation there. What
6 you just mentioned, the 1,366,000, that would be
7 removed from Line 1, on Page 50, is that what
8 you're saying?

9 A (Paruta) That's correct. Yes.

10 Q Okay. So, it affected the 2.11 percentage that
11 you applied to all the projects in the Step
12 Adjustment?

13 A (Paruta) Yes. But, just to clarify, it was a
14 two -- kind of like a two-step adjustment. It
15 was the 1,366,129, and then the 341,532. So, the
16 total adjustment to that Line 1, as you
17 mentioned, on Bates Page 050, was 1,707,661.

18 Q And it's because those taxes are -- why were they
19 removed? Could you explain that again?

20 A (Paruta) So, this was a prior period adjustment
21 that was made in 2021 that related to
22 transmission -- I'll call it "transmission
23 values" that were improperly included as part of
24 the distribution plant assets. And, so, it did

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1 impact the property tax value. In 2021, the
2 Property Tax Department recorded this journal
3 entry to remove it. And, so, in doing so, we had
4 picked it up, and we should not have, because
5 it's a prior period adjustment. So, it relates
6 to 2020, fiscal year 2020.

7 But, having said that, because it
8 relates to property tax fiscal year 2020, the
9 last three months actually do relate to 2021.
10 And we had inverted the -- we added it back in,
11 and we should not have. It should have not been
12 included. And then, we also should have reduced
13 the property tax expense in 2021 for the
14 transmission allocation out of distribution for
15 January, February, and March of 2021, which is
16 what we now do in this revised revenue
17 requirements calculation, if you will.

18 Q Yes. Okay. And I appreciate the update in the
19 Step Adjustment. But we had -- not that long
20 ago, you and I had a hearing on property tax --
21 for the Property Tax Adjustment Mechanism. Was
22 this phenomena reflected, in your mind, properly
23 in the Property Tax Adjustment Mechanism?

24 A (Paruta) Absolutely. This is a different

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1 calculation. So, and not to rehash the one-hour
2 discussion in that hearing, but, in that hearing,
3 remember, that is a tracking mechanism --

4 Q Uh-huh.

5 A (Paruta) -- of pure tax expense. So, we're
6 tracking period-over-period. So, this particular
7 adjustment was reflected in last year's RRA. So,
8 it was properly included to negate it, remember
9 that discussion.

10 For this particular Step Adjustment,
11 what we're looking is, as of a period of time, we
12 have to determine what the property tax expense
13 was just for 2021. There's not a reconciling
14 mechanism here. So, in order to do that, what we
15 did is we pulled just 2021 property tax expense
16 and took out anything that related to the prior
17 period. But, in doing so, we inversely added
18 back the number that we should have taken out.
19 And then, also, what we should have done is take
20 out the piece of that adjustment that related to
21 2021, which was January, February, and March of
22 2021, and pulled that out of the property tax
23 expense.

24 Q Okay. So, I think, in sum then, your testimony

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 today is that, with this correction, the Step
2 Adjustment now properly reflects property tax
3 adjustments, is that right?

4 A (Paruta) That is correct.

5 Q And you're also sort of reminding us that we
6 don't need to worry about making an offsetting
7 adjustment in the RRA/PTAM case, that's already
8 been taken care of properly?

9 A (Paruta) Absolutely. It's correct.

10 Q Okay. All right. Thanks. So, is that it for
11 the audit issues?

12 A (Paruta) Let me just -- I believe so. I just
13 want to kind of scroll to the end and make sure
14 Audit Issue Number 6 -- nope. Sorry, there is
15 one more. And that is Audit Issue Number 6.
16 This was a discovery by the auditor where we had
17 plant that was placed in service in 2021 that
18 related to IT computer and PC replacements, low
19 cost. These were \$367,211.56. These computer --
20 excuse me -- and PC replacements were actually
21 purchased in 2019. And, because of the
22 accounting exercise and how it flowed through, it
23 should have been picked up in the step in 2019.
24 So, we did agree to remove it from this step.

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1 Q Okay. And what was that amount please?

2 A (Paruta) It is 367,211.56.

3 Q And that appears on Page 52, \$367,000?

4 A (Paruta) Correct.

5 Q Okay. And this was removed from a particular
6 project, we won't go through the exercise, but
7 this was removed from a particular project listed
8 on Exhibit 1, Pages 29, 30, or 31, correct?

9 A (Paruta) That is correct.

10 Q Okay. All right. Thanks. And the second cause
11 for the update today you mentioned was the
12 removal of the two stipulated projects that were
13 discussed in the letter by the Company, I think
14 yesterday or Friday, is that right?

15 A (Paruta) That is correct.

16 Q Okay. And that's the Nashua Renovation and the
17 Millyard Substation, correct?

18 A (Paruta) Yes.

19 Q We don't have an updated schedule to look at, but
20 that's included in the \$8.9 million revenue
21 requirement, right?

22 A (Paruta) Correct.

23 Q Okay. So, I wanted to ask you to go to
24 Exhibit 1, Page 51, let me see if I can get

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 there. Is this -- this schedule indicates how
2 the proposed, it was 9.3 million, now it's 8.9
3 million, gets allocated to the various rate
4 classes, correct?

5 A (Davis) This shows the result of that allocation,
6 yes.

7 Q It shows the result of the allocation, okay.

8 A (Davis) I believe, if you wanted to see the
9 actual allocation, it is Bates 055, I believe.

10 Q Okay. And just so that we're all following
11 along, the requested, again at the time, it was
12 9.3 million, shows up on Line 32, looks like
13 Column (F), is that right?

14 A (Davis) That's correct.

15 Q Okay. So, let's go down to Page 55 then, and see
16 how these costs were allocated to the various
17 classes. What does Page 055 show?

18 A (Davis) I apologize, Page 56.

19 Q Page 56. Okay. So, how was the allocation to
20 the various classes performed?

21 A (Davis) So, at the upper section, you'll see --
22 let me make this larger. So, Line 17 shows a
23 dollar amount, it actually shows in -- it shows
24 here in thousands, but the dollar amount "\$9.3

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1 million" is allocated to rate classes using an
2 average percent, in this case, "2.23 percent".

3 It shows on Line 19.

4 Q Yes. I see the "2.23 percent".

5 A (Davis) And that amount is then applied to
6 distribution revenues by rate class. And that
7 shows, ultimately, in Column B, you'll see the
8 revenue; Column D, you'll show the change in
9 revenue due to the allocation, which you can see
10 at the very bottom adds up to the \$9.3 million;
11 and then, the sum of Columns B and C give you
12 what are revenue targets, distribution revenue
13 targets.

14 We then, and there's subsequent pages
15 that provide a significant amount of detail,
16 where we actually take these targets, bring them
17 into each rate class, and try to design the
18 specific pricing that will achieve those targets.
19 The result of that set of calculations appears in
20 Column E.

21 And, so, you can see at the bottom, we
22 have a target of "426,734.2 million", and we have
23 an actual proposed rate revenue of "426,733.8".
24 So, those are all in Line 55.

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1 So, what we do is we design rates so
2 that we can achieve those targets. We do it
3 individually by rate class. Within each rate
4 class, we apply it to specific rate components.
5 For example, in Rate R, we have a total revenue,
6 change in revenue, but we wouldn't be making any
7 changes to the customer charge, we would instead
8 apply a change to the per kilowatt-hour charge so
9 that we can achieve that target.

10 Q And why was the step adjustment allocated only to
11 the volumetric charge for residential customers?

12 A (Davis) Two reasons. Well, the main reason is we
13 have a stipulation that maintains the customer
14 charge at the current level from the last rate
15 case. But, also, for step changes, we will make
16 a change, and this is also the result of
17 implementing the step methodology, we make a
18 change to the demand-related component of charges
19 in a given rate class. And, in Residential,
20 that's done on a per kilowatt-hour basis. In
21 other classes, it might be on a per kilowatt or
22 kVA basis. So, it depends on the rate class.
23 And we apply it to those demand-related
24 charges -- or, rates, if you will.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q Were the customer charges for any classes
2 impacted by the Step Adjustment?

3 A (Davis) No.

4 Q And is that consistent with the underlying
5 Settlement from DE 19-057?

6 A (Davis) Yes, it is.

7 Q Okay. Now, if we go to Bates Page 057, again,
8 this is before the update, but am I correct that
9 the column marked "Proposed Rates" would be the
10 actual rates that the Company is seeking approval
11 of in this docket?

12 A (Davis) That's true, yes. And then, just as a
13 reminder, these are from our initial filing.

14 Q Correct.

15 A (Davis) So, they would be a little lower as a
16 result.

17 Q Okay. And do we have updated rates equivalent to
18 Bates Page 057 and 058, and so on?

19 A (Davis) We have those. I don't believe we've
20 submitted those. I can readily submit those.

21 Q Okay. And, jumping down to Bates Page 101 of
22 Exhibit 1, this takes me to the Company's
23 proposed tariff changes, correct?

24 A (Davis) Just a moment. That's correct.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q And this, I happen to be looking at the
2 Residential Rate R, I think you indicated that
3 the customer charge of \$13.81 would not change as
4 a result of the Step Adjustment, correct?

5 A (Davis) That is correct.

6 Q The only number, in fact, that would change on
7 here is the distribution charge. Right now, it
8 says "5.63" -- "5.363 cents per kilowatt-hour".
9 That's the proposed rate, before updating,
10 correct?

11 A (Davis) That's correct.

12 Q Could you tell us what the proposed rate for the
13 residential customer would be after updating?

14 A (Davis) So, here is where I want to harken back
15 to my initial direct testimony, where we
16 indicated that we are seeking an effective date
17 of October 1st, --

18 Q Uh-huh.

19 A (Davis) -- because of the timing. And,
20 therefore, we are seeking to recover that over a
21 10-month period. So, instead of applying rates,
22 as we initially filed, August 1st, where you
23 design rates on a 12-month basis, we're actually
24 designing rates for this period starting

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 October 1st over a 10-month basis. So, what I'm
2 going to tell you is I'm going to give you the
3 price to answer your question, but I just want to
4 then explain why it's higher than you would have
5 intuitively expected.

6 So, on the basis of \$8.9 million, we
7 actually would design rates over a 10-month
8 period, so that, when we apply rates for 10
9 months, we actually get back to the \$8.9 million.
10 Okay? So, the "5.363 cents" that you see in our
11 initial filing on Page 101 would become "5.389
12 cents per kilowatt-hour".

13 And then, at the end of the 10 months,
14 this rate would resort back to a lower number.

15 Q Well, that was my next question. So, when will
16 that be? When would the rate resort back to a
17 lower number?

18 A (Davis) August 1st of 2023. All else being
19 equal.

20 Q And do you have that number, what it would revert
21 back to, assuming nothing else changes?

22 A (Davis) I do not, but I can get that with a short
23 check.

24 Q And does the Company plan to make a rate filing

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 for effect August 1st, 2023?

2 A (Davis) In this instant proceeding?

3 Q In other words, to drop the rate down from this
4 shortened 10-month period, back down to what's
5 going to be the ongoing rate for the step
6 adjustment, there's going to have to be a rate
7 change, that's what you just said. My question
8 is, would that be a filing that the Company would
9 make for approval with the Commission, and, for
10 the record, Department of Energy supports such a
11 filing, rather than sort of a pre-approval of a
12 decrease to come 10 months from now or something
13 like that?

14 And, if you don't know, that's fine. I
15 just -- we can, you know, the lawyers can address
16 that, I guess.

17 A (Davis) If I could consult, then we can respond
18 to that. Yes.

19 Q Sure. Okay. So, where we are now is an \$8.9
20 million revenue requirement, consisting of lots
21 of projects that are listed on Exhibit 1, Pages
22 29, 30, and 31, but with some adjustments. And I
23 now want to ask some questions about the
24 remaining specific projects, starting on Page 29.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 So, let me see if I can get there.

2 Okay. The first project I want to ask
3 about is called the "Emerald Street Substation",
4 that's Line 15, on Bates Page 029 of Exhibit 1.
5 Is that right?

6 A (Plante) Correct.

7 Q And this project is placed in service in this
8 Step Adjustment at an amount of \$19,536,000, and
9 I'm just rounding, but I get that number in
10 Column H, is that right?

11 A (Plante) Yes.

12 Q Okay. And this project was originally authorized
13 to cost 16 million -- \$16.8 million, as shown in
14 Column I, correct?

15 A (Plante) Correct.

16 Q And when was this project placed in service?

17 A (Plante) In July of 2021.

18 Q July of 2021, okay. And there's backup
19 information about this project contained in
20 Exhibit 5. So, I'd like to go to Exhibit 5 for a
21 minute. And I want to go to Bates Page 040 of
22 Exhibit 5.

23 MR. DEXTER: Commissioners, I seem to
24 have some page numbers wrong. I'd like to take a

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 60-second break off the record please? So, I
2 can -- somehow I messed up my Bates page numbers.

3 CMSR. SIMPSON: Oh, no problem.

4 MR. DEXTER: Thank you.

5 CMSR. SIMPSON: Take your time.

6 *[Short pause - off the record.]*

7 MR. DEXTER: Okay. I'm ready to
8 proceed, if I may?

9 CMSR. SIMPSON: Please do so.

10 MR. DEXTER: Thank you.

11 BY MR. DEXTER:

12 Q So, I actually wanted to go to Bates Page 042,
13 which is the "Executive Summary". And I wanted
14 to direct your attention to the second full
15 paragraph on Bates Page 042.

16 And I want you to confirm that this
17 report, which is a study of the Keene -- well,
18 let me ask you this, I guess, rather than assume.
19 Could you tell me what the purpose of the Keene
20 Area Planning Study is, which starts on Exhibit
21 5, Bates Pages 040?

22 A (Johnson) This Study is a comprehensive Area
23 Study --

24 *[Court reporter interruption.]*

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 **BY THE WITNESS:**

2 A (Johnson) This Study is a comprehensive Area
3 Study for the Greater Keene Area. During the
4 previous Ten Year Load Flow Study, it recognized,
5 under contingency, some -- over the 10-year
6 horizon, some issues. And it recommended a
7 comprehensive Area Study. So, that's what this
8 particular document is.

9 BY MR. DEXTER:

10 Q And when was this document prepared?

11 A (Johnson) This study started in April of 2011.
12 It was finalized in May of 2012.

13 Q Okay. And is it correct that, on Page 2 of the
14 Study, which is Bates Page 042, that the second
15 paragraph indicates that "This area", meaning
16 Keene, "is presently experiencing a 3.1 percent
17 load growth which is expected to continue for the
18 foreseeable future"?

19 A (Johnson) That's correct.

20 Q Is that 3.1 percent per year?

21 A (Johnson) Yes, it is.

22 Q And did that load growth, which was predicted in
23 2011, in fact, materialize?

24 A (Johnson) It has not.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q It has not.

2 A (Johnson) I will add to that that this, again,
3 was a comprehensive Area Study, in which you need
4 to forecast a load forecast, of which, at that
5 time, looking at the historical load growth in
6 that area, was forecasted to be around 3.1
7 percent.

8 Q Okay. Has the Keene area experienced load growth
9 since 2011?

10 A (Johnson) Very slight load growth since that
11 time.

12 Q Okay. So, if I were to go to Bates Page 058, I
13 guess I should go to Bates Page 057, where it
14 starts, there's a paragraph that's called "Load
15 Flow Analysis". Could you explain what that is
16 please?

17 A (Johnson) The "load flow analysis" is developing
18 a model of the system, applying your load
19 forecast to that model, and then conducting an
20 annual -- a year-by-year study for ten years, to
21 identify both base case, as well as contingency,
22 violations.

23 Q Okay. And the next page, the bottom of 057, and
24 all of 058, talks about a number of violations,

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 correct?

2 A (Johnson) It does.

3 Q Could you explain what "violations" are in this
4 context?

5 A (Johnson) In this context, and, again, we're
6 talking in the timeframe of 2011, and the
7 planning criteria that was in place at that time,
8 it was the base case overload of the long-term
9 emergency capacity of the transformation. It was
10 potentially an overload of circuit conductors,
11 and it was also a resulting drop in load for a
12 contingency, a permanent dropping of load under a
13 contingency.

14 Q What do mean a "permanent dropping of load"?

15 A (Johnson) In other words, you don't have the
16 capacity to restore load to the customers.

17 Q So, in other words, the -- you would be facing a
18 situation where you wouldn't be able to serve
19 customers?

20 A (Johnson) Correct. I'll add to my response, in
21 that there are additional elements to the
22 criteria at the time, that you could conduct up
23 to the three load block transfers during the
24 restoration. If it required more than that, then

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 that was considered a violation of the criteria.

2 Q Okay. And these violations were occurring
3 because there was too much load for the system to
4 handle, right?

5 A (Johnson) It's a combination of load, as well as
6 the configuration of the existing substation.

7 Q Right. And the load that couldn't be handled
8 assumed a 3.1 percent annual growth factor,
9 correct?

10 A (Johnson) Correct.

11 Q Okay. And that's shown on -- there's a graph
12 here, on Page 59. And, again, this is different
13 scenarios, I guess. Maybe you could explain
14 what's on Page 59?

15 A (Johnson) Sure. At the time, load forecasting
16 was primarily based on looking at the historical
17 load growth, as well as looking at significant
18 spot loads that were known to be coming on line.
19 And what we would do at the time is we would
20 establish an envelope of low-level growth rate,
21 and I apologize for the misplacement of the
22 arrows. You can tell that word processing has
23 improved over the years. But the lower gray line
24 has represented a 2 percent growth rate, the

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 upper line represented a 4 percent growth rate.
2 And, basically, what you observe there is the
3 solid line up and down is the actual peak loads.
4 And you'll notice that the last peak load noted
5 there was 2010, because this analysis was begun
6 in the early part of 2011, when we hadn't seen
7 another summer peak yet.

8 So, based on that historical load, the
9 3.1 percent, or the middle curve, was selected as
10 the forecast.

11 Q Okay. And is this study that was provided the
12 basis for the decision to undertake the Emerald
13 Street Substation Project that's at issue for
14 recovery in this Step Adjustment?

15 A (Johnson) The Study -- yes. The answer to that
16 question is "yes, the Study." The growth -- the
17 forecast, as it turns out, played no role in the
18 solution that was selected at Emerald Street.

19 Q And why is that?

20 A (Johnson) If you look in the Study, if you want I
21 can get to the Bates page, give me a second. On
22 Bates 045, there's a Section 7 called "Load
23 Growth", which identified that the first criteria
24 violation was in 2014, and it was a contingent

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 violation, it was for loss of a transformer. And
2 noted there is that "With a mobile transformer
3 available, additional transformation is then
4 required prior to the Summer of 2020." In fact,
5 the Company acquired a mobile transformer, a
6 115-to-12.47 mobile transformer and addressed
7 that particular issue.

8 So, it was all of the other remaining
9 issues identified in the Study that drove the
10 ultimate solution for the Keene area.

11 Q Is the mobile transformer still in use?

12 A (Johnson) Yes. It backs up multiple 115-to-12 kV
13 substations that we have on our system now.

14 Q Okay. Is it in use in Keene? Is it needed in
15 Keene, after the Emerald Street Substation
16 Project?

17 A (Johnson) It is used in situations, for example,
18 for maintenance at North Keene, which has a
19 single transformer, they would use the mobile
20 during maintenance there.

21 It is not needed for a transformer
22 failure at Emerald Street specifically. And I'll
23 explain the reason why, is a mobile has a backup
24 for, you know, for planning criteria, is intended

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 to be in place until you can install the spare
2 transformer in its place. Whereas, because that
3 mobile is, in fact, backing up multiple stations,
4 we cannot have a spare 115-to-12.47 transformer.
5 Therefore, we can't rely on the mobile as a
6 long-term solution while you're waiting the 18
7 months to two years to get a replacement
8 transformer. So, you know, in fact, the capacity
9 that we have at Emerald Street addresses that
10 issue.

11 So, we would use it for maintenance
12 activities at this point. And, for loss of a
13 transformer, we would most likely have it on-site
14 to prepare for the loss of an additional unit.
15 But, on a first contingency or contingent at
16 Emerald Street, the system is now designed with
17 an automatic bus restoral scheme --

18 *[Court reporter interruption.]*

19 WITNESS JOHNSON: I'm sorry.

20 **CONTINUED BY THE WITNESS:**

21 A (Johnson) The system is now designed at Emerald
22 Street with an automatic bus restoral scheme in
23 the switchgear that, for loss of a transformer,
24 we're able to restore all load.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 BY MR. DEXTER:

2 Q Okay. Well, let's get back to the graph for a
3 moment. So that, I think, was Bates Page 059.
4 And you said that the graph "reflected historical
5 growth". Could you tell me what the annual
6 percentage historical growth was in the Keene
7 forecast that is shown on this graph and what
8 years that covered?

9 A (Johnson) What's shown is, in 2005, a peak of
10 roughly 51. And then, in 2010, it was at around
11 59. Following -- based on the curve that's here,
12 that particular growth rate, from to 2005 to
13 2010, was 3.1 percent.

14 Q Okay. And that's sort of an averaging of those
15 spikes up and down, is it?

16 A (Johnson) Yes.

17 Q I'm looking at a jagged black line, that the
18 actual load?

19 A (Johnson) Yes.

20 Q Okay. All right. So, the historical load growth
21 was 3.1 percent. This graph predicted --
22 projected that forward, and that's what the blue
23 line is, correct?

24 A (Johnson) My version isn't in color, sorry.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q Okay. The middle line?

2 A (Johnson) Yes.

3 Q The middle solid line?

4 A (Johnson) Yes.

5 Q Okay. All right. Thanks. And I think you
6 testified, and, again, I'm not trying to make you
7 repeat things, but I think you testified that the
8 actual growth from 2010, we're now in 2022, in
9 this same area, the Keene area, was "minimal", is
10 that what you said?

11 A (Johnson) That's correct.

12 Q Okay. And do you have a percentage? When you
13 say "minimal", what percentage is that?

14 A (Johnson) I don't know that answer off the top of
15 my head.

16 Q Okay. Well, how do you know it's minimal,
17 though? I'm not trying to be wise, but I'm --

18 A (Johnson) No, no, no. I know --

19 Q I'm just trying to understand.

20 A (Johnson) I know, from this past summer, that
21 they peaked around 59 megawatts.

22 Q Fifty-nine (59) megawatts.

23 A (Johnson) So, it was -- yes. Now, again, you
24 need to weather-adjust peaks, which that has not,

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 you know, been done, for the number that I just
2 provided you.

3 Q Sure.

4 A (Johnson) But, you know, simply looking at the
5 graph, it was around, you know, 58 plus in 2010,
6 and the combined Emerald Street and North Keene
7 is -- was around that, that point. And I am
8 going by memory.

9 And I do need -- I need to make one
10 correction.

11 Q Okay.

12 A (Johnson) And I have to go back and verify this,
13 but I believe that the -- I believe that this
14 forecast included some of the load at Swanzey
15 Substation. But I would have to confirm that,
16 but I believe it does.

17 Q The forecast shown on Bates Page 059?

18 A (Johnson) Yes.

19 Q Okay. When was the decision made to undertake
20 the Emerald Street Substation Project?

21 A (Johnson) The result of the comprehensive Area
22 Study was a two-phase solution. The first phase
23 was to construct the North Keene Substation.
24 And, again, the decision to move forward was

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 based on asset condition at Emerald Street
2 over-dutied equipment at Emerald Street.

3 So, the ultimate solution was to
4 provide a new source into the area, because the
5 Emerald Street Substation served over 16,000
6 customers, and was the only source to that
7 customer base. So, we built a new substation in
8 North Keene, which provided a second source into
9 the area, it applied a source closer to the load
10 in North Keene.

11 And it also allowed for the
12 construction, the rebuild to take place, at the
13 Emerald Street site, due to how tightly
14 constrained that substation is, and the inability
15 to greenfield construct a substation site there.
16 So, Phase 1 was to build the North Keene
17 Substation. So, that was completed in 2016, I
18 believe. The technical authorization that had --
19 that involved the full scope of the work at
20 Emerald Street, I believe, was approved in 2017.

21 Q And I think, I don't want to put words in your
22 mouth, but I think that what I'm hearing you
23 saying is that, in 2017, when you moved to the
24 project that's at issue here, that the 3.1

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1 percent previously predicted load, first of all,
2 was not materializing, and, second of all, wasn't
3 a factor in that 2017 decision?

4 A (Johnson) Correct.

5 Q Okay. And I think what you said was, that what
6 was a factor were asset conditions?

7 A (Johnson) Asset condition, underrated breakers at
8 the station. There are other issues. There were
9 flood mitigation issues. There was obsolescence,
10 with respect to, you know, all of the protective
11 schemes were all electric mechanical systems.
12 So, there were a number of deficiencies within
13 the station.

14 And the overall design of the station,
15 over the decades, in order to meet the growth in
16 the area, transformers had been installed in
17 parallel with the existing transformers, which
18 led to the over-duty fault duty issue with the
19 equipment. But it also creates an issue under
20 contingency, where we had a 22.4 MVA transformer
21 in parallel with a 12.5 MVA transformer. So,
22 when you lose the larger transformer, you
23 overload the lower, the lower --

24 *[Court reporter interruption.]*

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 CONTINUED BY THE WITNESS:

2 A (Johnson) -- the lower MVA transformer
3 significantly. And keep in mind that these are
4 1950 vintage transformers, 1949 vintage
5 switchgear.

6 And, as noted, one of the transformers
7 actually failed during the construction phase,
8 just reinforcing the concern over the condition
9 of the assets there.

10 MR. DEXTER: Okay. I was going to
11 start a new project. You had mentioned "taking a
12 break at 10:30". Would you --

13 CMSR. SIMPSON: Let's take that break
14 now.

15 MR. DEXTER: Okay.

16 CMSR. SIMPSON: It's 10:25. We'll
17 resume in ten minutes, at 10:35. Off the record.

18 *(Recess taken at 10:25 a.m., and the*
19 *hearing resumed at 10:42 a.m.)*

20 CMSR. SIMPSON: On the record.

21 Attorney Dexter, please resume.

22 MR. DEXTER: Thank you. Yes. And I do
23 have some more questions on the Emerald Street.
24 I was mistaken when I thought I had finished.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 BY MR. DEXTER:

2 Q So, I would like to turn to Exhibit 5, Bates
3 Page 027 please. And I'm looking at a form
4 called a "Technical Authorization Form". Could
5 one of the witnesses tell me what this "Technical
6 Authorization Form" is please?

7 A (Johnson) So, at the time that this project was
8 in development, the capital approval process in
9 place had a step where you received technical
10 authorization, and then you went for financial
11 authorization through the -- for project
12 approval.

13 Q So, this is an internal Eversource document
14 seeking, just what it says, technical
15 authorization for the project?

16 A (Johnson) Correct.

17 Q Okay. And right under the first paragraph, bold
18 "Project Need Statement", it references a "2012
19 Area Study...to determine how to best address the
20 area loading and requirements [retirement?] of
21 the equipment at Emerald Street Substation."
22 That's the study we were just looking at before,
23 correct?

24 A (Johnson) Correct.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q The Load Area Study. Okay. It talks about the
2 two solutions that you mentioned, the North Keene
3 Station having been put in service in 2016. And
4 then, Paragraph 1, under "Project Objectives", is
5 entitled "Retire aging infrastructure", correct?

6 A (Johnson) Correct.

7 Q And that talks about what you had mentioned
8 earlier, the age of some of the elements or the
9 components of the substation. And then, in the
10 last paragraph, under "Project Objectives", it
11 says: "Besides the age and condition of the 67
12 year-old switchgear, there [was] a concern about
13 the fault duty of the equipment." Can you
14 explain that concern and what gave rise to that
15 concern?

16 A (Johnson) Yes. Equipment, such as circuit
17 breakers, are rated to be able to interrupt up to
18 a certain level of current, and that's sort of
19 referred to as "fault duty". And, so, within the
20 substation, there are breakers between the bus
21 sections on the low side of the transformer,
22 there are breakers feeding the individual
23 circuits. There are also breakers on the --
24 actually, on the low side of the transformer,

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 which we're talking about here, because we're
2 talking about the distribution side.

3 This specific reference is to the bus
4 tie breakers. And at issue is the fault duty, in
5 other words, if you were to place a fault on the
6 low side of these devices, this is the percentage
7 of that rated capacity of those devices. Now,
8 that issue is that, if you close a bus tie at
9 Emerald Street at the time, and put another
10 transformer in parallel with the two existing
11 parallel transformers, you exceed those
12 interrupting ratings.

13 This also, what fails to reference here
14 is that the -- which is referenced in the Area
15 Study, is the actual transformer breakers are
16 already exceeding their 10,000 amp capacity. But
17 here it's referencing the switchgear bus tie
18 breakers, and being at 85 and 99 percent of their
19 rating. And, again, this is equipment that's 67
20 years old.

21 Q Right. And what put them in this state of 85 and
22 98 percent?

23 A (Johnson) The process of putting two transformers
24 in parallel, lowered -- increases the available

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 fault current. But, also, changes on the
2 transmission side, the strengthening on the
3 transmission side as a source can increase the
4 available fault current. So, it's a combination
5 of those two things over time.

6 Q And you mentioned something that wasn't mentioned
7 here, but was mentioned in the Area Study, and
8 that had to do with the "capacity of
9 transformers", is that what you said?

10 A (Johnson) No, the transformer breakers. The
11 low-side protection on the transformers. Their
12 oil circuit breakers, just like the breakers on
13 the bus tie or the circuit breakers. So, those
14 were identified in the study of being above their
15 interrupting rating.

16 Q Right. And you said something -- you gave a
17 10,000 something figure?

18 A (Johnson) That's what the rating was for those
19 devices.

20 Q Can you repeat that figure?

21 A (Johnson) Ten thousand (10,000) amps.

22 Q Amps, okay. So, -- okay. And what would put
23 those breakers at that 10,000 amp point?

24 A (Johnson) Strengthening of the supply, the

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 transmission system, creates greater fault
2 current on the system.

3 Q And can you briefly describe "strengthening of
4 the transmission system"?

5 A (Johnson) As the transmission system, as lines
6 are reconductored, as additional transmission
7 lines are built, additional generation is put on
8 line, are all elements that would strengthen the
9 transmission system and increase the available
10 fault current.

11 Q Okay. And is that Eversource transmission
12 equipment or a different party?

13 A (Johnson) It's New England. It's Eversource,
14 it's other parties, it's other generators.

15 Q Yes. And one last question on the issue of the
16 load growth, I want to jump to Page 70 of this
17 exhibit. And this is -- understanding that this
18 is a DOE exhibit, this is a graph that was taken
19 from the Company's pending Least Cost Integrated
20 Resource Plan. And it's entitled "Loading and
21 Capacity, Emerald Street Substation". And am I
22 correct that the blue line, and yours might not
23 be colored, but there's a squiggly line labeled
24 "Historical", and it seems to be at about 40, on

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 the left-hand side of the graph, which is "2007",
2 and seems to be about 30 on the right-hand side
3 of the graph at "2020". Do you see that line I'm
4 talking about?

5 A (Johnson) I do.

6 Q What does that line represent?

7 A (Johnson) That's a good question. This can be
8 confusing. This is pulled from a planning
9 document, distribution planning document. And
10 what they do here, I'll try and explain this, is
11 this data is used in the forward-looking
12 development of the load forecast. So, what they
13 do is, is when a new substation is added, load is
14 -- in this particular case, I'll give you an
15 example, we built North Keene Substation, and
16 roughly 18 megawatts was moved from Emerald
17 Street to North Keene. So, in order to be able
18 to develop a load forecast, based on the history
19 at Emerald Street, they make an adjustment. They
20 take their best guess of backing out the load
21 that was moved to North Keene from the historical
22 load at Emerald Street. So, you know, that
23 historical data is that adjusted amount, as best
24 as they can do it.

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1 Now, you know, the reality is, is that,
2 because of the age of the equipment at Emerald
3 Street, we did not have good load data on
4 circuitry or in the area. So, it's really an
5 approximation. So, to the left is that adjusted
6 amount of historical, and to the right is the
7 forecast.

8 Q Okay. And is that why the numbers are,
9 represented by this blue historical line, are in
10 the 30s and 40s, whereas the other graph we were
11 looking at, the numbers were in the mid to high
12 50s, because that -- is it this phenomena of
13 adding the North Keene Substation?

14 A (Johnson) Yes. Yes. And I'll -- and, again, the
15 other graph, it was the overall western area, --

16 Q Right.

17 A (Johnson) -- which included some load from
18 Swanzy. So, there was that adjustment as well.

19 Q Okay.

20 A (Johnson) This was specifically Emerald Street.

21 Q Okay. So, right to the right of the blue line is
22 a fairly straight line, I think it's labeled
23 "90/10 Forecast". Do I have that right?

24 A (Johnson) Yes.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q And that starts in 2020, and it goes to 2029.
2 And, although it looks somewhat flat, it does
3 have an incline. Is that -- is that the load
4 forecast for Keene at this time?

5 A (Johnson) Yes, it is.

6 Q For Emerald Street at this time?

7 A (Johnson) Yes, it is.

8 Q Okay. Can you -- do you have the numbers behind
9 this graph to tell me what the load is at 2010
10 versus 2029, the projected load?

11 A (Johnson) I do not.

12 Q Anybody on the panel here?

13 A (Johnson) I can certainly get that for you.

14 MR. DEXTER: Well, we've got a lot of
15 folks in the room here. I don't know if we have
16 anybody that prepared this Least Cost Plan in the
17 room?

18 WITNESS JOHNSON: No. There's no one
19 here from the System Planning Department.

20 MS. RALSTON: Yes. We don't have a
21 witness that would be able to address the Least
22 Cost Integrated Resource Plan.

23 MR. DEXTER: Okay. All right.

24 BY MR. DEXTER:

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1 Q But you could provide the underlying load data
2 and you could provide the percentage annual
3 increase for this graph, "you", meaning "the
4 Company"?

5 A (Johnson) Yes. And I can add some context, if it
6 helps.

7 Q Please.

8 A (Johnson) I mean, I can tell you that, from a
9 statewide perspective, that recent load forecast
10 from a statewide perspective is in the one
11 percent range. So, I would assume that this
12 growth rate that's being assumed in this area is
13 similar to that. That's probably pretty close.

14 Q I think that's -- I think that's enough for
15 purposes of what we're doing here. And I think,
16 when I asked you earlier about "minimal load
17 growth", and we've got a number on it, in the
18 "one percent range" you would agree is "minimal
19 load growth"?

20 A (Johnson) Yes.

21 Q Okay. Okay. So, now, lastly, on the substation,
22 I wanted to go back to Exhibit 1, Bates 029,
23 where it indicated that the amount -- the
24 difference between the budgeted amount and the

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1 actual amount for this project was roughly
2 \$3 million. That showed up on Exhibit 1, Page
3 29, Line 15. And that would be the difference
4 between Column H and Column I, correct?

5 A (Plante) That's correct.

6 Q Okay. And the "Pre-Construction Authorization"
7 figure of 16 million -- "16,835,000", is that
8 reflective of the Supplemental Authorization or
9 is that the original authorization?

10 A (Plante) That is the document entitled the
11 "Supplement Authorization". However, we are
12 representing that as our pre-construction cost,
13 as it was presented to the EPAC Committee just as
14 construction was beginning. So, we incorporated
15 our -- the remainder of our contracted costs and
16 whatnot to fulfill the full cost estimate for the
17 project.

18 Q Okay. So, it does reflect the supplemental?

19 A (Plante) The 16 --

20 Q The supplement? The 16?

21 A (Plante) Yes.

22 Q What was the original amount of the authorized --
23 what was the original amount authorized for the
24 substation?

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1 A (Plante) It had a couple of authorizations,
2 actually. Back in the 2017 timeframe, or late
3 2016 actually, it was authorized for initial
4 funding of about a million dollars, to kind of
5 launch the project. And then, in mid-2017,
6 additional funding was authorized to order and
7 procure the major equipment, meaning the
8 switchgear and the transformers. Because we
9 really need to have that equipment known and
10 defined, before you can complete the detailed
11 engineering for the project.

12 Q And what was that amount for the equipment?

13 A (Plante) That raised the level to about 5.3. So,
14 it was a \$4.3 million incremental funding
15 increase. So, as I said, that allowed us to
16 complete the order of the major equipment, and
17 get them working on their design, so they could
18 deliver to us the detailed design of the
19 equipment.

20 Q Okay. And was there another supplement or was
21 the next one the 16.9?

22 A (Plante) The next funding authorization was at
23 the end of 2017, and that was what we had at the
24 time called "full funding", and that was in the

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1 amount of \$11 million.

2 Q In total or on top of the 5.3?

3 A (Plante) Yes, in total.

4 Q In total.

5 A (Plante) Yes. And that included the known cost
6 of the major equipment, and the cost of the
7 engineering services that we had contracted to
8 date. But it was still carrying forecast
9 information for construction, testing, and some
10 of our miscellaneous project materials.

11 Q Okay. And was there another one or --

12 A (Plante) Yes. So, in May of 2019, the document
13 entitled "Supplemental Funding" was approved. We
14 had actually initiated it kind of in the January
15 timeframe, but it took a while to work its way
16 through. That's the \$16.8 million funding event,
17 which is about 13 of direct costs, and just under
18 \$4 million of indirect costs.

19 Q Okay. And could you, or someone on the panel,
20 explain then the difference between the -- I
21 guess I'll call it the "supplemental full funding
22 of 16.8 million" and the final "2021 in-service
23 amount of 19.5 million", both as shown on
24 Exhibit 1, Page 29, line 15?

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 A (Plante) Yes. I will get that for you. Hold on.
2 So, I did prepare a data response to TS 3-002,
3 which is in our Exhibit 15. And I can go through
4 that for you.

5 Q Yes. If you don't mind, I just want to take a
6 moment to open up that exhibit.

7 A (Plante) Okay.

8 CMSR. SIMPSON: And, if there was a
9 Bates Page, that would be helpful as well.

10 WITNESS PLANTE: Four.

11 CMSR. SIMPSON: Thank you.

12 MR. DEXTER: I'm just going to need a
13 minute to have Mr. Dudley pull that up.

14 CMSR. SIMPSON: Take your time.

15 BY MR. DEXTER:

16 Q Okay. We have that up on the screen now. If you
17 could provide a brief explanation, that would be
18 helpful.

19 A (Plante) Sure. So, the authorized amount is
20 \$16.8 million was -- wait a second. So, excuse
21 me, the difference in the cost between the \$16.8
22 million authorized value and the as of
23 December 2021 value of 20.2 is about \$3.4
24 million. Not all of that is plant in service

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1 dollars, because there's, I don't know, 700 and
2 some dollars of -- thousand dollars [\$700,000+?]
3 of removals cost, which does not go to the plant
4 in service.

5 Of that \$3.4 million, about 1.26 of
6 that is direct costs. The remaining \$2.2 million
7 goes to indirect costs, just normal overheads,
8 and AFUDC. The primary driver for these cost
9 increases has to do with overall extension to the
10 project schedule. We had been planning to have
11 this in service in December of 2020. However, as
12 I mentioned earlier, it did not actually get
13 completed until July of 2021. So, that's about
14 seven-ish months of additional project duration.

15 Additionally, we had costs incurred to
16 mitigate some additional contaminants that were
17 discovered upon removal of a couple of the
18 transformers and their associated switchgear. We
19 discovered PCBs that were unable to be detected
20 in our pre-project characterization, because they
21 were underneath the, you know, the cabinets of
22 these pieces of equipment. So, once we started
23 removing them, we discovered additional PCB
24 contamination, as well as some

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1 asbestos-containing materials that is like a
2 coating that was painted on the bottom of this
3 equipment. So, that drove a delay in the project
4 construction schedule while that abatement and
5 mitigation was taking place in early 2021.

6 Additionally, property taxes assessed
7 to the project were significantly higher than had
8 been included in the authorized value.

9 Q So, I'm sorry --

10 A (Plante) I can get into the weeds, if you want?

11 Q Just on the property taxes. So, the figure on
12 Exhibit 1, Page 29, is 19,536,000. That number
13 would have property taxes in it?

14 A (Plante) Yes. So, I don't know how many years
15 ago it was, it wasn't that long ago, that we
16 started assessing the property tax to the
17 projects that are actually in the construction
18 process. Previous to that, the property taxes
19 were done kind of in a different manner. So, we
20 have to start allocating property taxes to the
21 projects based on their -- the value of the
22 project. And that happens on a monthly basis,
23 until the project goes into service. Similar to
24 the way AFUDC is assessed. It happens on a

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1 monthly basis, up until the month that the
2 project goes in service.

3 So, in this case, went in service in
4 July of 2021. So, both AFUDC and property tax
5 allocation ended as of June 30th.

6 Q When did that change take place, where you began
7 to capitalize property taxes during construction?

8 A (Plante) I don't have an exact date when we
9 started doing that. I want to say sometime in
10 the 2013, '14, '15 timeframe, I'm going to guess.

11 Q Okay. Not something you just happened to --

12 A (Plante) But I can't promise that that's the
13 right timeframe. But, relatively recent,
14 compared to the history of the Company.

15 Q Okay. And, Ms. Paruta, back on the PTAM/RRA case
16 that we just had a few months ago, was this
17 notion of capitalized property taxes reflected in
18 that RRA?

19 A (Paruta) Yes, it was.

20 Q Okay. All right. Okay. So, I'm going to move
21 to another project. And, hopefully, this will go
22 a little quicker.

23 I want to talk about a project that's
24 entitled "Goffstown Pad-Mounted Transformer".

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1 And this shows up at Exhibit 1, Bates 029,
2 Line 25.

3 Now, I want to start by going to
4 Exhibit 6, Page 1 of 11. Well, before I do that,
5 could someone just put into the record what the
6 amount of this project is in the Step Adjustment,
7 from Exhibit 1, Bates Page 029?

8 A (Devereaux) 780,148.76.

9 Q Where does that number appear?

10 A (Devereaux) In Column H.

11 Q Say it again please?

12 A (Devereaux) Am I reading it right? 780,148.76.

13 Q Okay. I had the wrong line. Thank you. And,
14 so, then, I want to go to Exhibit 6, Page 1. And
15 that's entitled "Supplement Request Form",
16 correct?

17 A (Plante) That's correct.

18 Q And it says that this supplement request is for
19 "347 and a half thousand", for a total new
20 request of "754,000". Correct?

21 A (Plante) Correct.

22 Q Okay. Now, back on Exhibit 1, Page 29, there's
23 no indication that there was a supplement for
24 this project. Is that right? Whereas, other

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1 projects, the supplemental figures are indicated
2 in Columns P and Q. Am I understanding this
3 right?

4 A (Plante) Yes.

5 Q Column J, actually. Not Column P --

6 A (Plante) Yes. And this was a situation where the
7 Supplemental Request Form was presented, you
8 know, at or about the time construction started.
9 So, it achieved the permits, design was done, and
10 revised construction estimates had been received.

11 Q Okay. So, the decision to go forward with this
12 project was based not on the supplement then, but
13 on the original authorization, correct?

14 A (Plante) I mean, at the time, I guess that's
15 true, yes.

16 Q Well, I think what you just said was that the
17 supplement was done at the same time that
18 construction began. And, so, I guess, logically,
19 I would conclude from that then, and you said
20 that permitting had been achieved and all that,
21 so it would seem to me, and I just want you to
22 confirm this, that the decision to go forward
23 would have been made at some time prior?

24 A (Plante) Yes. The decision to move forward was

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1 based on the \$407,000 authorized amount, which
2 included evaluation of a couple of the
3 alternatives that were considered, which were
4 both way more expensive than this proposed
5 solution.

6 Q Okay. So, and the original authorization form is
7 "407,000", that shows up in Exhibit 6, starting
8 at Bates Page -- I seem to have lost my Bates
9 page numbers. Bates 006, maybe. "Page 5 of 11"
10 in the exhibit?

11 A (Plante) Correct.

12 Q Okay. All right. So, that's what I wanted to
13 ask you about, was the 407,000, and the
14 difference between that and the final amount of
15 about -- I think it was 780,000. Can you -- can
16 you explain what makes up that difference?

17 A (Plante) Yes. So, the \$407,000 estimate was
18 developed largely using our STORMS System, which
19 is designed for roadside distribution projects.
20 This particular project, though it seems similar
21 to several previous projects that we've done that
22 were like this to install pad-mount step
23 transformers, in place of pole-mounted step
24 transformers. Those projects were either in an

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1 urban area or within an existing kind of
2 fenced-in substation area.

3 This is a suburban installation, on
4 newly acquired land. And, because of that, it
5 really is more like a substation project, in
6 terms of the amount of engineering and permitting
7 and stakeholder involvement that's involved.

8 This project had -- a couple of
9 components went into this early estimate. There
10 was a preliminary agreement with a landowner to
11 acquire an easement to place this transformer on.
12 That was -- \$30,000 was included in that estimate
13 for that, and that's actually what we ended up
14 paying.

15 There was also an estimate for the
16 environmental mapping associated with this new
17 piece of property. And there was a preliminary
18 construction estimate from one of our of choice
19 civil construction vendors, as well as a couple
20 of small items for trucks and cranes and whatnot.
21 Internal labor, part of that estimate as well,
22 and some of the miscellaneous materials
23 associated with it.

24 The cost of the transformer itself is

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1 not part of this, because that's a
2 pre-capitalized item.

3 Q Okay. But my question was, what was the
4 difference between the 400 --

5 A (Plante) Yes.

6 Q Were you getting into that?

7 A (Plante) Yes.

8 Q I'm sorry.

9 A (Plante) I'm getting there.

10 Q Okay.

11 A (Plante) I'm getting there. So, shortly after
12 this full funding event was approved, we really
13 got deeper into the engineering process, and
14 investigating the permit needs for making such a
15 significant installation in a suburban area.

16 We had to contract additional survey,
17 field survey. We had to contract additional site
18 engineering resources. We hadn't previously
19 contracted that effort. So, that's kind of a
20 post full funding authorization need that was
21 determined to do a full site plan design to
22 achieve Zoning Board and Planning Board approval
23 from the Town of Goffstown.

24 We also needed to include an oil

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1 containment system, because this site, being kind
2 of a greenfield, well, not "kind of", it was a
3 greenfield location, had no existing facilities
4 to contain the transformer oil, in the event of a
5 release. So, that was an additional cost that
6 was required as well. Those are kind of the
7 bigger contributions.

8 So, once we get that final site design
9 completed, it did reveal the need to make some
10 fairly significant site improvements. We went
11 back to our civil contractor to get a revised
12 proposal to incorporate all of those newly
13 defined project requirements.

14 And that's kind of what drove us to the
15 cost that we are at now.

16 Q So, again, I'm on Exhibit 6, Page 2 of 11. And I
17 don't know why I lost the Bates numbers, but I'm
18 going to go with that. Page 2 of 11, Paragraph 5
19 says "Construction: 227,000". And, in that
20 paragraph, it says "The proposal from the
21 construction vendor that was used in the original
22 estimate (58,000)" --

23 A (Plante) Yes.

24 Q -- "was based on a preliminary sketch and did not

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1 fully include all the requirements that were
2 agreed upon with the landowner in order to secure
3 the easement."

4 Why would the original estimate have
5 been based on a "preliminary sketch", and not a
6 more detailed sketch that accounted, you know,
7 that took into account these items that you go on
8 to mention in this paragraph?

9 A (Plante) Well, this kind of gets back to the
10 whole process that our Company has adopted for
11 the staged funding process. In today's world, we
12 would have either waited until we had completed
13 further design, and either bid or direct awarded
14 our major services before we sought full funding,
15 or we would have sought partial funding to do
16 certain preliminary tasks, whatever they may be,
17 if, for instance, we had, you know, gotten to the
18 point where we were exceeding the initially
19 funded amount.

20 Q Right. And you mentioned "doing preliminary
21 work". So, if I were to go down to -- or, I'm
22 sorry, go back up to Page 1 of Exhibit 6, --

23 A (Plante) Uh-huh.

24 Q -- this page indicates that there was \$75,000

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1 allotted for preliminary work, correct?

2 A (Plante) Yes.

3 Q So, what was that preliminary work? What was
4 that \$75,000 for?

5 A (Plante) So, that's initial funding to, first of
6 all, engage the property owner for purchase of
7 the easement to locate that pad-mount transformer
8 on, as well as get going with engineering and
9 seek a construction estimate.

10 Q And when was that authorization? The 75,000,
11 when was that approved?

12 A (Plante) December of 2019.

13 Q And then, when was the initial estimate of the
14 407, when was that? What's the date on that?

15 A (Plante) June of 2020, I think.

16 Q And then, finally, the final funding of 780,000
17 or so?

18 A (Plante) In January of 2021 is when that was
19 fully approved.

20 Q Okay. Now, you mentioned "review of
21 alternatives" earlier.

22 A (Plante) Yes.

23 Q And I believe, if I go down to Page 8 of 11 of
24 this exhibit, there's a discussion of the various

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1 alternatives. And I'm in a sheet --

2 A (Plante) That is correct.

3 Q -- a sheet called "Technical Justification". And
4 there's two alternatives listed at the bottom of
5 the page. Could you explain those briefly?

6 A (Plante) I could. Maybe Russel could do a better
7 job.

8 A (Johnson) So, the issue that we had here was that
9 we had parallel step transformers. So, to take a
10 step back, a step transformer, in this case,
11 converts the voltage from 34.5 kV to 12 kV. In
12 this particular application, we had parallel 500
13 kVA steps. So, we had six 500 kVA steps
14 pole-mounted that had exceeded their nameplate.
15 And, again, with parallel steps, our criteria is
16 nameplate. So, the loading had exceeded their
17 nameplate, and we needed to address that.

18 And there really are two options to
19 that. You either convert the circuit, the 34.5
20 kV, and push the steps further out on the system
21 where the loading is less, is lower, or, you
22 install a larger step, which the only way to do
23 that is a pad-mounted step.

24 Now, Alternative 1 and 2 here are

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1 simply two options of the circuit conversion
2 alternative. And one is to do a 3.88 mile
3 conversion, which has a number of advantages to
4 it. And then, Alternative 2 was to reductor
5 just for 2 miles, which would, basically, just
6 get you minimally below that loading on the
7 steps.

8 So, and that -- so, those two estimates
9 for those, the larger conversion was 2.4 million,
10 and the lesser conversion was around 1.4 million.

11 Q And are there other system benefits that would
12 have come along with either of these conversion
13 alternatives?

14 A (Johnson) One could be, if we -- the
15 reductoring that would be -- that would be
16 done with that, would be done with covered
17 conductor. So, there could potentially be a
18 reliability benefit there. But, for the
19 increased cost, we deemed that not to be a
20 prudent investment.

21 Q Okay. Did these two numbers that are here, the
22 2.4 million and the 1.382 million, did they
23 include the covered wire?

24 A (Johnson) The first one you note there, in the

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1 third sentence, it says it will be replaced with
2 "477 spacer cable", which is a covered conductor.
3 And, likewise, in the second one, it makes that
4 similar clarification.

5 Q Okay. Yes. And when was this analysis of
6 alternatives performed in the process?

7 A (Johnson) This would have been -- bear with me a
8 second. I got to get the right year. So, this
9 would have been in the latter part of 2019.

10 A (Plante) No, 2018 maybe?

11 A (Johnson) Maybe.

12 Q I thought I heard two witnesses giving two
13 different answers. So, I just would ask you to
14 clarify?

15 A (Johnson) No. The initial funding request was in
16 December of 2019. We would have did the -- the
17 project would have been proposed at a challenge
18 session in the Summer of 2019, with the initial
19 funding request.

20 Q Okay. So, the alternatives were analyzed at the
21 same time as the \$75,000 allotment for
22 preliminary work, if I'm understanding?

23 A (Johnson) It would have been prior to that.

24 Q Prior to that. Okay. And, again, I know I'm

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1 coming across as being flip, but I'm really not.
2 I'm just trying to figure out. So, if your
3 alternatives are 2.4 million and 1.4 million, and
4 they're substantially higher than what you chose,
5 but the preliminary budget for what you chose
6 wasn't developed until after, how do you know
7 that the alternatives were more expensive? Do
8 you understand what I'm asking, based on the
9 timeline?

10 A (Plante) In the initial funding document for
11 75,000, let me see if I can find which page it's
12 on. At that time, this project was estimated to
13 be a \$675,000 project. You see that on Page 11
14 of 11, last paragraph.

15 Q Page 11 of 11.

16 A (Plante) So, at the time, the project was
17 considered to be about a \$675,000 project.

18 Q Okay. So, I see that. But, now, I'm very
19 confused, because -- so, this came first. This
20 was December 2019. The Company allocated \$75,000
21 for preliminary investigation of a \$675,000
22 project. Right?

23 A (Plante) Yes.

24 Q Okay. And then, in June of 2020, the initial

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1 authorization came out for \$407,000. So, then,
2 my question would be, why would the authorization
3 that came later be for 400,000, when the
4 preliminary estimate was 675,000?

5 A (Plante) So, for the reasons I mentioned
6 previously, this project -- this \$407,000
7 estimate was missing the detailed information on
8 site design, which has a significant impact on
9 the cost of the construction. So, as I
10 mentioned, it's really more of a substation-type
11 project, that requires a different approach than
12 a roadside distribution project, which is kind of
13 the way it was approached. So, it failed to
14 recognize the uniqueness of this project, as
15 compared to previous projects that were
16 considered to be similar.

17 Q Okay. And, you know, despite the fact that on
18 Page 11 it says "Based on previous installations
19 the total project is estimated at 675,000", those
20 two statements don't seem to be congruent. And
21 I'm just saying that, so that I'm giving you a
22 chance to explain again.

23 A (Plante) I guess I can't really defend that
24 difference.

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1 Q Okay.

2 A (Plante) I mean, you know, the project team did
3 their best to prepare an estimate for the cost of
4 the project. And, you know, in this case, it was
5 missing some of the critical components of the
6 cost.

7 Q Okay. Okay. All right then. Okay. The next
8 project I wanted to talk about is called
9 "Purchase of Transformers". It shows up on
10 Exhibit 1, Bates Page 030.

11 CMSR. SIMPSON: Can you restate the
12 exhibit number please?

13 MR. DEXTER: Yes. Exhibit 1, Bates
14 030, Line 19.

15 CMSR. SIMPSON: Thank you.

16 BY MR. DEXTER:

17 Q And this is for a project that's included in the
18 step at \$14.6 million. Do I have that right?

19 A (Devereaux) That's correct.

20 Q And Column H indicates that the Annual
21 Authorization amount was "11.5" -- "\$11.6
22 million", correct?

23 A (Devereaux) That's correct.

24 Q Okay. And what's the "Annual Authorization", in

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1 Column H? What does that mean? Column I says
2 "Supplemental Authorization". Is Column H, does
3 "annual" mean like the "initial authorization"?

4 A (Devereaux) This exhibit is the annual programs.

5 Q Oh. Oh, right.

6 A (Devereaux) Different than, you know,
7 "pre-construction estimate". It's the annual
8 estimate.

9 Q Okay. Okay. Thank you for that clarification.
10 Okay. So, if I want to see the details of the
11 11.6 million that was the annual authorization, I
12 go to Exhibit 7, Page 395 of 450, if I have this
13 right. So, let me do that.

14 MR. DEXTER: So, apologies to the
15 Commission and to the parties. Apparently, these
16 are DOE exhibits. And I thought we had Bates
17 stamped them all, and it seems that we didn't.
18 Unless you guys are seeing Bates stamps, and I'm
19 not. So, my apologies. I'm going to work from
20 the internal paging.

21 And, so, where I am is Exhibit 7, and
22 I'm in "Attachment DOE 1-4", Page 394 and 395 of
23 450. And it's actually Page 1 of Exhibit --
24 Page 1 and 2 of Exhibit 7.

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1 So, my apologies for not having Bates
2 numbers on these.

3 CMSR. SIMPSON: No problem.

4 BY MR. DEXTER:

5 Q And, again, all I wanted to do is get to the
6 details. And, so, I've got a horizontal page
7 here for Page 2. So, let me turn that around.
8 And this page indicates that, of the \$11.6
9 million that was allocated -- or, sorry, that was
10 budgeted for the reliability project, 10.8
11 million of that, on Line 6, is indicated as
12 "Materials (Eversource purchased)", is that
13 right?

14 A (Devereaux) That is correct. If you recall, on
15 Technical Session 3-005, it was explained the
16 difference between the authorized cost element
17 detail and the supplement cost element detail.
18 So, yes, per the authorization, it's only in
19 Materials, which is erroneous. It should be
20 Materials, Internal Labor, and Outside Services.

21 Q Okay. Well, I'm going to take it a little slower
22 than you did there, so I can keep up. So, this
23 Page 395, you're saying that that number of
24 \$10.8 million should have been split between what

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1 items?

2 A (Devereaux) It should have been split between
3 Materials, Internal Labor, and Outside Services.

4 Q Okay. But the total amount is fine for this
5 project, as initially authorized?

6 A (Devereaux) Correct. Correct.

7 Q Okay. And do you know what the reason would be
8 for this to have been dropped all in Materials,
9 in the original authorization?

10 A (Devereaux) I can't answer it specifically. I
11 know that it was done by a different group. So,
12 they were looking at simply the "materials"
13 portion of it, whereas the supplement was done --
14 I was the author of the supplement.

15 Q Okay. And I'm looking at the other, there's
16 twelve potential cost categories that I see on
17 Bates 395 of 450. I don't see either "Internal
18 Labor" or "Outside Services". Am I missing that?
19 Or, which of those twelve lines would this number
20 have been broken up into?

21 A (Devereaux) Certainly, Line 7. And that could
22 include both internal and outside services.

23 Q Okay. All right. Very good.

24 A (Devereaux) And further down has a breakout of

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1 costs, where it would show "outside services" and
2 "straight time" and "overtime" for internal
3 labor.

4 Q When you say "further down" -- oh, the next page?

5 A (Devereaux) The next page. Sorry about that.

6 Q Next page, okay. Okay. And, so, then I wanted
7 to go down to the supplemental request, which
8 takes us from 11.6 million to 14.6 million. And
9 the justification for that difference states, and
10 I'm on Page 399 of 450 -- or, 400 of 450. And
11 here we have the supplemental request seems to be
12 spread out between "Internal Labor", "Outside
13 Services", and then a negative amount for
14 "Materials", all totaling down to \$3 million.

15 So, could you explain what those
16 figures are for? In other words, the
17 Supplemental Request for labor, outside services,
18 materials, et cetera?

19 A (Devereaux) Yes. I believe this was also in that
20 tech session response. But, for the original
21 authorization, as I stated, it was only listed
22 under the cost element "Materials", when it
23 should have been split under three.

24 When the supplement was done, it took a

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1 look at the costs for those three categories.
2 And that has produced -- the reason for the
3 supplement was the increased costs for internal
4 labor and for contractors, that was the result of
5 a new calculation -- I should say an "updated"
6 calculation for the Cost of First Installation.

7 Q And why would the amount for materials go down by
8 1.2 million?

9 A (Devereaux) Because I believe, as stated, all of
10 the costs went to the "Materials" cost element in
11 the authorization. This was incorrect. It
12 should have been spread out over those three cost
13 elements. So, Materials was overstated in the
14 authorization, as Internal Labor and Outside
15 Services didn't exist in that, so, obviously,
16 were understated.

17 Q So, I think, if I understand what you're saying,
18 had the \$10.7 million in the prior authorization
19 been more accurately broken out, there would have
20 been a figure for materials there, and then, upon
21 the supplement, that figure would have been
22 lower, that figure went down by 1.2 million?

23 A (Devereaux) I think you confused me at the
24 beginning. If all three cost elements were

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1 included in the authorization, then, when the
2 supplement came out, there would be significant
3 increases in Internal Labor, Outside Services,
4 and a minor increase in Materials.

5 Q Okay. Minor increase in materials?

6 A (Devereaux) Correct. They all went up. But the
7 reason for the supplement was the dramatic
8 increase in Internal Labor and Outside Services.

9 Q All right. Let me ask it this way then. So, if
10 I go to the right-hand column on Page 400, those
11 numbers show the allocation the way it should
12 have been?

13 A (Devereaux) Correct.

14 Q That's the breakdown of the 14.6 million?

15 A (Devereaux) Correct.

16 Q Okay. All right. So, then, my question is, this
17 project is "Purchase of Transformers", right?
18 So, --

19 A (Devereaux) Purchase and installation. It's
20 pre-capitalized.

21 Q Oh. Okay. Well, let me finish the sentence
22 first. Okay. Now, I forgot my question. So,
23 just give me a minute.

24 So, the transformers are

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1 pre-capitalized. We've gone through this, I
2 think, in the tech session. So, why don't you
3 explain what that is, "pre-capitalized"?

4 A (Devereaux) When the transformers are received by
5 the Company, instead of being direct charged to a
6 specific project, they are pre-capitalized, and
7 they're no longer tied to a -- they're no longer
8 tied to a project.

9 A (Paruta) So, if I may, Mr. Dexter, add to that?
10 So, there is longstanding FERC rules that
11 actually do allow you to pre-capitalize,
12 specifically, in this case, transformers. And
13 that rule states specifically that you can
14 include the cost installed, overhead,
15 underground, distribution line transformers,
16 whether they are in service or held in reserve.

17 So, that is truly the FERC guidance.
18 And we've been following that for many, many,
19 many years.

20 Q Okay. And, so, the "Materials", in the
21 right-hand column, 9.6 million, that's the actual
22 transformers?

23 A (Devereaux) Correct.

24 Q And then, so, what's the "Outside Services"?

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1 A (Devereaux) The "Outside Services" are
2 contractors installing transformers.

3 Q Okay. But these -- but these haven't been
4 installed. So, how do you know that number?

5 A (Devereaux) That number is calculated based upon
6 the cost of contractors and internal labor rates,
7 for installing transformers in this case.

8 Q Okay. And, so, it's an estimate?

9 A (Devereaux) It's an estimate, correct.

10 Q Okay. And, so, there must be some estimate of,
11 like, half of these are going to be done
12 internally, and half are going to be done using
13 contractors? Or, is it more a situation they're
14 all going to be using contractors, but there's
15 always some internal labor loaded on top of that?

16 A (Devereaux) No. It's an estimate based on past
17 history.

18 Q Of that split between what's going in and what's
19 going out?

20 A (Devereaux) Correct.

21 Q Okay. And, so, this figure of 14.6 million, if
22 the Company's request is approved, will go into
23 rate base as an actual number, correct.

24 A (Devereaux) Correct.

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1 Q How would any variances between the 14.6 million
2 that's in rate base, and the actual cost, once
3 it's all done, how would that be accounted for?

4 A (Devereaux) I'm not sure what you mean "the
5 actual cost"?

6 Q Okay. Well, I think we just established that the
7 labor and the services are estimates.

8 A (Paruta) If I may, Mr. Dexter?

9 Q Sure.

10 A (Paruta) So, when these are pre-capitalized, they
11 are taken directly to unitization, so -- which is
12 FERC Account 101. So, they completely bifurcate
13 the standard process for, like, special projects.
14 Having said that, there's no change to the values
15 when they are recorded in Account -- FERC Account
16 101, and I believe it is the Subaccount 368,
17 which is the plant account for line transformers.

18 Essentially, when those transformers
19 are deployed and used in a specific project, what
20 the Company does is it transfers that transformer
21 as a memo transfer into the project with no
22 value, because that value has already been,
23 essentially, placed into service immediately.

24 Q Yes. No, I understand all that. But there must

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1 be an actual bill from the person that the
2 service -- the outside service. And my question
3 is, if that actual bill shows a different amount
4 than what's built into this step adjustment,
5 14.6 million, where does that difference get
6 accounted for?

7 A (Paruta) It does not. Because the FERC rules do
8 allow you to include an estimated value for the
9 actual cost to install the transformer. So,
10 again, we are following the FERC prescribed rule.

11 Q I understand what you're saying, that the rate
12 base amount won't change.

13 A (Paruta) Uh-huh.

14 Q But the books have to balance. So, am I missing
15 something? I mean, if the actual labor came in
16 at half of what you "estimated" and put in rate
17 base, where would that difference show up?

18 A (Paruta) That is beyond my world. I don't know
19 if there's another witness that may have that
20 detail.

21 A (Landry) Hello, Mr. Dexter. So, I think I
22 understand your question.

23 *[Court reporter interruption.]*

24 **BY THE WITNESS:**

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1 A (Landry) All right. So, I just want to clarify
2 to make sure -- am I on? Yes. Okay. Sorry.

3 So, what ends up happening is is, when
4 the actual unit is installed, it gets -- the
5 charges of the internal labor or the outside
6 contractors goes to an expense account. So,
7 that's where those charges would go. So, and
8 then, there's a balancing to make sure that --
9 that what ends up happening is, as Ms. Paruta
10 said, the assets and the installation is
11 capitalized under the FERC rule, and then the
12 offset, when they're installed, goes to expense.
13 And then, we monitor that. And then, if there is
14 a difference, then, you know, we have an update
15 to the rates, to make sure we are accurately
16 reflecting the cost of installation in the
17 capital accounts. But that's how it all gets
18 balanced.

19 MR. DEXTER: Okay. Thanks.

20 CMSR. SIMPSON: May I ask a question?

21 MR. DEXTER: Yes.

22 CMSR. SIMPSON: I don't want to
23 interrupt your flow, but --

24 MR. DEXTER: No. Please.

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1 BY CMSR. SIMPSON:

2 Q So, this reflects all the transformers that you
3 bought over the year, correct?

4 A (Landry) Yes.

5 Q So, some of those sit in your yards as spares,
6 some of them get allocated to projects and get
7 installed during the year, correct?

8 A (Landry) Correct.

9 Q So, the initial breakdown, you just had all the
10 costs in Materials, including installation costs.
11 So, there really could be a fourth column here
12 that says "Prior Authorized Corrected", right?

13 A (Landry) Yes.

14 Q Okay. And that would have the material cost for
15 the transformers, internal labor, and outside
16 services broken out of that 10.8 million, right?

17 A (Landry) Yes.

18 Q Okay. And then, the Supplemental Request is
19 somewhat confusing, because it shows a negative
20 for "Materials". But I think the witness
21 testified that the material cost actually
22 increased, --

23 A (Landry) Yes.

24 Q -- despite the break -- or, with the breakout?

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1 A (Landry) Yes.

2 CMSR. SIMPSON: Okay. All right. I

3 think that helps clarify for me. Thank you.

4 Thank you for the indulgence, Attorney

5 Dexter.

6 MR. DEXTER: No. Thanks for the help.

7 I just want to consult with Mr. Dudley for a

8 minute.

9 *[Atty. Dexter and Mr. Dudley*

10 *conferring.]*

11 BY MR. DEXTER:

12 Q I was just taking a moment to review the response

13 that Mr. Devereaux had referenced, which is

14 TS 3-005, which is part of Exhibit 15. I don't

15 have any questions on that.

16 But I guess my question would be then,

17 what makes up the 3 million difference between

18 the 11.6 million and the 14.6 million? I know we

19 have the breakdown. But, conceptually, what's

20 behind that increase?

21 A (Devereaux) As stated on the Supplement, it was

22 an increase in the Cost of First Installation

23 calculation.

24 Q So, you're referring me back to Exhibit 15?

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 A (Devereaux) Correct. The Supplement Request
2 Form.

3 Q Okay. Oh, the Supplement Request Form. I'm
4 sorry. So, --

5 MS. RALSTON: Mr. Devereaux, are you
6 referring to Exhibit 7, Page 6?

7 WITNESS DEVEREAUX: Yes. Thank you.

8 MS. RALSTON: Sorry.

9 MR. DEXTER: I'm not finding that page.
10 I'm sorry. Could someone give me the "out of
11 450" number?

12 MS. RALSTON: Sure. It's Page 399.

13 MR. DEXTER: 399. Okay. Here I am.
14 All right.

15 MS. RALSTON: Page 6 of the *pdf*.

16 BY MR. DEXTER:

17 Q Okay. Now, Mr. Devereaux, I'm sorry. So, could
18 you explain what that difference is?

19 A (Devereaux) The reason for the additional cost --

20 Q Yes.

21 A (Devereaux) -- was the increased Cost of First
22 Installation calculation.

23 Q Okay. All right. And I did want to ask you
24 about that. Thanks. I'm getting a little bit

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1 confused with the page numbers. So, what is that
2 calculation?

3 A (Devereaux) That calculation is based on history
4 on the internal labor rates to install a
5 transformer, and contractor rates to install a
6 transformer.

7 Q So, it says that the calculation was updated in
8 2021. And, so, that updated calculation fell
9 between the original authorization and the
10 supplemental authorization?

11 A (Devereaux) Correct. It was done during the
12 year.

13 Q Okay. And the supplemental authorization was
14 prepared actually in 2022?

15 A (Devereaux) Correct. As I believe we've
16 discussed, the annual projects are funded based
17 upon history. And, as the year unfolds, if a
18 supplement is needed, I believe this is part of
19 Russel's testimony, that is done at the end of
20 the year.

21 Q Well, it's done, actually, after the end of the
22 year, right?

23 A (Devereaux) Correct. When the final costs are
24 tabulated.

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1 Q Okay. Okay. So, it's -- so, it's different from
2 the other projects, where the money is accounted
3 for and requested up front?

4 A (Devereaux) Very different. Correct.

5 Q Okay. And that's by design, in other words,
6 these annual projects are set up to get a second
7 look after the year is over?

8 A (Devereaux) If needed. Many don't need it.

9 Q Okay.

10 A (Devereaux) Most don't need it.

11 Q Okay. I wanted to move to the next project,
12 which is called the "Reliability Annual Program".

13 MR. DEXTER: And, Commissioners, I
14 actually meant to bring this up at the outset of
15 the hearing, and I had forgot to. In my letter
16 of September 16th, --

17 CMSR. SIMPSON: Uh-huh.

18 MR. DEXTER: -- I had indicated that
19 our plan was to disallow 317,000, and that letter
20 had a combination of a typo and a bad number.
21 The actual recommended disallowance would have
22 been "913,000". And, as I said in the letter, it
23 was the amount "over authorized". And, if we
24 were to go back to Exhibit 1, Page 30, Line 19,

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1 that's the project that we're talking about,
2 Purchase of Transformers -- no, sorry, I'm on the
3 wrong line. Line 13, "Reliability Improvements",
4 you'll see that the plant in service amount for
5 2021 is 3.9 million, the annual authorization is
6 3 million, and that difference is 913,000. So,
7 that's what should have been put in my letter,
8 rather than the "317", which was actually
9 supposed to be "319", which represented a
10 transposition.

11 But, in any event, that is the
12 recommended disallowance, you know, subject to us
13 finishing up today. I noticed this late
14 yesterday. I alerted counsel to the Company of
15 that error. I didn't take the time to write you
16 a letter. I thought we'd just talk about it
17 today. So, --

18 CMSR. SIMPSON: Very good. Please
19 proceed. Thank you.

20 MR. DEXTER: Okay.

21 BY MR. DEXTER:

22 Q So, --

23 CMSR. SIMPSON: And let me just ask
24 you, before we jump in. We're about ten of noon.

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1 It would be, I think, cleanest if we were able to
2 finish your questioning of these witnesses prior
3 to a lunch break. And then, we can return with
4 Commissioner questioning. I ask that, do you
5 have any sense of the amount of time you'll need
6 in order to wrap up, presumably going through the
7 next four exhibit projects in your letter? Which
8 I would anticipate the Annual Reliability
9 Projects, the Maintain Voltage Project, Submarine
10 Cable, and the Millyard Substation?

11 MR. DEXTER: Yes. And the Millyard has
12 been stipulated. So, it's really just those
13 three.

14 CMSR. SIMPSON: Okay.

15 MR. DEXTER: I don't really have a lot
16 of questions about these last three. I have
17 some. But -- so, why don't we try to forge
18 ahead --

19 CMSR. SIMPSON: Okay. Very good.

20 MR. DEXTER: -- and see where we end
21 up.

22 BY MR. DEXTER:

23 Q So, what I'd like to explore with the Annual
24 Reliability Project is the reasoning -- the

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1 reasons for the difference between the 3 million
2 that was authorized and the 3.9 million that's
3 included in the step. And I'd like to do that
4 first by going to Exhibit 8, Page 1.

5 And Exhibit 8, Page 1, at the bottom,
6 says "Investment in the distribution line
7 reliability program was higher than originally
8 budgeted due to more work being performed on the
9 system than anticipated."

10 Is there any additional detail you can
11 provide about why there was more work done than
12 anticipated?

13 And, if it helps to start with a
14 general, very brief description of what the
15 Reliability Program is, maybe that will put it
16 into context.

17 A (Johnson) Sure. And, again, this is an annual
18 blanket. And, under that annual, we fund it
19 based on typical historical expenditures. In
20 this particular year, we recognized the ability
21 to install, and there are other potential
22 reliability -- let me take a step back.

23 This particular annual is intended for
24 small, lower cost reliability items that don't

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1 rise in cost to the level of requiring a specific
2 project by our accounting policy. So, the
3 typical work that's done under here is the
4 addition of fused cutouts, the relocation of
5 fused cutouts, the addition of, you know, single
6 phase reclosers. And, more significantly,
7 recently, the addition of TripSaver devices,
8 which, for the benefit of those here, act like a
9 recloser. They're a lower cost alternative than
10 a typical recloser. They fit into the body of a
11 cutout. So, they're a relatively simple
12 installation.

13 In this particular year in question, we
14 had engineered the location settings for a
15 significant number of these devices for the
16 following year. But recognized the opportunity
17 to install them in this calendar year, and,
18 therefore, we pulled those jobs forward, and were
19 able to get those reliability-improving
20 installations in place earlier than initially
21 planned.

22 Q And how was the amount, the extra amount, the
23 \$900,000, how was that arrived at?

24 A (Johnson) Well, that's plant in service, for the

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1 purposes of this step.

2 Q Right.

3 A (Johnson) So, those would be completed work
4 orders of actual spend. So, again, the
5 supplement was prepared following the completion
6 of the year.

7 Q Yes. No, I'm sorry, I probably didn't phrase the
8 question right. So, we started at 3 million, we
9 ended up with 3.9 million. My question is, how
10 did we get to the 3.9 million, as opposed to,
11 say, I don't know, 5 million? I mean, what was
12 the process? How did we end up at 3.9 million?

13 A (Johnson) Again, these are lower cost
14 projects/jobs, which are, you know, the
15 responsibility for approval of these lower cost
16 items are delegated in our organization. They
17 were given the approval to proceed with
18 additional reliability spend. And, therefore,
19 they executed those projects, and which resulted
20 in plant being what it ended up being.

21 Q Okay. So, the approval that was given to go
22 forward and do more, is that what I'm looking at
23 now in the Supplemental Request Form, or is there
24 something else I should be looking at?

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1 A (Johnson) In part. The Supplemental Request Form
2 is for the actual spend in that calendar year.
3 So, there are many jobs which roll from one year
4 to the next in these annual programs. So, the
5 actual spend in the year was about \$5.2 million.
6 What, actually, the plant in service was your
7 3.9 million number.

8 Q So, what's the difference then, between the
9 5 million, the actual spend, and the part that's
10 in service?

11 A (Johnson) The jobs that have not been placed in
12 service.

13 Q Okay. Okay. Okay. So, again, in a quest to try
14 to understand specifically what was in the
15 \$900,000, the Department of Energy issued
16 TS 3-003, which is part of Exhibit 15. So, I
17 want to turn to that now.

18 A (Johnson) Uh-huh.

19 Q And what I'm looking at in -- the cover page just
20 says "see Attachment". So, I'm looking at the
21 attachment. And what I'm seeing here is many,
22 many rows, 423 rows of information, that total
23 \$3.9 million. Could you explain what this rows
24 of information represents?

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1 CMSR. SIMPSON: Is there a Bates Page
2 you're looking at, Attorney Dexter?

3 MR. DEXTER: It's an Excel spreadsheet.

4 CMSR. SIMPSON: Oh.

5 WITNESS JOHNSON: It's Bates 012 in
6 Exhibit 15.

7 WITNESS PARUTA: May I, Mr. Dexter?

8 CMSR. SIMPSON: Thank you.

9 WITNESS PARUTA: Sorry.

10 CMSR. SIMPSON: Please proceed.

11 **BY THE WITNESS:**

12 A (Paruta) May I, Mr. Dexter? We were requested,
13 in the data request, to provide a pivot table for
14 the work orders that comprise the total 2021
15 plant placed in service, which is exactly what we
16 provided. And we did provide a pivot table, so
17 that, within the working Excel file, that the DOE
18 Staff could actually drill down and drill into
19 any particular work orders, in case they had any
20 follow-up questions.

21 A (Johnson) So, as far as the exhibit, as Marisa
22 indicated, this is a pivot table, which is set up
23 to identify the individual work orders that were
24 placed in service by Area Work Center.

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1 So, for example, the first section is
2 for the Lancaster Area Work Center. They provide
3 the work order number, which is what the charges
4 were assigned to. And then, there is a brief
5 description, which is truncated in the process of
6 it being moved from our Work Management System
7 into PowerPlan, our accounting system. Someone
8 else can probably define it better than I can.

9 But, for the most part, you can see by
10 the title to get a general idea of the project.
11 Unfortunately, you'll notice that there has been
12 text added to the front of some of these that
13 captured the status from a scheduling and
14 construction side, which pushed, you know, which
15 impacted the title. However, you'll see here
16 that the vast majority of these are "upgrade
17 fuse", "upgrade and add a fuse", "adding
18 TripSavers".

19 You know, I did look at some of those
20 that had more general titles to them. Many of
21 those were the installation of in-line
22 disconnects to provide a isolating point, such
23 that, in response to an outage event, you can
24 reduce the size of the outage and restore

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1 customers.

2 Some of the larger jobs in here, you
3 know, you'll see most of these are in the 10 to
4 \$20,000 range. There are a few larger ones,
5 which were, for example, some smaller
6 reconductoring jobs with covered conductor that
7 did not rise to the level of requiring a specific
8 project.

9 Does that answer your question, Mr.
10 Dexter?

11 BY MR. DEXTER:

12 Q Well, it certainly provides some detail as to the
13 total \$3.9 million. But it doesn't provide, as I
14 can see, any detail or explanation of why the
15 Company went from an initial authorized amount of
16 3 million to 3.9 million. And I think that's
17 what was the purpose of the data request. We
18 were trying to get at the, you know, for lack of
19 a better term, you know, budget overrun.

20 So, if anybody can provide some detail
21 or explanation about the nature of the overrun,
22 other than the supplemental authorization, which
23 just says "we spent more because we spent more",
24 I'm paraphrasing, but that's essentially what it

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1 says. Any additional -- additional information
2 would be welcomed by the Department?

3 A (Johnson) Our capital approval process includes a
4 monthly Capital Budget Review Committee meeting,
5 at which the capital spend is reviewed each
6 month. And, at one of those monthly meetings, it
7 was decided to, because of the point that we are
8 in within the capital budget, to allow for
9 additional spending against this annual.

10 I don't know if -- Paul Renaud may have
11 some additional -- some additional --

12 A (Renaud) Yes. This may be putting what Mr.
13 Johnson is trying to say in slightly different
14 words. This is forecasted project. At the
15 beginning of the year, we forecast based on the
16 level of activity that we would typically have in
17 a year for these types of projects, things that
18 come up. Every day we have meetings, daily
19 meetings, where the Operations folks get
20 together. Things may come out of that that we
21 can improve reliability for customers. And we
22 have monthly meetings. So, lots of things come
23 up during that.

24 We can, over the course of the year,

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1 not -- we may find that we need more of those
2 than we forecasted, which is what's going on in
3 these annuals. We forecasted based on an
4 historical level. We found, based on the
5 activity in our daily look, and activities with
6 reliability, that we needed to do more. And the
7 Committee, as Mr. Johnson mentioned, looked at
8 the overall spending, and thought that was a
9 prudent thing to do, is to keep allowing some of
10 those smaller ones.

11 And, as you said, those are approved at
12 a lower level in the organization, by the work
13 orders that you see.

14 Q So, I think I heard that there are "monthly
15 meetings", and there are also "daily meetings",
16 that would go into this decision to go from
17 3.0 million to 3.9 million. Do I understand that
18 right?

19 A (Dickie) Yes. So, we have daily meetings where
20 we review all of the outages on the previous day.
21 So, you know, during that, during those meetings,
22 which is with all the Operations personnel, if we
23 have three or more outages for particular
24 customers, or three or more outages on a

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1 particular line, we may ask for a TripSaver to be
2 installed. And this happens daily.

3 Q Now, in the course of the tech sessions, we
4 talked about the \$3.9 million figure, including
5 an out-of-period adjustment in the area of
6 \$500,000. And we thought that we would get
7 additional information about that \$500,000
8 adjustment in response TS 3-003, which I don't
9 think we got.

10 So, if someone on the panel could
11 explain that out-of-period adjustment and provide
12 additional detail, that would be appreciated?

13 CMSR. SIMPSON: And, if there's a Bates
14 page with an exhibit that is preferring to the
15 \$500,000 that Attorney Dexter has asked a
16 question about, please point that out as well.

17 **BY THE WITNESS:**

18 A (Johnson) Do you know which document you're
19 referring to that we can speak to?

20 *[Short pause.]*

21 **BY THE WITNESS:**

22 A (Johnson) If I may, my recollection is that
23 discussion revolved around the supplemental and
24 the amount of the supplemental. And I shared

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1 that, that value, part of the increase to the 5.2
2 million on the supplemental, which showed up as
3 spend to that path. Mind you, this is separate
4 than the plant in service. It had to do with the
5 explanation of increase in that path was that, in
6 2020, there had been a reimbursement applied in
7 error to this annual in December. That was then
8 corrected in January. And, therefore, it showed
9 up as a charge to the 2021 Annual, which
10 increased the total supplement amount, but was
11 not part of the Step Adjustment.

12 A (Devereaux) Not part of the plant in service.

13 A (Johnson) "Plant in service". Thank you.

14 BY MR. DEXTER:

15 Q So, that was what we were talking about at the
16 tech session. And that's why -- part of the
17 reason we asked for the \$3.9 million to be broken
18 down. And that's what was provided in this pivot
19 table. And I'm looking at the summary of the
20 pivot table. So, I think what we're hearing
21 today is that that half a million dollar
22 out-of-period adjustment doesn't appear on any of
23 these 400 or so lines that total to 3.9 million,
24 therefore demonstrating that it's not included in

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1 the request today. Is that -- do I have that
2 right?

3 A (Devereaux) That's correct. Correct. When we
4 look at the supplement, we're not, especially on
5 annual programs, it's comparing spend verse
6 authorized. We're not and I shouldn't say
7 "concerned" with plant in service. So, it was
8 the 5.2 that we spent versus the initial
9 authorization of \$3 million, if memory serves me.

10 So that, when we spoke that day, it
11 was -- we were sort of explaining the 5.2, not
12 focused on the 3.9.

13 Q Okay. But we're all in agreement that that half
14 a million dollars is not in the 3.9, which is
15 what's requested in this docket?

16 A (Devereaux) You're correct.

17 Q Okay.

18 CMSR. SIMPSON: I'm sorry, I have to
19 ask, because I'm a little bit lost with respect
20 to the half a million number that continues to be
21 discussed. Can you point me to where that
22 \$500,000 number is in the record, and what it is
23 even attributed to?

24 I believe that it's in the 2.2 million

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1 from the 3 million authorized, to the 5.2 total
2 request in the supplement. But what is the other
3 1.7 million, and what's the 500,000 in the \$2.2
4 million delta? I'm just not following.

5 MR. DEXTER: I don't know the answer to
6 that, based on what we learned in the tech
7 session or what we've learned today. But we'll
8 -- so, I don't know. And I'll leave it at that.

9 CMSR. SIMPSON: Because then we --

10 MR. DEXTER: But maybe the Company
11 knows.

12 CMSR. SIMPSON: Yes. Because we also
13 then have the 900,000 over budget that's
14 reflected in Exhibit 1.

15 BY CMSR. SIMPSON:

16 Q So, could somebody square all of those numbers
17 for us please?

18 A (Johnson) I will try. As Jim described, the
19 Project Authorization Form is authorized to spend
20 for the year, total spend. And, so, any charges
21 to that annual that show up in that year are
22 included in that for that authorization. There
23 are many jobs which begin in one year, but are
24 not effectively placed in service until the

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1 following year. So, there are charges, which
2 show up against the annual in that year, but do
3 not show up as plant in service in that year.

4 The additional 900,000 plant in service
5 that we spoke about were an increased number of
6 reliability projects that were completed in 2021
7 above the historical norm.

8 Q Yes. I understand that.

9 A (Johnson) And, in fact, the historical norm may
10 have been distorted by the fact that there was an
11 inappropriate -- a reimbursement done in error in
12 2020, which actually showed the overall cost
13 being less than what it should have been. So,
14 I'm just trying to get, you know, it doesn't
15 impact plant in service.

16 Q Uh-huh.

17 A (Johnson) But that incorrect reimbursement, and
18 then the subsequent correction of that, is what
19 influences the -- has influenced the annual
20 dollar amount under that project authorization.

21 Q So, within this general bucket, you budgeted
22 3 million --

23 A (Johnson) Yes.

24 Q -- for plant in service? You actually put --

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1 A (Johnson) No, no, no.

2 Q No?

3 A (Johnson) I'm sorry. We budgeted the 3 million
4 of spend.

5 Q Uh-huh. Total?

6 A (Johnson) Total.

7 Q So, that's inclusive of plant in service and just
8 costs attributed, --

9 A (Johnson) Right.

10 Q -- but not in service?

11 A (Johnson) Right. Some of it are charges that
12 completed a project that was started the year
13 before, and some are charges that the project has
14 not been completed or placed in service within
15 that year. It is just charges applied within the
16 calendar year to that annual. It's really a
17 separate number than plant in service.

18 Q Okay. And what's the 500,000 that's being
19 discussed?

20 A (Johnson) There was a reimbursement, and I'll be
21 honest, I can't remember the specifics of what it
22 was for, but it was improperly applied, because
23 it was a reimbursement, it showed up as a credit
24 in 2020, in December; it was identified and

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1 corrected in January.

2 CMSR. SIMPSON: Okay. Got it. Thank
3 you. Appreciate it. Please proceed.

4 MR. DEXTER: Thanks.

5 BY MR. DEXTER:

6 Q Just one follow-up, if I could. When you say a
7 "reimbursement", what would that be? Even in
8 general, if you don't remember the specifics.

9 A (Johnson) It could have been a customer payment
10 for DG or for, you know, or --

11 *[Court reporter interruption.]*

12 **CONTINUED BY THE WITNESS:**

13 A (Johnson) Or it could have been a prepayment for
14 work associated with service to a new customer.
15 I'll be honest, it could be a number of things.
16 I -- not to change direction, but I saw a similar
17 event, under another annual, where credit for a
18 large amount of conduit was returned to the
19 incorrect job, showed up as a credit, and then
20 was corrected the following year.

21 So, it could be, and I'm open for
22 others on the panel to offer up other items. I
23 simply can't remember what that specific one was.

24 *[Witness Plante and Witness Johnson]*

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1 *conferring.]*

2 **BY THE WITNESS:**

3 A (Johnson) Dave just indicated another likely --
4 or, another possibility is make-ready for third
5 party attachments, that's paid, you know, prior
6 to work commencing being applied to the wrong
7 project.

8 A (Renaud) If I could just add? I think the main
9 point, though, is that that credit could have
10 come from anything, not associated with that
11 annual. It was incorrectly applied to that
12 annual.

13 A (Johnson) That's the key.

14 BY MR. DEXTER:

15 Q Okay. So, I had a similar line of questions for
16 the project which is labeled "Maintain Voltage".
17 It shows up on Exhibit 1, Page 30, Line 10. And,
18 if I'm looking at Column -- the difference
19 between Column G and Column H, I get a difference
20 of \$428,000. And that would indicate a
21 difference between the original annual
22 authorization and the plant in service number,
23 correct?

24 A (Devereaux) That is correct. Between the plant

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1 in service.

2 Q And then, we have a Supplemental Authorization,
3 in Column 9 [Column I?], of 2.17 million. And,
4 so that am I correct that the total authorized
5 amount is I would add those two numbers and get
6 something like 3.3 million?

7 A (Devereaux) No. The supplement amount is the
8 total authorization. So, it includes the 1.1 for
9 the previously authorized.

10 Q Okay. So, again, very quickly, if someone could
11 explain briefly what the "Maintain Voltage
12 Program" accomplishes?

13 A (Johnson) This annual covers work that is
14 required in order to address voltages that are
15 outside of the regulatory limits that are
16 established under the DOE/PUC 300 hundred rules.
17 The types of issues are, you know, low voltage on
18 the primary voltage system, where it may be
19 adding a capacitor bank, it may be adding a
20 regulator. But it also includes voltage
21 complaints, where they are having low voltage,
22 and require an upgraded transformer or service,
23 or even flicker complaints, which, again, could
24 require an upgraded transformer or service.

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1 Those are the types of projects that are included
2 within this program.

3 It is -- the dollar amount that's
4 established at the beginning of the year is based
5 on historical. This is one of those that we
6 literally have no real control over, in that we
7 tend to see spending significantly higher in
8 years where we have a really, really hot summer,
9 and a lot of people are running their air
10 conditioners, and maybe less spending on a cooler
11 summer.

12 But it really is, it's in reaction to
13 people identifying low voltage on the system or
14 customer complaints over voltage issues.

15 Q Is it possible, from the information that's
16 provided here, to identify specifically what
17 makes up the difference between the original
18 authorized amount of 1.1 million and the plant in
19 service amount of 1.6 million?

20 A (Johnson) No. It's a similar discussion on what
21 we had with the Reliability Annual. The Project
22 Authorization Form is based on annual spend to
23 the annual project. It is not based on an
24 in-service amount. And, again, jobs can roll

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1 from one year into the next, with respect to
2 spending and plant in service. And, so, no,
3 there is no direct link.

4 Q And, in response to a tech session data request,
5 the Company provided a pivot table that totals
6 the in-service amount that's requested of 1.6
7 million. That was provided as TS 3-004, and it's
8 part of Exhibit 15, correct?

9 A (Devereaux) Yes. That's correct.

10 Q Okay. Okay. And then, moving on to the project
11 that's -- it's not on the list. It's identified
12 as the "Submarine Cable". And my understanding
13 was that, based on PUC Order 26,505 [26,504?], at
14 Page 7, there was a disallowance of \$163,000.
15 And that came out of a recommendation from an
16 audit report from the step adjustment last year.
17 Do I understand that? Is my understanding
18 correct?

19 A (Paruta) That is correct.

20 CMSR. SIMPSON: Can you please repeat
21 the audit number, Attorney Dexter?

22 MR. DEXTER: The audit --

23 CMSR. SIMPSON: I mean the "order
24 number", excuse me.

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1 MR. DEXTER: The order number, sorry.

2 The order number is "26,504".

3 CMSR. SIMPSON: Thank you.

4 MR. DEXTER: At Page 7.

5 BY MR. DEXTER:

6 Q And what we were interested in learning was --
7 what we were interested in seeing was that
8 \$163,000 exclusion in this step adjustment, as a
9 result of that order. And could someone on the
10 panel show me where that \$163,000 is excluded?

11 A (Paruta) This was also a finding during the
12 Step 3 audit. And we reviewed that with the
13 auditors quite thoroughly. And there's actually
14 a really strong description within the Audit
15 Report issued for the Step 3.

16 So, if I may, Mr. Dexter, take us
17 there, that may help. We can start with Exhibit
18 1, and I can show the piece that is within the
19 Step 3. And I will take everyone there now, into
20 Exhibit 1.

21 CMSR. SIMPSON: Can you also identify
22 the pages in the Audit Report?

23 WITNESS PARUTA: I will do. Yes, sir.

24 CMSR. SIMPSON: Thank you.

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1 CONTINUED BY THE WITNESS:

2 A (Paruta) It should be in my carryforward project,
3 which is the second page.

4 MS. RALSTON: If I may, Marisa, I think
5 it's Page 31, Line 17.

6 WITNESS PARUTA: Line 17?

7 MS. RALSTON: Yes.

8 WITNESS PARUTA: Thank you.

9 CONTINUED BY THE WITNESS:

10 A (Paruta) Okay. If we go to Line 17, we will
11 see --

12 BY MR. DEXTER:

13 Q I'm sorry, Ms. Paruta. What exhibit are we
14 looking at?

15 A (Paruta) Oh, I'm so sorry. We are in Exhibit 1.
16 And it is Bates Page 31, Line 17. And that is
17 Project ID Number "A16N01". And you will notice,
18 in the Column H, we have a credit amount of
19 "148,109". And, now, if I could have everyone
20 turn to the Final Step 3 Audit Report, that was
21 submitted on August 31st, and if we could take
22 everyone to Page 3.

23 The auditor did an excellent job
24 ensuring that this was written off properly in

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1 our accounting books and records. And, in doing
2 so, we walked the auditor through the many steps
3 that are taken within the PowerPlan System.

4 So, at the very highest level, what
5 occurred was that we received a decision to
6 disallow investments in the Welch and Locks Cable
7 Replacement Project of \$163,000.

8 So, what the Company essentially did is
9 we took that amount, and we wrote it off against
10 the Project ID. In doing so, I'm going slow for
11 Steve, in doing so, the Project's ID has
12 preestablished work orders. And those work
13 orders are FERC mapped to certain plant balance
14 sheet accounts. So, what occurred, and because
15 of our PowerPlan System and its functionality,
16 when we wrote off the 163,000, it flowed back
17 into the system to the proper FERC accounts.

18 The auditor disagreed. That what we
19 should have done was written off the entire
20 amount to project placed in service, which is
21 FERC Account 106, or 101. But, instead, because
22 of the PowerPlan System, we wrote off the amount
23 to the project investment value, which
24 essentially reduced the total project value by

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1 the \$163,000. You will not see that in the Step
2 3 schedule, as we just showed, in Exhibit 1,
3 because that amount only reflects what was
4 included in FERC Account 106, which is project
5 placed in service.

6 The remainder went to FERC Account 108,
7 which is also picked up in the step, which is
8 also the revenue requirements calculation, I will
9 say, not the placed-in-service amount. So that
10 the revenue requirements calculation
11 appropriately reduced the amount by the full
12 \$163,000 disallowance.

13 So, there is a disconnect in terms of
14 how it is reflected in that one sheet, Exhibit 1,
15 because that specifically shows only what's
16 flowing through FERC Account 106.

17 BY MR. DEXTER:

18 Q Well, I actually wanted to finish up with some
19 questions that I probably should have started
20 with on the revenue requirement calculation. So,
21 let's do that. And then, we'll pick this issue
22 of 163 versus 148 up when we get there.

23 So, let me go back to Exhibit 1. And
24 I'll get you a page number in a minute. So,

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1 Exhibit 1, Page 45, is the revenue requirement
2 calculation, correct?

3 A (Paruta) That is correct.

4 Q And, again, these numbers need to be updated, but
5 working with what we have here. The very top of
6 this page compares plant in service at the end of
7 2020 to plant in service at the end of 2021, and
8 calculates a return on that change in net plant,
9 correct?

10 A (Paruta) May I add? So, your year-end plant in
11 service 2020 was adjusted for the disallowances
12 from the order in the Step 2. So, that plant in
13 service that you see in our Step 3 does not tie
14 to the plant in service reported in our Step 2.
15 We reduced that by the Pemi disallowance and the
16 Welch and Locks disallowance.

17 Q Okay. But I want to put the disallowances aside
18 for a minute, because I just want to ask about
19 the calculation that's here.

20 A (Paruta) Sure. Apologies.

21 Q No. No problem at all. So, but is it -- am I
22 right, though, that the presentation -- I should
23 have started with this, because it's important.
24 It's come up in many other step adjustments.

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1 What I'm trying -- what I'm asking here
2 is that the calculation of the revenue
3 requirement at issue is done on a change in net
4 plant basis, would you agree?

5 A (Paruta) In accordance with DE 19-057, the
6 Settlement Agreement, correct.

7 Q Okay. And the fact that we're talking about
8 specific projects stems from the fact that all of
9 those particular projects we've been talking
10 about find their way into Column B, on Exhibit 1,
11 Bates 045, "Net Utility Plant", you know, end of
12 the year 2021 number of 1,777,000, right? All
13 these projects are included in that number,
14 right?

15 A (Paruta) That's correct.

16 Q Okay. So, although we've been going
17 project-by-project, list-by-list, in reality,
18 what's included in the Step Adjustment is the
19 entire change in the Company's net plant?

20 A (Paruta) Excluding new customer growth, yes. If
21 you look at this particular page, we do exclude
22 new business. So, it is not all of the projects
23 that were placed in service in 2021.

24 Q Okay. So, where does that exclusion for

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1 growth/new business, where does that show up? Is
2 that done before we even get to Bates Page 45?

3 A (Paruta) If you look on Bates Page 046, that
4 right there will have identified for you, on Line
5 7 and 8, the additions and the retirements, where
6 the Company does exclude the new business. So,
7 for your roll-forward that you were referencing
8 on Bates Page 045, those numbers tie up. So,
9 it's actually on the next page, Page 46.

10 Q Okay. So, the exclusions for growth/new business
11 are shown on Bates Page 046, and that number at
12 the bottom of Bates Page 046 of 2,448,000 --
13 2,448,000,000 carries up to the first line on
14 Bates 045, 2,448,000,000?

15 A (Paruta) That is correct.

16 Q Okay. Okay. So, now, getting to the submarine
17 cable, where the specific list that we've been
18 talking about showed a reduction of \$148,000,
19 where we were expecting to see that project
20 reduced by \$163,000, I think you're telling me
21 that that \$15,000 differential is somehow
22 accounted for on Bates Page 045, correct?

23 A (Paruta) That is correct.

24 Q Okay. So, now, if you could give me that

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1 explanation, how that -- how that happens?

2 A (Paruta) Sure. So, well, first of all, I will
3 say the Company took a conservative approach. We
4 actually removed it in its entirety, and we did
5 so with the beginning balance. So, there's
6 actually a flowing through credit in addition to
7 that going through the Step. But I want you to
8 focus on the one that's flowing through the Step
9 today.

10 So, there are two line items I want you
11 to focus on. It's going to be your plant, on
12 Bates Page 046, if you look at your Line 7 there,
13 and you look at your "122,492,045", now I'm
14 trying to toggle back. So, please give me just
15 ten seconds.

16 Apologies. I'm trying to toggle
17 between the Excel files and the workbooks.

18 CMSR. SIMPSON: Take your time, Ms.
19 Paruta.

20 WITNESS PARUTA: Thank you.

21 **BY THE WITNESS:**

22 A (Paruta) So, let me go back to my schedules.
23 Okay. There we go. Thanks, Dave. Okay. So,
24 again, going to Exhibit 1, Bates Page 046, where

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1 we have that Line 7, "Additions", for 2021, the
2 "122,492,045", that is your plant asset additions
3 placed in service, excluding the new business,
4 for 2021, that ties to Attachment RDJ/DJP/ --
5 sorry -- /DLP/JJD-1, Page 1 of 4 [1 of 7?], which
6 I believe is Exhibit 1, Page -- do you know the
7 page number? I can't find the page number now,
8 because I'm in the same exhibit, I don't want to
9 move from this page.

10 So, this is the attachment. Bates
11 Page 028. Thank you, team. If you look at that
12 page, that gives you the Total Plant Additions of
13 "122,492,045".

14 BY MR. DEXTER:

15 Q Let me just interrupt -- if I could just
16 interrupt for a second, because I want to go
17 there.

18 A (Paruta) Sure.

19 Q So, you're saying Exhibit 1, Bates Page 028,
20 which is the list we've been -- well, it's just
21 before the list we've been talking about. Okay.
22 I see that number.

23 A (Paruta) Correct.

24 Q Thank you.

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1 A (Paruta) Yes. And, to your point, Mr. Dexter,
2 that is the summary of the list that we've been
3 referring to, which, in that list that we've been
4 referring to, also includes the credit associated
5 with the Welch and Locks Cable Replacement
6 Project, okay?

7 So, again, that number -- that credit
8 is flowing through your 7, Line 7, in our revenue
9 requirements calculation, going back to
10 Exhibit 1, Bates Page 046. That number, which
11 has been adjusted for the 148, plant in service,
12 Welch and Locks Cable Replacement Project, flows
13 up into your Bates Page 045, adjusted for your
14 new business, that number is your Line 4.

15 Your Line 5, which is your "Net Plant
16 Change", that includes FERC Account 108. In
17 Account FERC 108, if I may take everyone back to
18 the Final Step 3 Audit Report. And, if you go to
19 Page 3 of 52, you will see that there is a credit
20 flowing through the accumulated depreciation for
21 "15,280.44".

22 In addition to these amounts, there is
23 a very small amount of \$218 that flowed through
24 expense, which came up through this audit.

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1 However, when we provided our tech session
2 response, within our tech session response you
3 would see that that \$218 was actually -- that gap
4 was closed. So, we essentially did write off the
5 full amount through the project value that is
6 sitting in the plant FERC accounts.

7 Q Okay. So, I was with you when the 122 million,
8 on Bates 046, totaled the three numbers that I
9 could trace back to the list, and I saw that
10 148,000 was taken off the list. But I missed you
11 when you said what happened to the other 15,000.
12 So, if I could just ask you to repeat that?

13 A (Paruta) Sure. Sorry about that. So, the
14 15,000, if we look at the Audit Report, let me
15 see the page again, apologies, Page 3, that
16 15,280, the PowerPlan System flowed back that
17 disallowance to the FERC accounts as was
18 initially set up for the project, and that
19 includes the 15,280.

20 So, the project investment was
21 appropriately reduced by 163,000 in its totality.

22 Q But where, in either Bates 045, 046, or 028, does
23 that \$15,000 get taken out of plant in
24 service/rate base for purposes of this Step?

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1 A (Paruta) Your accumulated depreciation. Yes.
2 So, it's -- and I apologize that I'm not making
3 this clearer. So, let's go back.

4 Q That's the part I missed, because you came back
5 and referred us to Bates 045, 046, --

6 A (Paruta) Right.

7 Q -- and I think you referenced "Line 2"?

8 A (Paruta) I did. So, Line 2, that is your
9 accumulated depreciation that flows through our
10 system, our PowerPlan System. So, within that
11 amount is actually your reduction, if you will,
12 of the value of that plant that flows through
13 accumulated depreciation. So, in totality, when
14 you look at your net distribution plant change,
15 on Line 5, that number includes the full value of
16 the disallowance, flowing through properly
17 through our accounting books and records.

18 Q So, to sum up then, the 160 -- because I'm
19 interested in the amount that flows into the Step
20 Adjustment. And that amount --

21 A (Paruta) That amount is on Line 5 of Bates Page
22 045 of Exhibit 1.

23 Q Right. Because that's the number that shows up
24 on Bates Page 45, 65,326,000. That number is

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1 derived on Bates 046, Line 5, 65,326,000. That's
2 the net plant?

3 A (Paruta) Correct.

4 Q You're saying the 163,000 for this cable -- I
5 think what you're saying is, that the 148,000 for
6 this cable is reflected in the "Additions", Line
7 7, on Bates 046. And that the other 15,000 is
8 reflected on Line 2?

9 A (Paruta) That's correct. Yes. Said differently,
10 if you go to Bates Page 45, your Line 1, on Bates
11 Page 045, reflects your reduction of plant in
12 service. And Line 2 reflects the adjustment to
13 your accumulated depreciation for the cost of
14 removal component. So, the full value, if you
15 will, is reflected in those two line items.

16 Now, I do want to add quickly that, had
17 we done what the auditors wanted, this would be a
18 simple reclassification. Because the
19 disallowance was fully taken into earnings. So,
20 if we did what the auditors wanted, it would have
21 been a flip between FERC Account 108 and FERC
22 Account 106, all still within the plant value.
23 It's just a reclassification between two FERC
24 accounts. So, the disallowance was completely

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1 taken out of plant value.

2 Q And just for those of us that don't have the
3 Chart of Account memorized by number, what's
4 "106" and "108"?

5 A (Paruta) So, "108" is your "Accumulated
6 Depreciation"; "107" is your "Construction Work
7 in Progress"; "106" is "Plant in Service -
8 Non-Unitized"; and "101" is "Plant in Service -
9 Unitized".

10 MR. DEXTER: Okay. Okay, that
11 completes our questions.

12 CMSR. SIMPSON: Okay. Great. So,
13 next, I think we'll take a lunch break. I would
14 ask -- that was very extensive questioning.
15 Thank you for the work that the Department of
16 Energy has done in this proceeding. And I want
17 to compliment the witnesses as well. Their
18 testimony was incredibly thorough, both written
19 and today. So, I appreciate that from the
20 Company and the Department.

21 Would you like an opportunity, before
22 the Commissioners enter questioning, as, in your
23 questioning, I'm sure there's information that
24 came to light, in order to provide any closing

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1 information to the Commissioners, before we jump
2 into questioning?

3 MR. DEXTER: I think what you're asking
4 is, are we, at this point, ready to alter the
5 letter that we sent in on the 16th, in terms of
6 plant disallowances?

7 CMSR. SIMPSON: It's a thought that
8 crossed my mind.

9 MR. DEXTER: Sure. And I think I need
10 to talk about that with Mr. Dudley over lunch.
11 So, I don't have an answer now. But, if I do,
12 when we get back?

13 CMSR. SIMPSON: Very good.

14 MR. DEXTER: Okay.

15 CMSR. SIMPSON: Okay. Thank you,
16 everyone. It's 12:45. We will resume at 1:45.
17 Off the record.

18 *(Lunch recess taken at 12:45 p.m., and*
19 *the hearing resumed at 1:52 p.m.)*

20 CMSR. SIMPSON: On the record. So, as
21 promised, I wanted to see if the Department of
22 Energy had any new information that they thought
23 was relevant for the Commission's consideration,
24 before we engage in Commissioner questions for

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1 the Company witnesses?

2 MR. DEXTER: Well, Commissioners,
3 thanks for that opportunity.

4 I'm not at a point in the hearing
5 today, before Mr. Dudley has testified, to say
6 that, you know, certain issues have been
7 resolved. I understand we're pressed for time.
8 And I guess what I would say is, I think -- I
9 think Commissioner questions are always a good
10 thing. And, to the extent we have time for them,
11 I would like to hear them, and I think the
12 Company should hear what's on the Commission's
13 mind.

14 If I were to point to two projects
15 where our recommendation may more go towards
16 process in future step adjustments than this Step
17 Adjustment, that would probably be the blanket
18 projects, the reliability and the voltage
19 maintenance projects. Mr. Dudley will make some
20 comments about how difficult it is to review
21 those in step adjustments. But that may apply to
22 the future more so than this case, based on what
23 we heard today.

24 So, if you had to prioritize, maybe

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1 those would be two that you skipped. But I'll
2 leave that up to you.

3 But I welcome Commissioner questions in
4 this case. This is a lot of complicated and very
5 high cost -- this is a high-cost step adjustment.
6 So, I welcome the inquiry.

7 CMSR. SIMPSON: Appreciate that. Thank
8 you for those comments.

9 I will recognize my colleague,
10 Commissioner Chattopadhyay.

11 CMSR. CHATTOPADHYAY: How are you all
12 doing?

13 So, I think, first of all, I'm going to
14 have a record request. I would like to have the
15 schedules updated to reflect the changes that the
16 Company has, you know, accepted, so that the
17 Audit Report issues, as well as the deferments.
18 So, I would ask you to update. So, maybe I'll
19 just frame it as a record request right away.

20 Please provide the updated schedules in
21 live Excel format for the new calculations that
22 take account of the deferments on the Nashua and,
23 I think, the Millyard Projects, and the
24 changes -- the audit changes that were accepted

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1 by the Company. Something like that.

2 BY CMSR. CHATTOPADHYAY:

3 Q So, I know we talked about titles today. So, I
4 know there was a question by the Audit Division.
5 And, so, I think I understand that is
6 capitalized. So, can you give me a sense,
7 though, when you say it's "capitalized", like
8 it's part of the plant in service, sort of,
9 right?

10 A (Paruta) Yes. Correct. When the vehicle is
11 purchased, yes, the entire cost of the vehicle,
12 including the title, and the plate fees,
13 everything, is included as part of plant in
14 service. That's equipment placed in service.

15 Q Can you give us a sense of what is a dollar
16 amount that you're talking about when we say
17 "titles"?

18 A (Paruta) For the titles and the plate fees, what
19 we were told was that it was about \$1,200 for a
20 vehicle that was like a light-duty vehicle. And
21 then, for the heavy-duty vehicles, which is like
22 our bucket trucks, the ones that are heavy,
23 heavy, I'll say a significant cost, those are
24 4,200 -- or, excuse me, \$4,800.

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1 Q Yes. I'm asking gross. Can you -- is it
2 possible to have a number that one can look
3 through in the listing, to give us a sense of
4 what is a total dollar amount?

5 A (Paruta) We can do it in a record request. I
6 have estimates, but I would prefer, if we could.

7 CMSR. CHATTOPADHYAY: Okay. I will
8 gladly have a record request.

9 Please provide the total dollar
10 associated with the titles for the vehicles that
11 are included in the 2021 plant in service
12 listing.

13 *[Atty. Speidel conferring with Cmsr.*
14 *Chattopadhyay.]*

15 CMSR. CHATTOPADHYAY: Okay. I think we
16 will do that at the end. Sorry.

17 CMSR. SIMPSON: Yes.

18 BY CMSR. CHATTOPADHYAY:

19 Q So, as we were going through one of the -- I
20 think I'm trying to recall, was it Bates Page --
21 where you were talking about Keene. And there's
22 a projection for, you know, the load. Can you
23 tell me whether it's a summer peaking system in
24 Keene, or, you know, situation in Keene, or is it

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1 winter peaking?

2 A (Johnson) Yes, it's summer peaking.

3 Q It's summer peaking. Okay. So, I'm going to go
4 back to the "rates" issues. So, I heard that,
5 with the October 1st implementation, obviously,
6 the rates are going to be different than what it
7 would be if you were implementing it for twelve
8 months. When the back-and-forth was going on,
9 Mr. Davis, you had responded by saying you
10 haven't thought through how to go about when, in
11 2023 August, when you need to go back to the
12 rates that would reflect twelve months of
13 recoupment, how would you go about that?

14 A (Davis) So -- pardon me. So, let me start by
15 just sort of refreshing real quick. If we had a
16 lower request, instead of the 9.3 million, for
17 example, 8.9 million, and those were in effect
18 August 1st, it would be a lower number than we
19 have in our initial filing. So, obviously, we're
20 compressing the time to recover those same costs.
21 So, there's a factor we use, basically, sales, to
22 adjust. And we actually looked at October 2022
23 through July 2023 sales, and use a ratio to
24 adjust a revenue target. So that, when you

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1 implement the higher rates over a shorter period,
2 you get back to the same 8.9 million.

3 Q Yes, I understand. But I'm talking about 2023,
4 how will you come back to us and make sure that
5 the rates are then reduced? Because, after all,
6 this is a step increase, rates kind of stay for
7 good. So, it's -- you don't want to have the
8 same rates continue beyond August 1st. So, what
9 is the mechanism that you will follow to let us
10 know, and how should we go about that? That's my
11 question.

12 A (Davis) Correct. So, I may not know all the
13 answers to the process and technical
14 requirements, in terms of the regulatory
15 procedure. But, effectively, and the reason I
16 just went through that brief explanation, was I
17 would still have a 12-month based rate, if you
18 will, so that I know what the rate would revert
19 to when we get to August 2023.

20 So, I would submit the support and the
21 request for those rates that would be based on
22 twelve months. And I would request that those
23 become effective, all else being equal, meaning
24 if there are no other changes to distribution

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1 rates being requested for any other reason. I
2 would suggest that. And timingwise is the
3 question I'm not sure about, and process. But I
4 would request, and provide the support, for rates
5 in effect for August 1st, 2023, as if we had made
6 our initial filing in here for August 1st of
7 2022.

8 So, effectively, it's the same filing
9 that we would have had made had we used an \$8.9
10 million approximate revenue target. So, again,
11 the full -- basically, the full requirement, you
12 know, show the revenue requirements, the cost
13 allocations, rate design, bill impacts, the
14 entire set of filing requirements.

15 And we can do that now. I mean, we're
16 right -- we have that information now. If, for
17 some reason, we end up with November 1st rates or
18 October 1st rates, we can submit any of that
19 information for your consideration.

20 Q Okay. I mean, for me, it's really about --
21 excuse me -- whenever you have new rates, there
22 is a process that you need to follow. And, so,
23 it's like you may even require a hearing. And
24 I'm kind of thinking, what would be the most

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1 efficient way to go about? That's what I was --
2 so, you can, you know, --

3 A (Davis) If I could add? Perhaps, when we make a
4 typical rate filing, where we make one proposed
5 rate request, and the Commission orders something
6 different, we typically file a compliance. So,
7 if that's a good structure for that, all we would
8 simply do is provide the same information, but
9 provide a compliance that shows the new revenue
10 requirements and the associated rate calculations
11 that support changes to the tariff.

12 Q That is helpful. At least I will think through
13 it.

14 A (Davis) Thank you.

15 Q There was some discussion about property taxes,
16 and, you know, and there was a percentage, 2.1,
17 at some point that was referred. Don't have the
18 exhibit in front of me. But can you tell me how
19 is the property tax relevant in this filing?
20 Just give me a sense.

21 A (Paruta) So, the property -- sorry. The property
22 tax expense is one of the items that was agreed
23 upon as being a collectible cost to the Step, in
24 addition to depreciation expense and return. The

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1 property tax expense itself, as we had defined it
2 within the Settlement Agreement, we provided an
3 exhibit that actually identifies how to calculate
4 the property tax expense. And, within that
5 exhibit in the Settlement Agreement, what we did
6 was we took the entirety of the property tax
7 expense for the test year, and we divided it by
8 the plant -- rate base plant in service -- excuse
9 me -- total rate base plant assets, to come up
10 with an appropriate property tax rate.

11 I think at the time, the estimate in
12 the Settlement Agreement, subject to check, it
13 was 2.18 percent. So, what we do on an annual
14 basis within the Step is we essentially follow
15 that calculation that was included in the
16 Settlement Agreement, and we update that based on
17 actuals.

18 Q So, what I'm confused a bit about, and haven't
19 looked into everything, that the dollar amount
20 that you get for property tax, does that get
21 capitalized?

22 A (Paruta) So, if I could rephrase the question? I
23 think what you're asking is, "the property tax
24 expense that we determine to include in the Step,

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1 is that capitalized?" The dollar value of what
2 is included in the Step is part of revenue
3 requirements. So, yes. And I'm walking --

4 Q That I understand. Yes.

5 A (Paruta) I'm walking through the steps in my
6 mind, I'm sorry. So, that amount is included as
7 part of the revenue requirements. What then
8 happens is, within -- within actuals, we have the
9 actual step CWIP that is identified, which is
10 being collected as part of the revenue
11 requirements. Essentially, there is CWIP that is
12 capitalized, which is why we do include it --
13 excuse me -- the property tax expense that we are
14 collecting is related to the expense, not the
15 CWIP. So, I just want to be careful here,
16 because there are two different components. The
17 property tax expense that was discussed as part
18 of the construction work in progress is a whole
19 different calculation, which relates to property
20 tax expense during the year that is ascribed by
21 the towns to the value of the CWIP that is
22 determined to be in the town that is being
23 constructed. So, that is a different
24 calculation. I know it's confusing, because

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1 there seems to be property taxes in many areas of
2 our calculation.

3 So, I hope I'm not confusing you.

4 Because the property tax that we're including in
5 the revenue requirements is what we are actually
6 trying to collect for the property tax expense
7 associated with that plant placed in service.
8 Does that make sense?

9 Q So, let me see whether I understood it. Can you
10 confirm that the amount that is picked up by the
11 rates, the revenue requirement, does that include
12 any return on capital?

13 Or, said differently, is it purely
14 recovering exactly what the property taxes are,
15 just, you know, that's what you paid, so, you're
16 being reimbursed?

17 A (Paruta) Not the return on capital, because your
18 property tax expense is, again, calculated based
19 on just your net plant assets -- or, excuse me,
20 gross plant asset value. So, it would not, to
21 answer your question, collect a return on
22 capital.

23 Q It would not?

24 A (Paruta) It would not. Correct.

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1 Q Okay. So, when we were discussing the titles,
2 you had -- I forget which witness mentioned
3 something about the way it's treated here, it's
4 based on what the FERC rules are, or, you know,
5 FERC accounting practices are.

6 Can you -- can you provide a little bit
7 more substance to that? Like, did that -- was
8 it -- is it so forever, or that has happened
9 maybe just a few years ago? I'm just trying to
10 get a sense.

11 A (Paruta) So, for a title specifically, for as
12 long as I have discussed with the experts, it has
13 been done for a very, very long time. I don't
14 know the exact amount of time, but I would
15 probably even venture to say "decades", subject
16 to check. As it relates to vehicles and titles,
17 and the plates that are purchased, in order to
18 drive those vehicles off the lot.

19 Q And is that practice also being followed in
20 Massachusetts and Connecticut?

21 A (Paruta) It is. Yes. Correct.

22 CMSR. CHATTOPADHYAY: Okay. I think
23 that's all I have for now.

24 CMSR. SIMPSON: Okay. Thank you,

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1 Commissioner Chattopadhyay.

2 BY CMSR. SIMPSON:

3 Q I'd like to go to the Emerald Street Substation
4 topic. Mr. Russel [sic], I think you testified
5 that load has pretty much been flat there since
6 2010, around 59 megawatt peak at that substation,
7 is that correct?

8 A (Johnson) The 59 megawatts -- the 59 megawatts
9 was for the Greater Keene area. The Emerald
10 Street load was less than that. It's been
11 around -- identified there at roughly 40
12 megawatts.

13 And I did want to add to the record. I
14 found the latest forecast. And the ten-year
15 average going forward is at 0.87 percent right
16 now. So, I was relatively close with the
17 estimate I gave before.

18 Q So, the graph that we were looking at, I think it
19 was Exhibit 5, Bates 059?

20 A (Johnson) Yes.

21 Q This is reflective of the whole Keene area. So,
22 there's multiple substations that serve that part
23 of your service territory?

24 A (Johnson) Let me make sure we're talking about

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1 the same --

2 Q Sure.

3 A (Johnson) -- the same graph. I'm sorry, what
4 page?

5 Q Bates Page 059, the "Keene Peaks Forecast" graph.

6 A (Johnson) Yes. This was for the Greater Keene
7 area.

8 Q So, Emerald Street is a subset of this?

9 A (Johnson) Yes.

10 Q But the whole load in the area, as reflected
11 here, has been relatively flat?

12 A (Johnson) Yes.

13 Q And it's consistent with what you've seen at
14 Emerald Street as well?

15 A (Johnson) Yes.

16 Q So, planning studies, they're based on
17 assumptions and historical information. Were
18 there changes to either customer behavior or
19 programs from the Company? What do you think
20 were some of those factors that resulted in load
21 growth not manifesting to the degree that was
22 predicted in 2010-11?

23 A (Johnson) No, it's a great question. Because
24 what we've seen is, prior to 2008, that method of

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1 forecasting was -- it was extremely accurate.
2 Post 2008, there was a rebound to close to what
3 we expected. And, since that time, it's been
4 relatively flat.

5 So, you know, contributing factors, I
6 do think that, you know, lighting efficiency,
7 some small amounts of DG within the -- you know,
8 behind-the-meter DG, --

9 Q Uh-huh.

10 A (Johnson) -- because we can't account for the
11 other distributed generation. But I think it's
12 primarily that, you know, we have not seen the
13 continued level of growth, especially in the
14 industrial sector, I would say, following 2008,
15 to continue the type of growth that we had seen
16 prior to that.

17 Q And what was the capacity of that substation,
18 prior to the upgrade, and what's the capacity now
19 that you've implemented the upgrade?

20 A (Johnson) I should know this off the top of my
21 head, but I can do the math. So, it was -- there
22 are two 12 and a halves, two 22.4s, and one 20,
23 so, yes -- 69.8 was the capacity -- no, that's
24 wrong, because I know we have less capacity now

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1 than we had prior to. So, I think I'm off by one
2 decimal point there. I believe it's 89.8 was the
3 pre-project capacity. And, today, we have two
4 30s and a 20. So, we have 80 MVA there now at
5 Emerald Street.

6 Q And is it less because you've added a station or
7 upgraded surrounding stations around Emerald
8 Street as well?

9 A (Johnson) Yes.

10 Q So, you've kind of split --

11 A (Johnson) Yes.

12 Q -- the capacity?

13 A (Johnson) Yes. We built North Keene, which --
14 had North Keene installed. I should note that
15 these are our standard 115-to-12.47 transformer,
16 it's a 30 MVA transformer. It is the standard
17 across the Company. We now have them located in
18 multiple locations.

19 So, in North Keene, a 30 MVA was
20 installed there. That's loaded to around 18
21 megawatts right now.

22 And, yes, the installed capacity at
23 Emerald Street was actually reduced, because we
24 replaced a 12 and a half that was in parallel

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1 with a 22.4, with a single 30.

2 Q So, is there more modularity with the
3 transformation at these surrounding substations
4 than you had previously?

5 A (Johnson) I would say "more consistency", if
6 that's what you mean by "modularity"?

7 Q I think in terms, if you have a mobile, you
8 probably have spares.

9 A (Johnson) Oh.

10 Q You know, is there more modularity with this
11 design --

12 A (Johnson) Yes.

13 Q -- than previously?

14 A (Johnson) The design, specifically, you go with a
15 standard 30, allows you to size a mobile
16 appropriately, allows you to have a single spec
17 for purchasing transformers. Allows you, when we
18 reach a point where we feel it's prudent to
19 acquire a spare transformer, we will only require
20 one spare of that size on the system.

21 Q So, in your view, you don't feel as if the
22 substation is oversized today?

23 A (Johnson) No. In fact, what the installed
24 capacity allows us to do is to, in case of loss

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1 of a transformer, to be able to serve the load,
2 you know, from an adjacent substation.

3 Prior to this project, the only other
4 station in an even remote vicinity was Swanzey,
5 which is quite some distance away, with no strong
6 circuit ties between it. Very limited ability to
7 move power back and forth.

8 Now, we have the ability to move that
9 load between Emerald Street and North Keene, both
10 for substation issues, but also for line issues.
11 The fact that we now have a station much closer
12 to the load in North Keene provides a much more
13 reliable source to those customers.

14 Q And then, what about the vintage of the site? It
15 sounds as if the original substation was built in
16 the 1940s and '50s. And I believe somebody
17 testified to the fact that there was a failure in
18 the process of upgrading the station. Did I
19 understand that correctly?

20 A (Johnson) That's correct. The switchgear, I
21 believe, was manufactured in 1949. The
22 transformer, manufacturing dates were in the
23 early '50s, and I believe early, around 1960.
24 You know, it appears that, you know, it started

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1 with the 12 and a halves, then they added the two
2 22.4s as load grew. And then, as recently as
3 2000, they added another 20 MVA transformer off
4 the end of the bus. Now, because the switchgear
5 was existing, that transformer did not tie into
6 the rest of the system, the equipment within the
7 substation.

8 So, with this project, being that the
9 20 MVA was a relatively recent install, we did
10 not -- we left that unit there to take advantage
11 of it, but we did design a piece of switchgear to
12 allow that transformer to come into that
13 switchgear, such that now we have automatic bus
14 restoral schemes between the three transformers
15 located at Emerald Street.

16 Q So, then, within the planning study in 2010-2011,
17 a great deal of the justification for the project
18 was based on the forecast that there would be
19 load growth?

20 A (Johnson) No.

21 Q No?

22 A (Johnson) No, actually, as I spoke to before, the
23 only identified planning criteria for the project
24 had to do with a contingency that was predicted

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1 in 2014, but could be alleviated with the
2 purchase of a mobile. The Company purchased a
3 mobile, in light of the fact that we also have
4 115-to-12 kV stations in Derry and in Portsmouth,
5 such that if we needed a mobile anyway. So, that
6 alleviated that short-term load-driven
7 contingency. And the only other contingency that
8 was identified in that planning study wasn't
9 until 2020.

10 Q Okay. That's helpful. Thank you. So, I'd like
11 to jump to Exhibit 15, Bates Page 004. So, why
12 was the project extended by seven and a half
13 months?

14 A (Plante) So, as I addressed in the latter part of
15 this data request, I think, or maybe it was a
16 different one, there were three kind of
17 contributing factors to the extension of the
18 in-service date beyond the planned December 2020.
19 One of them was, just prior to the onset of
20 construction, where internal resource constraints
21 caused us to delay the start of construction from
22 late 2018 to January of 2019. So, that's a
23 couple of months. And then, in 2020, so, we
24 had -- we had to break the project up into

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1 multiple phases of construction. And we were
2 still working to fully define the outage
3 sequence, because that had a big impact on the
4 way the engineering was to take place.

5 So, after our first transformer cutover
6 in the Spring of 2020, which ended just before
7 Memorial Day, I believe, we ended up taking a
8 break on outage-related construction of about
9 four months, while we wrapped up the final
10 details of the engineering on that second phase
11 of construction. And that put us back into
12 construction in October. So, that was about four
13 months.

14 And then, in the Spring of 2021, while
15 we had just got into the construction for the
16 demolition on one of the last transformers to be
17 removed, is when we discovered the additional
18 asbestos and PCB contamination. So, that caused
19 us to halt construction-related activity, and
20 transition into abatement-related activity for
21 about a month.

22 So, those three events add up to about
23 seven months of delay.

24 Q Okay. Thank you.

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1 A (Johnson) May I add to a comment I made earlier,
2 because I didn't --

3 Q Please.

4 A (Johnson) -- I didn't fully address a comment
5 that you made. You mentioned the failure of a
6 transformer, and I failed to elaborate on that.
7 And I do have the dates in front of me, so I'll
8 give them to you. The transformer manufacturing
9 dates were 1953, 1954, 1964, 1969, and 2000. The
10 unit that actually failed was the 1969 vintage
11 unit. So, there are actually three transformers
12 on site that were older and significantly older
13 than the unit that failed.

14 Q And all of those were replaced in the project?

15 A (Johnson) The older units.

16 Q Not the 2000?

17 A (Johnson) Not the 2000 unit. Thank you.

18 Q Yes. Thank you. All right. Let's talk about
19 the Goffstown project. And if somebody, in my
20 notes, I don't have an exhibit number. It's the
21 one where you describe the 675,000 initial
22 estimate, the 407,000 approval, and then the
23 actual amount.

24 A (Plante) Yes.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q Do you have a exhibit for me?

2 A (Plante) Exhibit 14. And there's also a previous
3 exhibit.

4 MS. RALSTON: Exhibit 6.

5 **BY THE WITNESS:**

6 A (Plante) Six.

7 BY CMSR. SIMPSON:

8 Q Thank you. Yes. Exhibit 6 was the one I was
9 hoping to address. So, I haven't -- my
10 understanding is that the initial estimate was
11 675,000 for this project. Is that correct?

12 A (Plante) So, that was an initial order of
13 magnitude cost for the project. It was not a
14 detailed bottom-up estimate for the work.

15 Q Weren't too far off, though?

16 A (Plante) Correct.

17 Q Your more detailed estimate was further off,
18 correct?

19 A (Plante) The first detailed estimate, yes, was
20 further off.

21 Q Okay. Can you elaborate a bit on the delta? So,
22 you do your initial estimate, let's call it
23 back-of-the-envelope, but I'm sure better than
24 back-of-the-envelope, but 675,000. You then dig

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 a bit deeper in, you do another review, you get
2 to the 407,000?

3 A (Plante) Right.

4 A (Johnson) Dave, let me start. So, just to give
5 some background on the process. For distribution
6 line projects --

7 [Court reporter interruption.]

8 **CONTINUED BY THE WITNESS:**

9 A (Johnson) For distribution line projects like
10 this one, we start with what we refer to as a
11 "challenge session", which typically takes place
12 in August, where people bring forth their
13 proposed projects. It's at that time that this
14 initial conceptual estimate is provided, as well
15 as the estimates for the alternatives. And a
16 decision is made to put that project into the
17 preliminary budget.

18 BY CMSR. SIMPSON:

19 Q And, if I can stop you? Is it, you sort of have
20 an initial capital budget, and then everybody
21 from the Company is saying "we should do this
22 project", "we should do that project", and then
23 you kind of weigh --

24 A (Johnson) Correct.

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 Q -- which project should be pursued, which ones
2 maybe next year?

3 A (Johnson) Correct.

4 Q And you look at what your budgeted amount is?

5 A (Johnson) Correct.

6 Q Okay.

7 A (Johnson) And, then, when we have an approved
8 budget to proceed, --

9 Q Uh-huh.

10 A (Johnson) -- at that point it moves beyond just
11 that initial conceptual stage. And here I'll
12 pass it over to Dave to continue with the
13 explanation.

14 A (Plante) All right. So, kind of getting into the
15 differences between the 407,000 funding and the
16 supplemental funding value. As I mentioned
17 earlier, the 407 number wasn't based on a great
18 deal of engineering detail. They had the, I
19 guess, handshake agreement on the value of the
20 easement that was to be acquired. There was a
21 purchase order or a pending purchase order with
22 an environmental firm to do some environmental
23 assessment of the property before we closed on
24 the deal. And a high-level estimate from our

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 civil contractor to perform the site development
2 and install the foundation for the -- for the
3 transformer.

4 Shortly after that, we got into the
5 details of the engineering and the required
6 permitting that was going to be necessary to
7 complete the project. That required additional
8 field survey and topographic information, as well
9 as onboarding of a site design firm to complete
10 the site design and the site plan application, as
11 well as a zoning board application to be
12 presented to the Town of Goffstown.

13 Upon completion of the site design, we
14 went back to the civil vendor with the revised
15 design, which did include significant import of
16 select fills, riprap for drainage, paving of the
17 driveway access, and fencing and gates, which
18 were not specifically available at the time of
19 their previous estimate.

20 You know, those, in addition to some
21 additional trucking and crane work, because one
22 of the transformers was actually delivered and
23 ended up not passing a test in the field. So, we
24 had to swap it out with another one. So, that

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[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 resulted in additional trucking and crane rental.

2 Q Was that a manufacturing defect?

3 A (Plante) Actually, I'm not sure what the defect
4 was. Somebody might know. I don't know if you
5 know, Russel?

6 Q Okay. Continue.

7 A (Plante) Yes, I'm not sure what the exact issue
8 with the transformer was.

9 And then, ultimately, upon energization
10 of the completed project, we were experiencing
11 transformer sound levels that were a little bit
12 troublesome to some of the nearby neighbors to
13 the project. And that drove an effort to bring
14 on a consultant to perform some sound evaluations
15 and a sound study, and propose some mitigating
16 measures, including some fairly substantial
17 vegetative mitigations to help deal with the
18 noise or the sound from the transformer.

19 Those were the kind of major things
20 that contributed to the additional cost of the
21 project beyond what was approved in the initial
22 full funding authorization.

23 And, you know, even with all that, the
24 project total cost is still well below the next

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 least costly alternative for the project.

2 Q Okay. Thank you. A general question with
3 respect to the reliability budget and the voltage
4 issues. My understanding is that those are two
5 categories where it looks like, from the
6 spreadsheets, there's a pretty significant amount
7 of deference from the Company to folks that work
8 in your Area Work Centers. That, as they're on
9 the ground, they understand the local parts of
10 your system, they're making decisions to upgrade
11 the system in real-time. Is that a fair
12 characterization of that?

13 A (Johnson) That is fair, yes.

14 Q So, how do you develop that annual budget? What
15 goes into it? Is it really just a retrospective
16 look back or is there more to it than that?

17 A (Johnson) Generally, no, there's not more to it
18 than that. If there was something specific that
19 we had identified to be included, then we would
20 make an adjustment. But, generally, it's been
21 based off of historical, because we really don't
22 know, going into the year, what is going to, you
23 know, especially on the Maintain Voltage, but
24 also on Reliability as well, as we look for

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 opportunities to improve reliability to our
2 customers.

3 So, it is an unknown going in. It's
4 really just a planning number to hold a spot in
5 the budget for it.

6 Q And maintaining voltage and reliability is pretty
7 important, right?

8 A (Johnson) It is. It is. I was going to say
9 "it's the most important", but safety is the most
10 important.

11 Q Uh-huh.

12 A (Johnson) So, I guess this would be the next
13 important.

14 Q Certainly. Okay. The Audit Report, on Page 6,
15 describe some issues with duplicated plant asset
16 retirements as automated within PowerPlan. Can
17 any of the witnesses speak to that?

18 I'm primarily interested in whether
19 this has been addressed or if it's underway?

20 A (Landry) So, could you repeat the reference?

21 Q Yes.

22 A (Landry) I'm sorry.

23 Q It was Page 6 of the DOE Audit Report.

24 A (Paruta) So, just so that I can summarize. This

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 is the Maximo issue in PowerPlan that resulted in
2 the duplication of the retirements, which was
3 caught. They're, based on my understanding, I'm
4 certainly not the expert, but speaking to the
5 accounting experts, --

6 Q You use the system, right? Just so I understand
7 it.

8 A (Paruta) We do.

9 Q This system, you personally are familiar with?

10 A (Paruta) I am personally familiar with, correct.

11 Q Okay. Thank you.

12 A (Paruta) When they -- I will say it is addressed.
13 So, they have identified a mitigation factor.
14 And they are working on the -- I'll call it the
15 "hot fix" to the problem. The mitigation factor
16 is right now a workaround, where it's manually
17 performed. But, based on my understanding,
18 subject to check, it was going to be completed by
19 the end of 2022, in terms of making sure the
20 upgrade was made.

21 Ms. Landry is somewhat familiar with
22 the WAM process. I'm not sure, Ms. Landry, if
23 have any further update on the Maximo issue, with
24 the duplication? If you do not, we can --

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 A (Landry) No. I believe I can confirm, but, as
2 Ms. Paruta said, this issue has been addressed.
3 And the firm that's been mentioned is on-site,
4 has been working this. So, I'm confident that it
5 will be 100 percent rectified and a system fix is
6 in place by the end of the year.

7 We can confirm it. It may already be
8 in. I can confirm and get back to you shortly.

9 Q So, is this an IT issue primarily? Automation --

10 A (Paruta) It was the implementation of a brand-new
11 work management system, and how the
12 interfacing -- I'll say, the interfacing into the
13 PowerPlan System, and the data that came over,
14 how it was coded. So, it was an IT coding issue.

15 Q Okay.

16 A (Paruta) It was actually discovered by the plant
17 accounting experts as an issue post
18 implementation, but during the testing phase of
19 the interface. So, the Accounting team caught
20 it, with the IT experts. Unfortunately, they
21 could not mitigate it, because the WAM System had
22 essentially been already put into place, put into
23 production. So, that's why they have to now go
24 back, and they have to almost recreate the fix

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 and push it through the WAM System upstream, to
2 now be appropriately coming into the interface
3 into PowerPlan downstream.

4 Q Okay. And you expect by the end of the year?

5 A (Landry) Excuse me, Marisa?

6 A (Paruta) Subject to check.

7 A (Landry) Just checked. It is all 100 -- it's all
8 fixed. It's done.

9 Q Oh. Okay.

10 A (Paruta) Perfect.

11 A (Landry) Thanks.

12 Q Okay. Thank you. So, looking at Exhibit 2,
13 Bates Page 005, the last section. Can you
14 explain what's included in the retirement of
15 4.5 million, under "New Business Plants &
16 Retirement"?

17 A (Paruta) I can help explain how this data was
18 generated.

19 Q What I'm trying to reconcile is how you have a
20 "retirement" for new business?

21 A (Paruta) Oh. Okay. Yes. So, good question. I
22 had a similar question.

23 So, based on my understanding, subject
24 to check with the experts, on our panel of my

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 colleagues, when there is new business, there
2 could be existing infrastructure that has to be
3 reconfigured. And, so, within that
4 reconfiguration is the takedown/breakdown of
5 existing infrastructure, to then reconnect into
6 our existing infrastructure for the new customer,
7 whether that be development of a new condominium
8 complex, new building.

9 And I will allow the rest of my
10 colleagues to maybe add more.

11 Q Makes sense.

12 A (Landry) Yes.

13 Q Thank you. A thorough answer. And can you
14 confirm that that line representing "New Business
15 Plants & Retirement" is not part of "Net
16 Distribution Plant Additions and Retirements" in
17 the line above?

18 A (Paruta) That is correct. So, the data was run
19 to include the 122,492,000 and the 19,985,000 to
20 be the all-inclusive number, I believe. And
21 then, the "New Business Plant Addition and
22 Retirements" were run specific to those new
23 customer and new plant additions related to the
24 new customers using the Project ID and the

[PANEL: Johnson|Plante|Devereaux|Davis|Paruta|et al]

1 associated work orders with those Project IDs
2 that are specific to the new customers.

3 So, yes. They are separate and
4 distinct within the PowerPlan System.

5 Q Okay. So, the retirements are for existing
6 plant?

7 A (Paruta) The retirements are for the -- the plant
8 that was, again, reconfigured as it relates to
9 the new customers that were added on. So, it's
10 retirements associated with existing plant, if
11 you will, that is related to a new build-out.
12 So, that's how we defined it for purposes of the
13 Step.

14 Q And then, for your total net plant change,
15 including growth and non-growth, would that be in
16 FERC Form 1?

17 A (Paruta) For my total growth and non-growth, in
18 total, yes, that would be in your FERC Form 1.

19 CMSR. SIMPSON: Okay. Thanks. I think
20 that's all I have at this time. So, I will thank
21 you.

22 I'll recognize Attorney Ralston for any
23 redirect that she might have for her witnesses?

24 MS. RALSTON: I don't have any

[WITNESS: Dudley]

1 redirect. Thank you.

2 CMSR. SIMPSON: Okay. Thank you. So,
3 we'll release the witnesses. If we have other
4 questions, you'll remain under oath. But please
5 feel free to take a seat in the room.

6 *[Short pause.]*

7 CMSR. SIMPSON: So, we'll proceed with
8 Mr. Dudley. If you're more comfortable there,
9 Mr. Dudley, feel free to stay. You're also
10 welcome to come join us up here. Whatever is
11 most convenient, comfortable for you.

12 MR. DUDLEY: Yes. I'll take the stand.
13 (Whereupon **Jay E. Dudley** was duly
14 sworn by the Court Reporter.)

15 CMSR. SIMPSON: Great. Thank you for
16 being here, Mr. Dudley. I'll recognize Attorney
17 Dexter.

18 MR. DEXTER: Thank you, Commissioner.

19 **JAY E. DUDLEY, SWORN**

20 **DIRECT EXAMINATION**

21 BY MR. DEXTER:

22 Q Please state your name and position with the DOE?

23 A My name is Jay Dudley.

24 *[Court reporter interruption regarding*

[WITNESS: Dudley]

1 *the microphone.]*

2 **BY THE WITNESS:**

3 A My name is Jay Dudley. My business address is
4 21 South Fruit Street, Suite 10, Concord, New
5 Hampshire. And I am a Utilities Analyst for the
6 Division of Regulatory Support, Electric
7 Division, New Hampshire Department of Energy.

8 BY MR. DEXTER:

9 Q Mr. Dudley, you haven't provided written
10 testimony in this proceeding, correct?

11 A No, I have not.

12 Q Could you give us a brief description of your
13 educational background?

14 A Yes. I received my Bachelor of Arts degree in
15 Political Science from St. Michael's College.
16 Just to give some employment/work experience
17 background. I started with the New Hampshire
18 Public Utilities Commission in June of 2015 as a
19 Utilities Analyst in the Electric Division.
20 Effective July 1st, 2021, the Electric Division
21 was transferred to and became a part of the newly
22 created New Hampshire Department of Energy. And
23 I'm presently employed by that agency.

24 Before joining the Commission, I was

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1 employed at the Vermont Public Service Board, now
2 known as the "Vermont Public Utilities
3 Commission", for seven years as a Utilities
4 Analyst and as a Hearings Officer.

5 Q And, Mr. Dudley, have you testified before this
6 Commission in matters similar to what's at issue
7 today, and by that I mean "recovery of capital
8 projects, in both rate cases and step
9 adjustments"?

10 A Yes, I have. I previously submitted testimony to
11 the Commission in a number of different dockets,
12 including Docket Number DE 14-238, which was
13 Public Service Company of New Hampshire
14 generation assets; Docket Number DE 16-383, which
15 was Liberty Utilities' request for change in
16 rates; Docket Number DE 19-064, Liberty
17 Utilities' request for change in rates; Docket
18 Number DE 19-057, Public Service Company of New
19 Hampshire request for change in rates; Docket
20 Number DE 21-030, Unitil Energy Systems' request
21 for change in rates; Docket Number DE 22-026,
22 Unitil Energy Systems' Petition for Approval of
23 Step Adjustment; Docket Number DE 21-004, Liberty
24 Utilities' 2021 Least Cost Integrated Resource

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1 Plan; and Docket Number DE 20-161, Eversource
2 2020 Least Cost Integrated Resource Plan.

3 Q And on that list of dockets, you mentioned "DE
4 19-057", which was the base rate case that gave
5 rise to the step adjustment we're talking about
6 today, correct?

7 A Yes. That's correct.

8 Q So, you were involved in the settlements that led
9 to the three step adjustments that were provided
10 for?

11 A Yes, I was.

12 Q Okay. What was the general task that you
13 undertook at the DOE to review the proposed Step
14 Adjustment in this case?

15 A Well, the task was to provide the DOE's
16 recommendation involving Eversource's third step
17 adjustment, a request filed with the Commission
18 on May 2nd, 2022, as it relates to capital
19 investments added to Eversource's rate base in
20 2021.

21 Based on the information filed with the
22 Commission, and data responses filed with the
23 Department, involving approximately 198 projects,
24 and total plant additions of approximately

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1 \$122.5 million, and the Department's review of
2 those capital expenditures, the Department
3 recommends that a number of adjustments should be
4 made to some of the amounts requested by
5 Eversource.

6 Q And you talked -- we've talked a lot about
7 today -- today about the list of the projects,
8 and I think you mentioned today that there's
9 about 200 projects on that list. In fact, that
10 list contains the entire capital budget for
11 Eversource, is that correct?

12 A That is correct. Yes.

13 Q And you didn't look at every one of the projects
14 on that list in detail, did you?

15 A Well, we did look at most of them, but not in
16 great detail on some of them, no.

17 Q Okay. And the ones that you made -- or, are
18 about to make recommendations on, or that were
19 listed in our September 16th letter, were
20 projects that you took a closer look at, is
21 that --

22 A Correct.

23 Q -- is that fair to say?

24 A Yes.

[WITNESS: Dudley]

1 Q Okay. Is it also fair to say that, when
2 assessing -- when looking at those projects, one
3 of the issues that you're trying to evaluate for
4 your recommendation is whether or not the
5 projects were, in fact, placed in service in
6 2021, which is the year of the Step Adjustment
7 for this case, is that right?

8 A Yes.

9 Q And, in addition to confirming that the projects
10 were placed in service, you are looking to assess
11 whether or not the projects are used and useful,
12 and maybe that's the same thing, but they're used
13 and useful?

14 A They should be used and useful.

15 Q And do you assess the decision-making process of
16 the Company, in terms of the prudence of the
17 projects that are placed in service?

18 A As best as we can. The Department and the
19 Commission can only assess the prudence of the
20 project based on the information provided by the
21 Company. If the project raises questions or
22 they're not adequately explained or supported by
23 the Company, then our recommendation is to either
24 disallow the expenditure or defer the expenditure

[WITNESS: Dudley]

1 to the next rate case.

2 Q So, that's an important point. I think I just
3 heard you say that you can only work with the
4 information that's been provided to you from the
5 Company, you don't have any sort of other
6 independent source material to verify any of
7 these projects?

8 A No. We're totally reliant on the information
9 that the Company provides to us.

10 Q And that includes the Company's initial filing,
11 as well as information gleaned through data
12 requests, and tech sessions, is that right?

13 A Yes. That's correct.

14 Q Okay. And, in the course of this case, we, the
15 Department of Energy, were asked to outline the
16 recommendations that we plan to make today for
17 the parties, and we did that in a letter that we
18 submitted on September 16th, is that right?

19 A Yes.

20 Q And you had a hand in crafting that letter,
21 although it's got my name on the bottom of it, is
22 that right?

23 A Yes, I did.

24 Q Okay. And, so, what I want to do today is go

[WITNESS: Dudley]

1 through the recommendations that we were going to
2 make, and, in fact, either make those
3 recommendations today, or change them, or
4 possibly add some additional information, based
5 on what we heard this morning.

6 So, I'm going to skip over the first
7 project, titled the "Nashua Work Center
8 Renovation", because the Company has agreed to
9 defer the recovery of that project to the next
10 rate case, which is what our recommendation was
11 going to be. And I'd like to move towards the
12 second project, the "Emerald Street Substation".

13 Now, is it correct that the underlying
14 Settlement in this case sort of has a threshold
15 that says, and I believe the term is that the
16 step adjustment won't include "growth-related
17 projects". Is that your understanding of the
18 Settlement?

19 A Yes, it is.

20 Q Okay. And how would you view a "growth-related
21 project", such that it would be excluded from the
22 step adjustment, from the outset, you wouldn't
23 even, you know, have to undertake a review of it?

24 A Well, primarily, it would involve a project that

[WITNESS: Dudley]

1 the Company is undertaking in response to load
2 growth in a particular area.

3 Q Okay.

4 A That's usually what it involves.

5 Q And, when we put together the list for September
6 16th, we identified that we were going to
7 recommend a deferral of the Emerald Street
8 Substation, because the documents that the
9 Company provided indicated that the project was
10 undertaken, at least in part, by a projected
11 3.1 percent load forecast in the Keene area, is
12 that right?

13 A Yes.

14 Q Okay. And one more thing, before we get into the
15 specifics of that. Is it your understanding that
16 the reason for not including load growth or
17 growth-related projects in a step adjustment is
18 because, in a step adjustment, it's inherently
19 one-sided, in that it allows for recovery of
20 costs, but doesn't recognize any changes in the
21 Company's revenues, as were examined in the
22 underlying test year?

23 A That is our understanding, yes.

24 Q And this prohibition, if you will, or clause in

[WITNESS: Dudley]

1 the Settlement for step adjustments, that
2 excludes growth-related projects, is not unique
3 to this case, would you agree?

4 A No. It's been a requirement in several of the
5 settlement agreements that I have been involved
6 with.

7 Q And, by a "requirement", it's an item that's
8 important to the PUC Staff, when we were Staff,
9 and DOE now, to be in a step adjustment, to
10 address the fact -- to acknowledge the fact that
11 we're only adjusting costs in a step adjustment,
12 and not recognizing changes in revenues?

13 A Yes.

14 Q Okay. Okay. So, having said all that, when you
15 reviewed the documents that were provided for the
16 Emerald Street Substation, is it correct that you
17 saw that -- or, that you read that the substation
18 was premised on a 3.1 percent load forecast?

19 A Yes. And that was in the Keene Area Report that
20 was attached to the -- to Data Request TS 1-006A.

21 Q Right. And we talked about that this morning.
22 So, everyone is familiar, I think, with the chart
23 that we were all looking at.

24 And is it your understanding that that

[WITNESS: Dudley]

1 study was presented in -- that it was prepared in
2 the 2011-2012 timeframe?

3 A Yes, it is.

4 Q And is it your understanding that the decision to
5 go forward with the Emerald Street Project was
6 made in the 2016-2017 timeframe?

7 A That is what I gleaned from the project
8 documentation, yes.

9 Q And there's another document that I think you can
10 point to to the Commission where, in 2017, the
11 Company refers back to that 2012 load study, is
12 that right?

13 A Yes. That is correct.

14 Q And could you explain that a little bit?

15 A Yes, if I can just get to the page. Yes. And
16 this is the -- this is what Eversource refers to
17 as the "Technical Authorization Form", which is
18 essentially the starting place for their
19 budgeting and evaluation process for a project.

20 Q Now, let me interrupt you for a second. Because
21 I believe the project documents for this
22 particular project are in Exhibit 5, right?

23 A Yes.

24 Q Okay. So, could you give us a page number before

[WITNESS: Dudley]

1 you go into any detail?

2 A Like you, Mr. Dexter, I am without Bates pages.

3 Q Okay. Is there an internal page number that we
4 can --

5 A There is. It's "Attachment DOE 1-008", and it is
6 "Page 26 of 32".

7 CMSR. SIMPSON: And which exhibit
8 number, Mr. Dudley, I'm sorry?

9 WITNESS DUDLEY: Exhibit 5.

10 MR. DEXTER: Can we go off the record
11 for a second, Commissioner?

12 CMSR. SIMPSON: No problem.

13 *[Brief off-the-record discussion*
14 *ensued.]*

15 CMSR. SIMPSON: Okay. Back on the
16 record.

17 MR. DEXTER: Thank you.

18 BY MR. DEXTER:

19 Q Well, I stand corrected. The form that you were
20 looking for is, in fact, in Exhibit 5, starting
21 on -- it's Bates Page 027.

22 So, we were talking about -- I had
23 asked you about the Company, in 2017, referring
24 back to the load forecast that was done in the

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1 Keene area in 2011 or '12. So, could you
2 continue with that answer?

3 A Yes. And the Technical Authorization, this is
4 dated "November 18th, 2016", under the "Project
5 Need Statement", the first sentence is "In 2012
6 an Area Study was performed to determine how to
7 best address the area loading and retirement of
8 equipment at the Emerald Street Substation."

9 Q Is there anything else in this document that you
10 wanted to refer to?

11 A Yes. It goes on to say, under "Project
12 Objectives", and that would be in the third
13 paragraph of that section, it refers to the
14 "bus 1 and bus 2 switchgear breakers that are at
15 85.4 percent and up to 98.6 percent of their
16 interrupting rating."

17 And what we've seen throughout the
18 project documentation that we reviewed is, first
19 of all, we don't contest the whole idea that the
20 equipment in the substation is at or near its
21 obsolescence. But what we did glean from the
22 project documentation was that the new additional
23 loading that was predicted to come on line was
24 something that was going to exacerbate that

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1 condition.

2 And, if I may, Mr. Dexter, I'd just
3 like to turn back to the Study itself. And what
4 I'm looking at is the -- I'm looking at the
5 "System & Planning Strategy [sic] Keene Area
6 Distribution Study. And that is "Attachment
7 TS 1-006A". And, again, I don't have the Bates
8 pages, but I'm looking at Page 3 of 28 of the
9 load -- of the Area Study.

10 MS. RALSTON: It's Bates Page 042, for
11 anyone looking at the electronic version.

12 CMSR. SIMPSON: And are we still on
13 Exhibit 5?

14 MS. RALSTON: Yes.

15 WITNESS DUDLEY: Yes.

16 CMSR. SIMPSON: So, Bates 042 of
17 Exhibit 5? Is that correct?

18 MS. RALSTON: Correct.

19 CMSR. SIMPSON: Thank you.

20 MR. DEXTER: Thank you.

21 **CONTINUED BY THE WITNESS:**

22 A And what stood out to us was that, under the
23 "Executive Summary", the real discussion in the
24 Executive Summary, there was a primary and a

[WITNESS: Dudley]

1 secondary discussion, the primary discussion
2 involves load growth and projected load growth.
3 The secondary discussion is the obsolescence of
4 the substation.

5 If I may, in the second paragraph of
6 the Executive Summary of the Study, it clearly
7 says "This area is presently experiencing a
8 3.1 percent load growth which is expected to
9 continue in the foreseeable future."

10 BY MR. DEXTER:

11 Q Right. And this was the Study that was performed
12 in the 2011-2012 timeframe?

13 A Yes.

14 Q Okay. And your understanding is that the Study
15 was designed to do two things, basically, look at
16 the area and the load, and come up with
17 infrastructure to serve that projected load?

18 A Yes. Yes.

19 Q Okay. And, in fact, you heard the testimony of
20 Mr. Johnson this morning that actual load growth
21 did continue in the Keene area, although at a
22 lower rate, in the area of one percent, than was
23 forecasted back in 2012?

24 A Yes. I do recall that.

[WITNESS: Dudley]

1 Q Okay. Now, your recommendation with respect to
2 this substation is not to disallow recovery of
3 the costs based on imprudence, is that right?

4 A Yes.

5 Q And your recommendation is not to permanently
6 disallow the recovery of these costs, is that
7 right?

8 A Yes. That's correct.

9 Q And, in fact, your recommendation is to defer the
10 review of this substation to the next rate case,
11 so that the issue of -- based on the issue -- I'm
12 sorry -- based on the Settlement's provision of
13 excluding "growth-related projects", is that
14 right?

15 A Yes. That's right.

16 Q And this substation, as we discussed this
17 morning, came in at about \$19 million in 2021,
18 that's what's included in the Step Adjustment,
19 correct?

20 A That is correct. Yes.

21 Q Okay. And there was an initial budget of 16
22 million for this?

23 A Yes.

24 Q Right. So, in the next rate case, if review of

[WITNESS: Dudley]

1 this project were deferred, would that provide
2 the Department and any other parties an
3 opportunity to explore more fully the \$3 million
4 expenditures that were over budget?

5 A Yes, it would. The 3 million extra that was over
6 and above what the supplement request of
7 April 2019 was not documented anywhere, in any of
8 the -- you know, in any of the project
9 documentation that we received from the Company.
10 So, we had to inquire about it at the tech
11 session on August 31st. And what we received in
12 response to that was, we did receive a number of
13 expenditures, and some explanations of those
14 expenditures, in response to Data Request TS
15 3-002. The problem is that the number of line
16 items was quite numerous. The data response was
17 received on September 9th. Opportunities for
18 additional discovery had passed by that point.

19 So, we really didn't have a good
20 opportunity to really vet those numbers and
21 really get behind them. And a rate case, in a
22 rate case setting, that would afford us the
23 opportunity to do that.

24 Q And could you summarize the tech session data

[WITNESS: Dudley]

1 request that you just mentioned, what the actual
2 question was?

3 A Yes. It says "Please provide a detailed
4 explanation for the approximately 2.7 million
5 difference between the plant in service and
6 pre-construction authorization amounts shown in
7 Column I and J, respectively." That refers back
8 to Attachment RDJ/DLP/JJD. And what we
9 received -- we did receive a breakdown of each
10 category, and it goes on for several pages. We
11 did see some of the -- some of the environmental
12 issues that Mr. Plante mentioned earlier were
13 included in this. But we didn't -- we simply did
14 not have time, the time or the opportunity, to
15 dive into it or to ask additional questions.

16 Q All right. Now, the schedule that you referenced
17 back to was the list, the one with all the
18 initials, that was the list that was provided
19 when the Step Adjustment was filed?

20 A What we refer to as the "Master List".

21 Q "Master List".

22 A Yes.

23 Q Okay. Now, of course, you could have asked this
24 data request earlier in the process, correct?

[WITNESS: Dudley]

1 A Yes.

2 Q But I think what you said was that the -- is that
3 there was nothing in the initial filing that went
4 to address this variance, is that right?

5 A That's correct.

6 Q And there would have been nothing preventing the
7 Company for having provided an explanation up
8 front?

9 A Correct. At first, we thought it was an
10 oversight, and we did dig through it pretty
11 thoroughly, but we couldn't find anything that
12 addressed it.

13 Q Now, the Company did provide the project
14 documents that were required as laid out in the
15 Settlement, did they not?

16 A Yes, they did.

17 Q But, upon reviewing those, I guess what you're
18 saying is you didn't find a detailed explanation
19 for this?

20 A Correct.

21 Q Okay. And the last thing I wanted to ask you
22 was, I don't have the Master List in front of me,
23 but is this, in fact, the largest item on the
24 list? If not, it must be -- it must be up there?

[WITNESS: Dudley]

1 It's a fairly large item on the list, correct?

2 A Yes. Yes. I believe it is the largest one,
3 subject to check.

4 Q Okay. All right. That's all I wanted to ask you
5 about on your recommendation there. And, again,
6 just to confirm, your recommendation is that
7 recovery of this project be deferred to the next
8 base rate case?

9 A Yes, it is.

10 Q Now, under the Settlement Agreement, do you
11 recall when, what's the earliest that rate case
12 could come in?

13 A Subject to check, I recall that there was an
14 agreed to stay-out period. I believe it was
15 three years, but I'd have to double-check on
16 that.

17 Q Okay. Yes. All right. The next item that was
18 in our letter was the "Pad Mount Transformer" in
19 Goffstown, New Hampshire. And our letter said
20 that we were considering recommending a
21 disallowance of the over budget amount of
22 371,000, that was basically 90 percent -- a 90
23 percent initial budget overrun. Is that a fair
24 assessment?

[WITNESS: Dudley]

1 A Yes.

2 Q Okay. And, again, you heard the testimony this
3 morning from the Company. What's your primary --
4 what's the Department's primary concern with
5 allowing recovery of the Goffstown project at
6 this time, the way it was presented?

7 A Well, what we took away from the project
8 documentation, in particular, the Supplement
9 Request Form, our indication is that some of
10 these cost overruns were known or could have been
11 known at the time of project inception. And the
12 reason why I say that is, if you look at the
13 Supplement Request Form, and you look at -- and
14 this would be Attachment TS 2-001B. And, if you
15 look at Page 2 of 11, you have kind of a
16 breakdown of the additional costs. And what's
17 noted in some of these is that these were costs
18 that were not previously estimated in the
19 original PAF, not included in the original PAF.

20 CMSR. SIMPSON: Mr. Dudley, I'm sorry.
21 You said "Attachment TS 2- --

22 WITNESS DUDLEY: "001B". And, again, I
23 don't -- I apologize, Commissioner Simpson, I
24 don't have Bates numbers, but --

[WITNESS: Dudley]

1 BY MR. DEXTER:

2 Q Well, before we get to the Bates numbers, so,
3 Exhibit 6 only has 11 pages, and that's related
4 to Goffstown. So, I don't think what you're
5 referring to is in Exhibit 6. I'm guessing it's
6 in Exhibit 14?

7 A Well, again, my exhibit list may be old, Mr.
8 Dexter. I do have it marked as "Exhibit 6",
9 but --

10 Q You do?

11 A Yes.

12 Q Well, let me look. Oh, I'm sorry. Could you
13 give the cite again?

14 A It's TS -- it's "Attachment TS 2-001B".

15 Q Okay. I'm sorry. And that's the entire exhibit?

16 A That's the entire exhibit, yes.

17 CMSR. SIMPSON: And what was the page?

18 WITNESS DUDLEY: It is Page 2 of 11.

19 CMSR. SIMPSON: Okay. Thank you.

20 WITNESS DUDLEY: Yes.

21 MR. DEXTER: My apologies. When you
22 said -- I was looking for an Excel sheet.
23 Something you said prompted me to look for an
24 Excel sheet.

[WITNESS: Dudley]

1 WITNESS DUDLEY: Yes.

2 BY MR. DEXTER:

3 Q Okay. So, what I think you were saying was, that
4 the analysis that the Company provided internally
5 for their -- early in their decision-making
6 overlooked what I think you thought would be some
7 obvious costs that should have been looked in the
8 analysis. Is that a fair assessment?

9 A Yes. And that's reinforced by the "Lessons
10 Learned" section that you find on Page 4.

11 Q And what do they say?

12 A In the "Lessons Learned" section, there's three
13 of them. The first one is "Engineering must
14 validate existing conditions prior to finalizing
15 scope and launching detailed engineering." The
16 second one is "A scope document should be
17 developed as well as conceptual engineering prior
18 to obtaining an accurate estimate for full
19 funding. The Project Manager should be involved
20 in the scope development and estimating process
21 along with engineering." Which we conclude, in
22 this case, the Project Manager was not involved
23 in that stage of the planning. And, lastly, is
24 "A statement of work should be developed for

[WITNESS: Dudley]

1 contracts purposes. This statement of work will
2 give contractors better understanding of the
3 scope of the work of the project."

4 And this kind of -- this seems to
5 follow, to us, first, as Staff of the PUC, and
6 now with the Department, kind of an historical
7 pattern that Eversource has tended to follow, in
8 terms of planning and scoping out some of these
9 projects. And we, in the past rate case, in
10 19-057, we did notice several projects where this
11 was a consistent pattern, that the project was
12 halfway through completion, cost overruns
13 occurred, and the "Lessons Learned" section of
14 those Supplemental Request Forms indicated that,
15 you know, some of the costs should have been
16 known and should have been taken into
17 consideration during the scoping process. And
18 the descriptions of that are contained in my
19 testimony in that docket, including my
20 supplemental testimony.

21 Q And is that one of the things that led the
22 parties to that case to stipulate to the Business
23 Process Audit that's ongoing now of Eversource's
24 capital expenditure policies and practices?

[WITNESS: Dudley]

1 A Yes. That is correct.

2 Q Okay. So, I mean, the Company did submit a
3 revised or a supplemental analysis of this
4 project, and we looked at that today, right?

5 A Yes.

6 Q And that contained some of the things that you're
7 saying were overlooked that probably shouldn't
8 have been overlooked in the initial project,
9 correct?

10 A Yes.

11 Q What concern then does the Department have about
12 allowing recovery of this project, if, in the
13 final analysis, the internal documents, you know,
14 appropriately accounted for the costs?

15 A Well, our problem is that, and, actually, it's
16 the Commission's problem as well, is that, and
17 I'll actually quote the Commission in a recent
18 order, and actually in the rate case, in the last
19 step adjustment, the second step adjustment from
20 last year, where the Commission stated in its
21 order "Prudent decisions cannot be made if
22 significant foreseeable cost elements of a
23 project are overlooked at the outset, and
24 meaningful reexamination of costs does not take

[WITNESS: Dudley]

1 place during project execution as costs
2 increase." And that's our concern. Is that
3 Eversource gets through a project, they get half,
4 three-quarters of the way through, costs start to
5 escalate, and what they find out is, "Well, oh,
6 gee, we could have planned for this in advance,
7 and we didn't. And, so, here we are."

8 And what oftentimes results in that
9 situation is that the project gets delayed, as in
10 this case, where the project was delayed seven
11 and a half months.

12 Q And we have learned this morning that a delay in
13 a project leads to increased costs, in terms of
14 additional AFUDC and additional indirect charges
15 being added as time goes on, is that right?

16 A Yes.

17 Q Okay. So, based on the -- based on the review of
18 the documents that we did, and what we heard this
19 morning, your recommendation isn't that the
20 Company not recover any of the costs it spent on
21 this Goffstown pad-mounted transformer, is that
22 right?

23 A Yes.

24 Q And you're recommending that recovery be limited

[WITNESS: Dudley]

1 to what was estimated at the time the Company
2 made the decision in the initial detailed
3 estimate of \$407,000, is that right?

4 A Yes.

5 Q Okay. I want to spend a few minutes now on the
6 next project, which is called the "Purchase of
7 Transformers". And I'd like to ask -- well, let
8 me go back to our preliminary recommendation,
9 which was to disallow \$3 million of transformers,
10 which were "over budget, which have not been
11 adequately explained." Is that -- that's kind of
12 a rough summary, but that's where we're headed on
13 that?

14 A That's where we are, yes.

15 Q Okay. Now, just to put this into context, if we
16 were to go back to the Master List, the "Purchase
17 of Transformers", what was the initial estimated
18 amount?

19 A According to the Supplemental Request Form, the
20 initial authorization amount was 11.5 million.

21 Q And the final in-service amount for this step
22 adjustment is 14 and a half million, right?

23 A Correct.

24 Q And that's the \$3 million difference?

[WITNESS: Dudley]

1 A Yes.

2 Q Now, listening to the testimony this morning and
3 looking through the documents, it appears that
4 one of the items that the Company gave as a
5 reason for this increase in actual versus budget
6 is "a change in the Cost of First Installation
7 calculation", did you hear that?

8 A Yes, I did.

9 Q Does that explain, based on your review, the
10 entire cost overrun of \$3 million?

11 A No, it does not. If you look at the
12 supplemental, which is "Attachment DOE 1-4", --

13 Q Now, let me interrupt you, so we get to the right
14 exhibit. I'm in Exhibit 7, --

15 A Yes.

16 Q -- "DOE 1-4" appears at the beginning of that
17 exhibit. And there's an internal page number,
18 something out of "450"?

19 A Yes. This starts at "399 out of 450".

20 Q Okay.

21 A I'm looking at "400 out of 450".

22 Q 400 out of 450. Okay. Sorry to interrupt you.

23 A No, that's fine.

24 Q This is a schedule that we looked at at length

[WITNESS: Dudley]

1 this morning?

2 A It is. Yes.

3 Q Yes?

4 A Yes, it is. And clearly, what you can see, as
5 the Eversource witness has pointed out, internal
6 labor and outside services are not included in
7 the cost summary, for the initial cost summary.
8 And then, they're later added in the Supplemental
9 Request.

10 But what I heard this morning from the
11 witnesses was that the bulk of those costs,
12 internal labor and outside labor, were lumped in
13 with the "Materials" cost of 10.7 million. But
14 what I'm seeing is I'm only seeing 1.1 million as
15 a corrective entry in the Supplemental Request,
16 leaving a total of 9.5 million in the total for
17 "Materials". So, to me, that leaves about
18 2 million in internal labor and outside services
19 that hasn't been explained.

20 In other words, you would think that
21 the -- if I'm understanding the testimony
22 correctly, you would think that the 10.7 million
23 would have been adjusted by 3 million, and it was
24 not. It was adjusted by 1.1 million.

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[WITNESS: Dudley]

1 Q All right. And what was the date of the original
2 authorization that totaled 11.6 million?

3 A The original authorization was December 18th,
4 2020.

5 Q And we're talking about 2021 here. So, that's
6 before the year happened?

7 A Yes.

8 Q And then, the supplemental came in when?

9 A The supplemental came in on January 13th, 2022.

10 Q So, that's after the year in question, correct?

11 A It is, yes.

12 Q Okay. And, on Bates Page 399 -- it's not a Bates
13 page, but it's "399 of 450", in the last
14 paragraph, there's a discussion of the "CFI"
15 calculation, and then there's some red ink that
16 talks about "cost increases were in outside
17 services and internal labor."

18 Do we have a breakdown of how that
19 overall \$3 million increase fell into the three
20 categories of attributable to CFI changes,
21 outside services changes, and internal labor
22 changes?

23 A No. We have no detail on that.

24 Q Okay. And, based on the documentation that was

[WITNESS: Dudley]

1 provided, our recommendation with respect to this
2 project is to allow recovery up to the initially
3 budgeted amount of 11.6 million, but not to allow
4 the Supplemental Request of 14.6 million, in
5 other words, a disallowance of the \$3 million
6 differential?

7 A Yes. Just to correct myself, Mr. Dexter. That
8 Eversource did respond to Data Request TS 3-005
9 on September 9th. And the -- what the data
10 request asked was "Please provide a detailed
11 explanation for how the costs were allocated
12 between categories in the Supplement Cost Summary
13 table."

14 And what we received was a very general
15 response that was not detailed. It simply said
16 "The original PAF listed only materials as a
17 direct cost; however, this was erroneous and was
18 corrected in the supplement, which listed the
19 costs for internal labor and outside services
20 that were necessary to install the transformers,
21 as well as material costs for the purchase of the
22 transformers."

23 So, what we get in answer to some of
24 these questions is that we get the "what", but we

{DE 22-030} [Day 1] {09-20-22}

[WITNESS: Dudley]

1 don't get the "why" and the "how". That's what
2 we don't know.

3 Q Now, with respect to the reliability and the --
4 CMSR. SIMPSON: Mr. Dexter, I think
5 we're at 3:20. So, I'd like to take a
6 five-minute break.

7 MR. DEXTER: Sounds good.

8 CMSR. SIMPSON: We'll reconvene at
9 3:25. Thank you. Off the record.

10 *(Recess taken at 3:20 p.m., and the*
11 *hearing resumed at 3:29 p.m.)*

12 CMSR. SIMPSON: All right. We'll go
13 back on the record. Attorney Dexter, please
14 proceed.

15 MR. DEXTER: Thank you, Commissioner.

16 BY MR. DEXTER:

17 Q Mr. Dudley, I was about to ask you about the
18 Reliability Annual Program and the Maintain
19 Voltage Annual Program. These are what we
20 sometimes hear from other utilities described as
21 "blanket programs", is that right?

22 A Yes.

23 Q And how do you understand that these -- well, let
24 me ask you this instead.

[WITNESS: Dudley]

1 Are there features of a blanket program
2 or an annual program that make them difficult to
3 review in a step adjustment process?

4 A Yes, there is. These blanket projects cover
5 numerous and sometimes hundreds of subprojects.
6 And, if there's a cost overrun, if something
7 doesn't add up in the project documentation, it's
8 very time-consuming to try and flesh that out.

9 Q Now, for example, on the Reliability Project, I
10 believe we were provided a spreadsheet with about
11 400 lines that totaled \$3,913,000. And I've got
12 that listed as "Exhibit 15, Attachment TS 3-003".
13 Do I have that right?

14 A Yes.

15 Q And that ties to the -- that ties to the Annual
16 Reliability Project?

17 A Yes.

18 Q Now, what gave rise to the Company providing you
19 this spreadsheet, as you understand it?

20 A Well, when you look at the Supplement Request
21 Form, and this is part of Attachment DOE 1-014,
22 we see that -- we understand that there's a cost
23 increase of 913,000. At first, I thought that
24 the Supplemental Request of 2.2 was not fully

[WITNESS: Dudley]

1 used. But my understanding, from Mr. Johnson's
2 testimony this morning, that it was, it just
3 hasn't been booked yet this year.

4 But, nevertheless, there's still a cost
5 overrun of 900,000 over the authorized amount of
6 3 million. But the --

7 Q Well, let me interrupt you then.

8 A Yes.

9 Q So, you had asked the Company "what makes up this
10 additional 900,000?" Is that right?

11 A Yes.

12 Q Okay. And I'm sorry to cut you off. I just
13 wanted to get back on track to that. And, so, we
14 got this Excel sheet, right?

15 A Yes.

16 Q That, in fact, breaks down, not just the 900,000,
17 but the full 3,900,000 that was included on "the
18 list" for inclusion in the step adjustment?

19 A It does. And, if you look at the pivot table,
20 it's a little more granular, and contains about
21 800 line items.

22 Q Now, given that, given the number of -- and when
23 did you get this list?

24 A This was provided in discovery. It was a

[WITNESS: Dudley]

1 follow-up request from the August 31st tech
2 session, and we received it on September 8th.

3 Q Okay. And looking at the list, and Mr. Johnson
4 indicated that it's sort of abbreviated
5 descriptions, there's no way for you to -- well,
6 let me ask it this way. Is it possible for you
7 to assess, from this list, you know, the detailed
8 nature of this project, and whether or not the
9 projects were necessary or prudently incurred, or
10 any of the things that you'd want to look at when
11 you look at a project?

12 A No, I cannot. And neither can I parse out the
13 components of the 913,000 cost overrun.

14 Q In other words, you can't tell the initially
15 budgeted from the overrun?

16 A No. The only thing I can confirm from the
17 spreadsheet is the total amount of the
18 expenditure, which is 3.9.

19 Q Okay. Which does have some value. In other
20 words, this would indicate to you that the
21 Company, in fact, spent \$3.9 million on
22 reliability projects, correct?

23 A Correct. Yes.

24 Q Okay. But, beyond that, you can't make any

[WITNESS: Dudley]

1 recommendations?

2 A No.

3 Q Okay. And -- well, I'll leave it at that.

4 And, finally, turning to the Submarine
5 Cable, you heard Ms. Paruta's explanation of how
6 that was treated in this Step Adjustment,
7 correct?

8 A Yes.

9 Q And is it your understanding that her conclusion
10 was that the Step Adjustment had been reduced by
11 the full \$163,000 that was ordered by the
12 Commission in the second step adjustment order
13 that I cited?

14 A Yes. Through various adjustments, yes.

15 Q Right. And, but what we didn't see, if we were
16 to go back to Exhibit 1, Page 29, where all the
17 projects are listed, we did not see a reduction
18 on that list for \$163,000, correct, we saw
19 148,000?

20 A That is correct. Yes.

21 Q Did you understand Ms. Paruta's testimony that --
22 well, let me rephrase that. Did you understand
23 the request of the DOE audit was to, you know,
24 "write off \$163,000"?

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[WITNESS: Dudley]

1 A Yes.

2 Q And did you understand, from Ms. Paruta's
3 testimony, that there would be a way to refigure
4 Exhibit 1 -- reconfigure Exhibit 1 such that
5 163,000 would be removed from the list, rather
6 than it being broken down into two different
7 accounts?

8 A Yes.

9 Q Okay. If you had seen \$163,000 removed from the
10 list on Exhibit 1, Page 29, would that have ended
11 the discussion in your mind?

12 A Yes. It would have indicated that the full
13 amount of the disallowance had been removed from
14 plant in service.

15 Q Okay. But you do understand that Ms. Paruta's
16 testimony is "we got to the same place", we just
17 did it by retracing, sort of reengineering --
18 reverse engineering the entries that had been
19 made, and it so happened that 148,000 came off
20 the list, and that the other 15,000 was an offset
21 to accumulated depreciation?

22 A Yes, I saw that. But it doesn't cause me to
23 question the findings of the audit, which
24 questioned the actual methodology.

[WITNESS: Dudley]

1 Q The methodology of --

2 A The methodology used by Ms. Paruta.

3 Q Okay. All right. So, in summary then, what
4 would be your recommendation on the submarine
5 cable?

6 A Well, my understanding is that Eversource is
7 going to file an update. And what we would
8 recommend is that they include in the update what
9 the accounting would look like if they had
10 followed the recommendation of the Audit Report
11 and simply deducted 163,000 from plant.

12 Q Okay. And, so, in total, I believe you've laid
13 out six recommendations, following along the
14 September 16th letter. Have you quantified the
15 impact of these recommendations on the proposed
16 revenue requirement?

17 A No, I have not.

18 Q Is that something that you believe Eversource
19 could do fairly easily, if asked?

20 A Yes.

21 Q And playing into that calculation -- well, let me
22 rephrase that. One of the complicating factors
23 in that calculation is how the Settlement cap of
24 \$9.3 million factors in, is that right?

[WITNESS: Dudley]

1 A Yes.

2 MR. DEXTER: Okay. That's all the
3 questions I have for Mr. Dudley.

4 CMSR. SIMPSON: Thank you, Attorney
5 Dexter. I will recognize Attorney Ralston for
6 the Company for cross-examination.

7 MS. RALSTON: Thank you. Would it be
8 possible for the Commission to ask its questions
9 first? We're trying to go through all the
10 information we just received and determine how to
11 proceed with our cross. A couple of minutes
12 would be helpful.

13 CMSR. SIMPSON: Just a moment.

14 *[Cmsr. Simpson, Cmsr. Chattopadhyay,*
15 *and Atty. Speidel conferring.]*

16 CMSR. SIMPSON: Does the Company still
17 have a preference for a continued hearing in this
18 matter?

19 MS. RALSTON: So, we're trying to make
20 that decision right now. This was a lot of
21 additional information --

22 CMSR. SIMPSON: Uh-huh.

23 MS. RALSTON: -- to receive this
24 afternoon. And, so, I think our preference would

[WITNESS: Dudley]

1 either be an opportunity for a second day of
2 hearings, or an opportunity for written comments.
3 The burden of proof is on the Company here.

4 CMSR. SIMPSON: Uh-huh.

5 MS. RALSTON: And we just really need
6 an opportunity to respond to everything that was
7 presented today, however the best the Commission
8 would like that process to work.

9 CMSR. SIMPSON: Uh-huh. Okay. I mean,
10 in my view, just being frank here, if there is
11 some coalescence around a common viewpoint in
12 some of the projects that could be included
13 within the step, I think the Commission would be
14 open to that with an October 1st date in mind, if
15 by that -- by the end of the week or very early
16 next week. Otherwise, we're looking at rates
17 effective November 1st. So, you know, a
18 significantly larger impact.

19 MS. RALSTON: The Company does
20 understand that.

21 CMSR. SIMPSON: Okay.

22 MS. RALSTON: Based on the
23 disallowances we just heard, --

24 CMSR. SIMPSON: Uh-huh.

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[WITNESS: Dudley]

1 MS. RALSTON: -- it's a significant
2 impact to the Company's step adjustment. And, as
3 you know, there's a stay-out provision.

4 CMSR. SIMPSON: Uh-huh.

5 MS. RALSTON: The step adjustment is
6 intended to support the Company during that
7 stay-out. And, so, we would like to have a fair
8 opportunity to respond to everything, even if
9 it --

10 CMSR. SIMPSON: Yes.

11 MS. RALSTON: -- requires a further
12 delay. We do understand the time constraints.

13 CMSR. SIMPSON: It has been a challenge
14 for us coming into this hearing today not having
15 updated revenue requirements from either the
16 Company or the Department of Energy worked with
17 the Company on that. Because we recognize the
18 list of projects that are at issue here, but
19 we're not crystal clear on what the ultimate
20 impact on a future step would be because of that.

21 MS. RALSTON: I understand.

22 CMSR. SIMPSON: I'll ask Attorney
23 Dexter if you have any thoughts on whether we
24 proceed or continue the hearing and schedule

[WITNESS: Dudley]

1 another hearing date?

2 MR. DEXTER: Well, since I got to do
3 all the things I came here to do, it sounds like
4 this -- I would defer to the Company on this.
5 And I understand I took a lot of time up today,
6 and I hope we can bring this to conclusion. But
7 I don't have any objection to what I --

8 CMSR. SIMPSON: Uh-huh.

9 MR. DEXTER: -- what I understand the
10 Company to be saying.

11 And maybe written comments might be a
12 way to go. If they need another hearing date,
13 we're certainly willing to show up for another
14 hearing date.

15 CMSR. SIMPSON: Okay. I mean, I think
16 both Commissioner Chattopadhyay and I are open to
17 asking our questions now. But, to be honest,
18 it's often helpful to hear the cross-examination,
19 so that we can frame our questions more acutely.

20 MS. RALSTON: I think our preference
21 would be a second hearing day, if possible. And
22 we will also work with DOE ahead of time to see
23 if there are any areas where we can come to an
24 agreement ahead of that hearing, to hopefully

1 narrow the issues, based on what we now know in
2 terms of DOE's recommendations.

3 CMSR. SIMPSON: Okay. So, we have a
4 few record requests as well, if -- would the
5 Company be able to provide responses to those
6 prior to a continued hearing date?

7 MS. RALSTON: I believe so. And I
8 think the first record request we received today
9 was asking for the updated rates and bill impacts
10 assuming October 1st.

11 CMSR. SIMPSON: Uh-huh.

12 MS. RALSTON: So, we should now update
13 that to be November 1st, would that be correct?
14 Or should we provide both?

15 CMSR. CHATTOPADHYAY: I think you
16 should provide both. And I was remiss on also
17 maybe adding that give us the numbers if it's
18 twelve months as well.

19 MS. RALSTON: Okay. So, twelve months
20 from October 1st and twelve months from November
21 1st?

22 CMSR. CHATTOPADHYAY: Yes.

23 CMSR. SIMPSON: That's more
24 illustrative.

1 CMSR. CHATTOPADHYAY: That's more
2 illustrative. So, and, I mean, I haven't decided
3 what the purpose necessarily is. But it's
4 helpful to know.

5 MS. RALSTON: You'd like to understand
6 it better. Okay. Understood.

7 CMSR. CHATTOPADHYAY: Yes.

8 CMSR. SIMPSON: Okay. So, I have four
9 record requests. One of which is somewhat new
10 that we haven't discussed yet. Just a moment.

11 *[Cmsr. Simpson, Cmsr. Chattopadhyay,*
12 *and Atty. Speidel conferring.]*

13 CMSR. SIMPSON: Okay. So, in order to
14 provide the parties with an opportunity to begin
15 working on responses to these record requests,
16 I'm going to summarize them. We will issue a
17 procedural order outlining the language
18 specifically.

19 But we'd like updated schedules, in
20 live Excel format, for the new calculations that
21 account for the removal of the Nashua and
22 Millyard Projects, which is what the Company came
23 in today stipulating was their updated request.

24 I would also ask the Company to work

1 with the Department of Energy to develop similar
2 calculations, based on their recommended Step
3 Adjustment total, in light of the recommended
4 disallowances.

5 I think we're probably looking at a
6 November 1st effective date under the
7 circumstances. If you are able to provide
8 October 1st as well, that would be excellent.
9 But it sounds like we're going to be working on a
10 November 1st date. And we'd also like a 12-month
11 outlook, recognizing it's illustrative, under the
12 terms of the 19-057 Settlement Agreement.

13 The second record request was to
14 provide the total dollar amount associated with
15 title amounts for vehicles as part of the Step
16 Adjustment.

17 The third record request, based on a
18 review during lunch, pertains to Exhibit 1, Bates
19 Page 045, I'd like you to confirm whether the
20 application of depreciation and property tax to
21 net plant change and gross plant change,
22 respectively, is correct? That those line items
23 are appropriately attributed on Exhibit 1,
24 Bates 045.

1 MS. RALSTON: Can you just repeat those
2 categories again? I have "property tax" --

3 CMSR. SIMPSON: Of course. Whether the
4 application of depreciation and property tax to
5 net plant change and gross plant change,
6 respectively, is correct?

7 MS. RALSTON: Thank you.

8 CMSR. SIMPSON: And the final record
9 request, in line with the first one, was to
10 provide the final revenue requirements for the
11 Company's update -- updated sought adjustment --
12 step adjustment and the DOE's recommended step
13 adjustment.

14 If the parties -- or, I should ask,
15 when do you believe you would be able to provide
16 substantive responses to those questions? A
17 week? Two weeks?

18 MR. DEXTER: Can I ask a clarifying
19 question, before counsel answers?

20 CMSR. SIMPSON: Please.

21 MR. DEXTER: I don't understand the
22 difference between 1 and 4? In other words, I
23 think we would need the updated -- or, the
24 Company would need the updated revenue

1 requirements, --

2 CMSR. SIMPSON: Uh-huh.

3 MR. DEXTER: -- in order to do any of
4 the calculations that were laid out in 1.

5 CMSR. SIMPSON: When we had initially
6 articulated the first record request, it only
7 pertains to the Company's request, with the
8 removal of the Millyard and Nashua Projects. The
9 fourth record request, which I've just
10 articulated, was to include an update with the
11 DOE's scenario, if all of the disallowances
12 sought by DOE, post this hearing, were ordered by
13 the Commission, what would that revenue
14 requirement look like?

15 MR. DEXTER: Okay. Thanks for that
16 clarification.

17 CMSR. SIMPSON: Yes. No problem.
18 Timing?

19 MS. RALSTON: Timing, we can do a week.

20 CMSR. SIMPSON: Okay. And would you be
21 able to coordinate with the Department of Energy
22 on a procedural schedule?

23 MS. RALSTON: Sure.

24 CMSR. SIMPSON: And provide that in

1 your filing?

2 MS. RALSTON: Yes. We can do that.

3 CMSR. SIMPSON: Okay. Great. So, if
4 you can provide all of that information by the
5 27th, that would be helpful. And then, we can
6 issue an order scheduling a continued hearing in
7 due course.

8 MS. RALSTON: Thank you.

9 *[Cmsr. Simpson, Cmsr. Chattopadhyay,*
10 *and Atty. Speidel conferring.]*

11 CMSR. SIMPSON: Okay. So, I was just
12 advised, to make sure it's clear, that we'd like
13 the updated schedules that account for the
14 removal of the Nashua, the Millyard Projects, and
15 any of the other audit findings that the Company
16 agreed to remove from recovery within this Step
17 Adjustment.

18 MS. RALSTON: Yes. I assumed that was,
19 yes.

20 CMSR. SIMPSON: Okay. Very good. is
21 there anything else today?

22 *[No verbal response.]*

23 CMSR. SIMPSON: All right. So, we'll
24 hold the record open pertaining to the record

1 requests and the exhibits. We will await a
2 response from the Company pertaining to the RRs,
3 and a procedural schedule, and issue an order
4 scheduling a continued hearing in this matter.

5 MS. KIMBALL: Thank you.

6 CMSR. SIMPSON: All right. Thank you.

7 MS. RALSTON: Thank you.

8 CMSR. SIMPSON: Off the record.

9 *(Whereupon the hearing was adjourned*
10 *at 3:49 p.m., and the hearing to*
11 *reconvene on a date to be determined*
12 *for Day 2 in this docket.)*

STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

October 17, 2022 - 9:04 a.m.

DAY 2

21 South Fruit Street
Suite 10
Concord, NH

RE: DE 22-030

EVERSOURCE ENERGY:

Petition for Third Step Adjustment.

PRESENT: Cmsr. Carleton B. Simpson, *Presiding*
Cmsr. Pradip K. Chattopadhyay

Alexander F. Speidel, Esq.
(*PUC Legal Advisor*)

Tracey Russo, Clerk

APPEARANCES: **Reptg. Public Service Company of New
Hampshire d/b/a Eversource Energy:**
Jessica B. Ralston, Esq. (*Keegan Werlin*)
Cheryl Kimball, Esq. (*Keegan Werlin*)

Reptg. New Hampshire Dept. of Energy:
Paul B. Dexter, Esq.
Jay E. Dudley, Electric Group
(*Regulatory Support Division*)

Court Reporter: Steven E. Patnaude, LCR No. 52

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E X H I B I T S

(The following Exhibits were admitted into evidence)

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
1	Prefiled Testimony and Supporting Attachments of Russel Johnson, David Plante, and James Devereaux, and the Prefiled Testimony and Supporting Attachments of Marisa Paruta and Edward Davis	<i>prefiled</i>
2	Response to Record Request RR 1-001, with attachments	<i>prefiled</i>
5	Emerald Street Substation Response to DOE 1-008, DOE TS 1-006, DOE TS 1-012, single page from DE 20-161, Eversource LCIRP, 3/31/21 Supplement, Appendix B-2, Page 109 of 158, captioned Loading and Capacity	<i>prefiled</i>
6	Pad Mount Transformer - Goffstown, Attachment TS 2-001(B)	<i>prefiled</i>
7	Purchase of Transformers, Att. DOE 1-4, pp. 394-450, Response to DOE 1-006	<i>prefiled</i>
8	Reliability Annual, Attachment DOE 1-014	<i>prefiled</i>
9	Maintain Voltage, Attachment DOE 1-4, pp. 367-380	<i>prefiled</i>
10	Replace Submarine Cable, Supplemental Response to TS 1-008, including Attachment TS 1-008	<i>prefiled</i>

E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
12	Responses to DOE First Set of Data Requests	<i>prefiled</i>
13	Responses to DOE First Set of Technical Session Data Requests	<i>prefiled</i>
14	Responses to DOE Second Set of Technical Session Data Requests	<i>prefiled</i>
15	Responses to DOE Third Set of Technical Session Data Requests	<i>prefiled</i>
16	Settlement Agreement approved by the Commission in DE 19-057	<i>prefiled</i>
18	N.H. Dept. of Energy Recommended Disallowances from Step Adjustment Recovery (Letter dated 09-16-22)	100
19	Four Record Request responses by Eversource from the September 20th hearing filed on September 29, 2022	174

1 P R O C E E D I N G

2 CMSR. SIMPSON: So, good morning,
3 everyone. Today is a continuation of the hearing
4 in 22-030 pertaining to Eversource Energy's
5 Petition for a Third Step Adjustment.

6 I know we have a couple of outstanding
7 motions, and I want to just discuss those on the
8 record before we begin. We have a Motion to
9 Compel from the Company and a Motion to Modify
10 the Procedural Schedule, with a response to the
11 Company's Motion to Compel. We were not able to
12 change the procedural schedule, given the
13 pendency of today's hearing.

14 I'd like to offer the Company and the
15 Department an opportunity to speak to these
16 issues. We have some thoughts, but I'll first
17 recognize Attorney Ralston for the Company.

18 MS. RALSTON: Sure. Thank you.

19 So, with respect to the Company's
20 Motion to Compel, one of the key components of
21 our motion was a request to get the Business
22 Process Audit Report that we understand the
23 Department of Energy has. In their testimony on
24 September 20th, they made four recommendations

1 for disallowances based on over budget project
2 costs, and cited to the business process audit as
3 necessary to address an historical pattern that
4 they alleged the Company has engaged in. And,
5 so, it brought it directly into this proceeding,
6 in our opinion, and it's very difficult for us to
7 rebut that presumption without a copy of the
8 Audit Report.

9 So, that is kind of the crux of our
10 motion, is that we think, in the nature of the
11 fairness and transparency, that both the
12 Commission and the Company should have the same
13 information that the Department has.

14 With respect to the Motion to Amend the
15 Schedule, we certainly wanted to go forward
16 today. We are prepared to conduct our
17 cross-examination without the Audit Report. We
18 really want the Audit Report in the record, in
19 case we receive an order that gives weight to
20 those disallowances, just to reserve our rights.
21 But we would like to move forward today, do the
22 cross-examination. And then, perhaps it would
23 make sense to evaluate any additional schedule
24 adjustments in the afternoon, after we've had an

1 opportunity to do our questioning.

2 CMSR. SIMPSON: Okay. Thank you,
3 Attorney Ralston. Attorney Dexter.

4 MR. DEXTER: Well, I'm not prepared to
5 address the Motion to Compel today in any detail.
6 It was 30 pages long, and it was submitted in
7 writing, and I'd like the opportunity to respond
8 in writing, which I believe I have the right to.
9 What I will say is that the Motion of Compel
10 never should have been filed.

11 If Eversource had a need to issue data
12 requests in this case, Eversource should have
13 filed a Motion to Amend the Schedule, and they
14 didn't do that. Instead, what Eversource did at
15 the hearing last time was say "We may hear some
16 stuff today that we want to rebut to, and we
17 reserve the right to recall witnesses in that
18 event." The Department of Energy said "That
19 sounds fair. We don't know what the issues are,
20 but, in general, that sounds fair." And that was
21 the proceeding -- that was the schedule that we
22 left with.

23 Instead of filing -- instead of
24 following the procedure that Eversource

1 themselves proposed, and to which the Department
2 agreed, and presumably the Bench would agree,
3 they chose to file data requests instead, which
4 were not provided for in the schedule. They
5 filed data requests on an issue that has not been
6 established as being relevant in this case. They
7 filed 30 data requests, most of which they know
8 the answer to. And the obvious way to get the
9 information that they asked for is to do exactly
10 what they said in the first place, which is to
11 recall a witness, to put on evidence, to rebut
12 stuff that Mr. Dudley testified to. So, the
13 motion never should have been filed, number one.

14 Number two, it's inappropriate to file
15 30 discovery requests, when the Department is
16 preparing for hearings, for the obvious reasons,
17 we're in the hearing stages.

18 So, what I want to point out is that it
19 is the Commission that drives the procedural
20 schedule in this case, not Eversource.
21 Eversource is not allowed to just file data
22 requests because they feel like it. The
23 appropriate approach to this would have been for
24 them to file a Motion to Extend the Schedule to

1 file data requests, so that our witnesses could
2 answer the data requests, if they were ever
3 established relevant, which they aren't, and then
4 we would proceed with the hearing.

5 So, that's my thoughts on the Motion to
6 Compel. I fully intend to respond to it in
7 writing within the timeframe allowed under the
8 rules.

9 The Motion to defer the hearing is
10 obvious, because we're in the middle of a
11 hearing, we're trying to prepare for the hearing,
12 and yet we're getting almost daily filings from
13 Eversource, none of which are provided for in the
14 procedural schedule, and we can't do both. And
15 that's just a simple reality. That's why we have
16 a procedural schedule. So, I think it's time for
17 the Commission to tell Eversource that the
18 Commission drives this case, the Commission runs
19 the schedule, not Eversource.

20 CMSR. SIMPSON: The only question I
21 have for you, Attorney Dexter, is did the
22 Department rely on any findings in this draft
23 Business Process Audit Report within the scope of
24 this case?

1 MR. DEXTER: Well, that would have been
2 a great question for Mr. Dudley. I'll answer it,
3 or I could have Mr. Dudley answer it. The answer
4 is -- the answer is, essentially, "no." And what
5 I want you to do is look at the question that I
6 asked Mr. Dudley.

7 I asked Mr. -- we were discussing the
8 Goffstown Pad Mount Transformer Project. Mr.
9 Dudley pointed to Eversource's analysis and said
10 "This analysis overlooked obvious siting facts
11 that should have been considered in the decision
12 to go forward with the Goffstown Project." And
13 all of which was confirmed later on cross -- or,
14 earlier on cross-examination by the Eversource
15 witnesses. Mr. Dudley said "Yes, those siting
16 facts were not" -- "were overlooked." And I --
17 and Mr. Dudley offered that this was a pattern
18 that he had discovered from the rate case where
19 he had looked at hundreds of Eversource projects,
20 and found a pattern of costs -- obvious siting
21 costs being overlooked. And I asked him "Wasn't
22 that one of the underpinnings for the reason for
23 the business process audit?" And he said "Yes."
24 His testimony did not say that he "relied on the

1 business process audit", it said, in response to
2 a question by me, that "Yes, this was one of the
3 underpinnings for the business process audit."

4 That question is not a great
5 revelation. In fact, the reason for the business
6 process audit is set forth in the Settlement in
7 19-057. So, this is a complete smokescreen by
8 Eversource, designed to divert attention from the
9 issues in this case, which are the prudence of
10 Eversource's decisions. And, now, we've turned
11 it into an attack on the business process audit,
12 which hasn't even been issued yet. And is -- it
13 is progressing according to a schedule that the
14 Parties laid out in 19-057.

15 They now, in their latest filing,
16 claimed that the business process audit can't be
17 valid, because Staff's commenting on a decision
18 and we're influencing the business process audit,
19 none of which is relevant to this step
20 adjustment. Possibly relevant in 19-057, if,
21 when the report comes out, and if Eversource
22 actually reads it, and then decides maybe that
23 there's a problem with it, they can file
24 something in 057, if it's allowed under the

1 Settlement. That's something for the Commission
2 to decide in 19-057.

3 This is a complete smokescreen, a
4 complete diversion from the issues in this case,
5 which is the prudence of Eversource's decisions
6 in 2021, before the audit even started.

7 CMSR. SIMPSON: Okay. Thank you. With
8 respect to any ongoing comment or objection
9 period for these two motions, I'm going to waive
10 that. I want to rule from the Bench. This
11 report is not before me. It's not before
12 Commissioner Chattopadhyay. It wasn't submitted
13 in the record. I don't view the report as
14 relevant to this proceeding.

15 I'm going to deny both motions, for the
16 Motion to Compel and the Motion to Change the
17 Procedural Schedule. I want to proceed with this
18 final hearing today, and hear from Mr. Dudley.
19 He'll have the opportunity to be questioned by
20 the Company and by the Commission.

21 So, with that, I'd invite Mr. Dudley to
22 approach the bench for cross-examination.

23 (Whereupon **Jay Dudley** was recalled as a
24 witness, having been previously sworn.)

[WITNESS: Dudley]

1 CMSR. SIMPSON: And Mr. Dudley was
2 sworn in during our first day of hearing.

3 So I'll recognize Attorney Ralston, for
4 the Company.

5 MS. RALSTON: Thank you. Good morning,
6 Mr. Dudley.

7 WITNESS DUDLEY: Good morning.

8 MS. RALSTON: Are you ready or do you
9 need a moment?

10 WITNESS DUDLEY: I'm ready, yes.

11 MS. RALSTON: Okay.

12 **JAY DUDLEY, Previously Sworn**

13 **CROSS-EXAMINATION**

14 BY MS. RALSTON:

15 Q We're going to talk this morning about five of
16 the Company's capital projects that DOE is
17 challenging in this proceeding, either
18 recommending disallowance or exclusion from the
19 third step adjustment. So, I'm just going to
20 walk through your recommendations, just to
21 refresh everyone's memory.

22 A Okay.

23 Q So, with respect to the Annual Blanket Projects
24 for Reliability, you're recommending a

[WITNESS: Dudley]

1 disallowance of the over budget amount of
2 \$913,000, is that correct?

3 A That is correct. Yes.

4 Q And, with respect to the Annual Blanket Project -
5 Maintain Voltage, you are recommending a
6 disallowance of the over budget amount of
7 \$428,000?

8 A Yes.

9 CMSR. SIMPSON: Excuse me. Attorney
10 Ralston, are you looking at an exhibit?

11 MS. RALSTON: No, I'm not.

12 CMSR. SIMPSON: Okay.

13 MR. DEXTER: Commissioner, the
14 recommendations were laid out in our letter of
15 September 16th.

16 MS. RALSTON: I don't believe that's an
17 exhibit, but, yes.

18 MR. DEXTER: Excuse me. But, at the
19 hearing, I pointed out that I had had a typo in
20 that letter. And, so, the Reliability Projects,
21 the disallowance is "913,000", as Attorney
22 Ralston said, not the "317,000" that was in the
23 letter. That was, basically, a typo.

24 So, if you're looking for a summary of

[WITNESS: Dudley]

1 those recommendations of Staff -- of DOE, they're
2 contained in the September 16th letter. And the
3 effect of those was quantified in Record Response
4 Number 4.

5 CMSR. SIMPSON: Okay. Thank you.
6 Please proceed, Attorney Ralston.

7 MS. RALSTON: Okay. Thank you.

8 BY MS. RALSTON:

9 Q With respect to the Annual Blanket Project -
10 Transformers, you're recommending a disallowance
11 of the over budget amount of \$3 million, correct?

12 A Correct.

13 Q And, with respect to the Pad Mount Transformer in
14 Goffstown, you're recommending a disallowance of
15 the over budget amount of \$371,000?

16 A 373,000.

17 Q Thank you. And, with respect to the Emerald
18 Street Substation, you're recommending deferral
19 of the entire approximately \$20 million amount to
20 the Company's next rate proceeding, correct?

21 A Yes. Correct.

22 Q Okay. And are there any other disallowances or
23 deferrals that I have not mentioned?

24 A No.

[WITNESS: Dudley]

1 Q Okay. Thank you. So, do you recall the date
2 that the Company submitted its third step
3 adjustment that is the subject of this
4 proceeding?

5 A I'm sorry, I didn't hear the first part of that
6 question.

7 Q Do you recall the date that the Company submitted
8 its Petition in this proceeding?

9 A Subject to check, I believe it was May, May or
10 April.

11 Q Does "May 2nd" sound right to you?

12 A Yes.

13 Q Okay. And, so, did you perform a review of the
14 Company's filing when it was submitted?

15 A I started -- I initiated my review of the filing
16 when it was submitted. But, due to my
17 involvement in many other dockets, the progress
18 of that review was fairly slow. But I was able
19 to complete most of it by late summer.

20 Q And were you responsible for reviewing the entire
21 filing or just the parts pertaining to capital
22 projects and programs?

23 A We reviewed the entire filing.

24 Q And are you familiar with the testimony of Russel

[WITNESS: Dudley]

1 Johnson, David Plante, and James Devereaux, that
2 was marked as "Exhibit 1", Bates Pages 008
3 through 027?

4 A Yes.

5 Q And do you recall what that testimony covers?

6 A Yes. Well, it covers certain projects that had
7 been submitted. I can bring it up, if you'd
8 like?

9 Q Sure. That would be good. I have a few
10 questions.

11 A All right.

12 Q Once you have it up, if you want to turn to Bates
13 Page 011.

14 A Okay.

15 Q At Lines 8 and 9, does it state that the
16 "testimony describes the capital projects and
17 processes in place at the Company pertaining to
18 project management and budgeting"?

19 A And that was which line, Ms. Ralston?

20 Q Lines 8 through 9.

21 A Yes. Yes, I see that.

22 Q Okay. And, at Lines 13 through 14, does it state
23 that the testimony included "Attachment
24 RDJ/DLP/JJD-1", which provides a list of "the

[WITNESS: Dudley]

1 capital additions for calendar year 2021 by
2 project"?

3 A Yes. Which is internally we refer to that as the
4 "Master List".

5 Q The "Master List", okay. And did you review that
6 Master List as part of your review of the filing?

7 A Yes, I did.

8 Q I'm going to be referencing the transcript from
9 the last hearing date. Would you like a copy or
10 do you have one?

11 A I do have a copy up, yes.

12 Q You do. Okay. So, if you could turn to the
13 transcript, at Page 192, Lines 8 through 11.

14 A You said that was "192"?

15 Q 192.

16 A Okay. Yes, I'm there.

17 Q Did you testify here that you were involved in
18 the Settlement that led to the three step
19 adjustments?

20 A Yes.

21 Q And what exactly was your role in the Settlement?

22 A Well, I was a member of the rate team. We had --
23 generally, with rate cases, we assign a rate team
24 to review the rate case and all of the filings.

[WITNESS: Dudley]

1 And my role in the review was prudence of capital
2 investments.

3 Q Okay. And, as part of that participation, did
4 you review drafts of the Settlement document
5 pertaining to capital projects?

6 A I did, yes.

7 Q And did you offer any suggestions on the
8 provisions regarding capital projects and
9 associated cost recovery that were ultimately
10 included in the Settlement Agreement?

11 A Yes.

12 Q And can you turn to Page 194 of the transcript,
13 Lines 15 through 17?

14 A Yes. I'm there.

15 Q Okay. And do you see that you testified here
16 that, "as best as you can, you assess the
17 decision-making process of the Company, in terms
18 of prudence of the projects that are placed in
19 service, based on the information provided by the
20 Company"?

21 A Yes.

22 Q And then, moving down to Lines 21 through 24, did
23 you further testify that "If the project raises
24 questions or they're not adequately explained or

[WITNESS: Dudley]

1 supported by the Company, then [your]
2 recommendation is to either disallow the
3 expenditure or defer the expenditure to the next
4 rate case"?

5 A Yes.

6 Q And, so, how do you assess the decision-making
7 process of the Company when you're considering
8 recovery of capital project costs?

9 A Well, it's the burden of the utility to support
10 its actions and support what it did. And what we
11 do is we turn to the project documentation to
12 find that out. And, typically, when we look at
13 projects, for example, when we look at the Master
14 List, what we look at is the complexity of the
15 project, the amount of money that was spent,
16 whether or not there was a cost overrun. If
17 there is a cost overrun that is significant,
18 that's a red flag for us.

19 And we try to follow the process of
20 decision-making on the project, from its
21 inception to its completion.

22 Q So, in making your recommendation, are you
23 assessing the decision-making process or the
24 documentation that's submitted by the Company?

[WITNESS: Dudley]

1 A Both.

2 Q So, does this mean that you would find a project
3 to be imprudent if, in your opinion, the
4 documents provided by the Company do not answer
5 any and all of the questions that you may have
6 about the project?

7 A Well, no. That's why we have discovery, so that
8 we can try to get answers to those additional
9 questions. But we do rely on project
10 documentation as a starting point.

11 Q So, in your mind, the quality of the
12 documentation is very important to the Company's
13 demonstration of prudence for capital work?

14 A Absolutely.

15 Q Do you recall that the Company has testified and
16 presented evidence in this proceeding that there
17 are monthly meetings to review all capital
18 projects and programs?

19 A Yes, I do recall that.

20 Q And do you give that internal process any
21 credence in your determination of prudence on the
22 Company's capital projects?

23 A Well, when that testimony was given, that was
24 actually the first time that I was aware of

[WITNESS: Dudley]

1 monthly meetings. I know that there are budget
2 meetings where projects are proposed and
3 approved. But I was not aware of periodic
4 monthly meetings at that time. So, I didn't
5 consider it.

6 Q The issue of these monthly meetings was not
7 raised in the rate case or in any other review of
8 the Company's capital process that you're aware
9 of?

10 A Not as I recall, no.

11 Q Is it your opinion that there are deficiencies in
12 relation to the Company's decision-making process
13 regarding plant additions that compose the third
14 step adjustment?

15 A Yes.

16 Q And is it your opinion that there are
17 deficiencies in relation to the documentation
18 submitted in the initial filing in this
19 proceeding?

20 A Yes.

21 Q If we turn back to the transcript, at Page 195,
22 Lines 3 through 7, you testified there that you
23 "are totally reliant on the information that the
24 Company provides to [you]", and you agreed with

[WITNESS: Dudley]

1 your attorney that you don't get "any sort of
2 other independent source material to verify any
3 of the projects." Do you see that testimony?

4 A Yes, I do.

5 Q Okay. The Settlement Agreement from Docket DE
6 19-057 was marked as "Exhibit 16". Do you have a
7 copy of that or do you need one?

8 A I do have a copy.

9 Q Okay.

10 A Okay.

11 Q If we could turn to Section 3, which is titled
12 "Plant in Service"?

13 A Yes.

14 CMSR. SIMPSON: Can you just give me a
15 moment please?

16 MS. RALSTON: Sure.

17 *[Short pause.]*

18 CMSR. SIMPSON: Okay. Thank you.

19 Please proceed.

20 BY MS. RALSTON:

21 Q Does it state here that "Staff's testimony
22 includes observations and concerns about the
23 Company's documentation of certain capital
24 projects involving their planning, budgeting and

[WITNESS: Dudley]

1 management"?

2 A Yes.

3 Q And does it also state that "To address this
4 concern, the Company will work with Staff...to
5 develop a regulatory review template to guide the
6 development and production of capital project
7 documentation generated through the Company's
8 capital authorization process"?

9 A Yes.

10 Q And does it state that "The purpose of the
11 regulatory review template will be to facilitate
12 the Commission's review of future requests of the
13 Company to recover the costs of capital
14 investments"?

15 A Yes. That's correct.

16 Q And the Company's initial filing in this process
17 adhered to the regulatory template, including
18 feedback from the consultant handling the
19 business process audit, is that correct?

20 A Well, my understanding is that a final template
21 has not yet been developed. That is to -- the
22 final template is to be developed after the
23 business process audit has been issued, only
24 because part of the consultant's assignment is to

{DE 22-030} [Day 2] {10-17-22}

[WITNESS: Dudley]

1 provide input on that, and recommendations.

2 Q So, is it your understanding that the template
3 used for this filing did not include any of that
4 feedback that has been received thus far?

5 A Well, the template that was used was one that we
6 had discussed in the last step adjustment, the
7 second step adjustment. And our recommendations
8 at the time were incorporated. For example, we
9 wanted the Master -- what we call the "Master
10 List" to be more explicit in terms of budget
11 costs and final costs. We also asked for some
12 notations on, you know, side notions regarding
13 some projects that were over budget. That was
14 provided in this, in this step filing. All of
15 the project documentation was provided in this
16 step filing, whereas previously we had to request
17 it.

18 So, in terms of the filing, we were
19 happy with the filing. It provided what we
20 needed, what we had requested.

21 However, in terms of forming an actual
22 formal, final template, that's still a work in
23 progress.

24 Q Okay. Understood. Thank you for clarifying.

[WITNESS: Dudley]

1 A Yes.

2 Q Turning back to the Settlement Agreement,
3 Exhibit 16, does it state, in Section 3.2, that
4 "To further address Staff's concerns regarding
5 the inconsistent documentation of capital
6 projects as described in 3.1, that the Company
7 agreed to a business process audit consistent
8 with Appendix 2 to be conducted and overseen by
9 Staff"?

10 A Yes.

11 Q And, if we turn to Appendix 2, which has the
12 scope of the business process audit, that states
13 that Part 1 is a "Review and assessment of the
14 Company's capital planning, budgeting, approval,
15 and management oversight"; Part 2 is a "Review
16 and evaluation of capital project documentation";
17 and Part 3 is a "Selective Project Review." Is
18 that what that section states?

19 A Yes.

20 Q And does Part 2, relating to "capital project
21 documentation", include "Initial project
22 assessment and analysis in the PAF including
23 consideration of known and foreseeable costs and
24 risks"?

[WITNESS: Dudley]

1 A Yes. Correct.

2 Q And does Part 2 also reference the "Use of
3 Supplement Requests, including root cause
4 analysis and lessons learned"?

5 A Yes.

6 Q And does it state here that "The consultant will
7 select a sample of capital projects for 2020 and
8 2021 to be included as a part of its examination
9 and testing involving the above listed
10 processes"?

11 A Yes.

12 Q So, when you say that you "don't get any
13 independent source material to verify projects",
14 it is a fact that DOE has received a report from
15 the consulting auditor on the business process
16 audit that pertains to the Company's
17 decision-making and documentation practices for
18 capital projects, including a sample of projects
19 in 2021, isn't that correct?

20 MR. DEXTER: Objection. Objection.

21 The Bench has ruled that the business process
22 audit and the report's irrelevant to this
23 proceeding.

24 MS. RALSTON: We're just asking some

[WITNESS: Dudley]

1 additional questions on Mr. Dudley's own
2 testimony. We understand the report is not going
3 to be admitted as evidence today. But these are
4 things that he testified to at the last hearing.

5 CMSR. SIMPSON: I'm going to allow the
6 question. But the foundation is questionable,
7 so, proceed with caution.

8 MS. RALSTON: Okay. Thank you.

9 WITNESS DUDLEY: Can you repeat the
10 question, Ms. Ralston?

11 MS. RALSTON: Sure.

12 BY MS. RALSTON:

13 Q So, I asked, so, when you say that you "don't get
14 any other independent source material to verify
15 projects", is it a fact that DOE has received a
16 report from the consultant auditor as part of the
17 business process audit that pertains to the
18 Company's decision-making and documentation
19 practices for capital projects, including a
20 sample of projects in 2021, is that correct?

21 A That was part of their assignment, yes.

22 Q And when did the DOE receive the report?

23 MR. DEXTER: Objection. The report's
24 irrelevant.

[WITNESS: Dudley]

1 CMSR. SIMPSON: Sustained.

2 BY MS. RALSTON:

3 Q Do you know which projects were tested for 2021?

4 A No, I do not.

5 Q But you would agree that there were projects that
6 were tested, is that correct?

7 A That is part of their assignment, yes.

8 Q Okay. Do you know if any part of the report
9 discusses the Company's decision-making
10 processes, with relation to capital projects
11 placed in service?

12 MR. DEXTER: Objection. The report is
13 not relevant.

14 CMSR. SIMPSON: Sustained. Please move
15 on, Ms. Ralston.

16 BY MS. RALSTON:

17 Q Okay. We're going to move on to the Reliability
18 Annual Blanket Projects. And my first question
19 will still be referring back to the transcript,
20 if you want to turn to Page 221, at Lines 1
21 through 8.

22 A I'm almost there. My apologies, Ms. Ralston.
23 This is a new laptop, and my --

24 Q Take your time.

[WITNESS: Dudley]

1 A -- my pdf freezes every now and then.

2 Q Then, I will renew my offer and give you a hard
3 copy, if you find it's easier?

4 MS. RALSTON: And I offer the same to
5 the Bench.

6 **BY THE WITNESS:**

7 A In this case, due to technical difficulties, I
8 would appreciate that.

9 *[Atty. Ralston handing document to the*
10 *Witness.]*

11 CMSR. SIMPSON: You're on Page 221,
12 Attorney Ralston?

13 MS. RALSTON: Yes.

14 CMSR. SIMPSON: Thanks.

15 **BY THE WITNESS:**

16 A I'm there.

17 BY MS. RALSTON:

18 Q Okay. So, at Lines 1 through 8, does your
19 testimony state "Yes, there are features of a
20 blanket program or an annual program that make
21 them difficult to review in a step adjustment
22 process", and that this is because "these
23 projects cover numerous and sometimes hundreds of
24 subprojects"?

[WITNESS: Dudley]

1 A Yes. That's correct.

2 Q And are you familiar with Appendix 5 of the
3 Settlement Agreement from DE 19-057?

4 A Well, I may have it, but if you could tell me
5 what that is?

6 Q Yes. Just give me one second. So, Appendix 5
7 starts on Bates Page 052 of Exhibit 15 -- or, 16,
8 sorry, and it has the Step Adjustment list of
9 projects that were anticipated for Steps 1 and 2.

10 A Okay. I guess I do not have that available, but
11 I do recall it.

12 Q Okay. And, so, do you need a copy of the
13 exhibit?

14 A Yes, please.

15 Q All right.

16 MR. DEXTER: Commissioners, maybe it
17 would be appropriate to take a moment for Mr.
18 Dudley to print the Settlement Agreement from
19 19-057, since it seems to be a focus of extensive
20 cross-examination?

21 CMSR. SIMPSON: Do you have quite a few
22 further questions, Ms. Ralston, on the
23 Settlement?

24 MS. RALSTON: I do. I also have a copy

[WITNESS: Dudley]

1 of it. So, whichever --

2 CMSR. SIMPSON: Is it okay if she
3 provides it to him?

4 MR. DEXTER: That's fine.

5 CMSR. SIMPSON: Please.

6 *[Atty. Ralston handing document to the*
7 *Witness.]*

8 BY MS. RALSTON:

9 Q Okay. So, referring to Appendix 5, do you see
10 here that "Annual Blanket Projects" and "Annual
11 Program Projects" were specified for inclusion in
12 both Step 1 and Step 2?

13 A Yes.

14 Q And a similar listing for Step 3 with anticipated
15 projects was not included, because it was too far
16 in advance for specific projects to be known, is
17 that correct?

18 A Yes.

19 Q Was it your expectation that the Company was
20 going to terminate annual blanket projects and
21 annual program projects before the third step, or
22 did you expect to see those projects continue?

23 A I expected to see them continue.

24 Q Okay. And do you see, on Lines 4, 6, and 7 of

[WITNESS: Dudley]

1 Appendix 5 that the list for annual blanket
2 projects on the Step 1 adjustment includes
3 "Maintaining Voltage", "Reliability
4 Improvements", and "Purchase Transformers and
5 Regulators"?

6 A Yes, I do.

7 Q And is it also true that, for Lines 4, 6, and 7
8 of the Step 2 adjustment those same programs
9 appear?

10 A And the Step 2 appears on what page? Oh, I have
11 it, yes. Page 57, is that correct?

12 Q I think so. Yes. Page 57.

13 A Yes, I see it.

14 Q Okay. And, if we refer back to Exhibit 1, at
15 Bates 030, Lines 10, 13, and 19? And this is the
16 Master List.

17 A Yes. Yes, I have it.

18 Q So, at Lines 10, 13, and 19, we see the same
19 annual blanket projects included, is that
20 correct?

21 A Yes, that's correct.

22 Q Okay. And you were not surprised to see those
23 same projects, correct?

24 A No, I am not.

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[WITNESS: Dudley]

1 Q Okay. And, from your experience in the rate
2 case, and your work on the Settlement Agreement,
3 did you misunderstand that these annual programs
4 are designed to account for smaller numerous
5 projects that do not have individual project
6 estimates?

7 A No, I did not misunderstand. I'm well acquainted
8 with the purpose of blanket projects.

9 Q Okay. So, you understand that there not
10 individual project estimates for this program?

11 A I understand that, yes.

12 Q Okay. And, if we refer to the transcript, at
13 Page 221, Lines 4 through 5, you acknowledged
14 this in your direct testimony, where you stated
15 that the "blanket projects cover numerous and
16 sometimes hundreds of subprojects", is that
17 correct?

18 A Yes.

19 Q And the Settlement Agreement expressly spelled
20 out a timeline for the filing and review of the
21 step adjustments at Section 10.3, is that
22 correct?

23 A Yes, it does.

24 Q Is there any mention in the Settlement Agreement

[WITNESS: Dudley]

1 of the difficulties or special provision that
2 would be attached to inclusion of annual blanket
3 projects in the step adjustment?

4 A No, it does not. But, at the time of the
5 Settlement, this was a fairly new review process
6 that at that time PUC Staff was proposing. In
7 prior rate cases, typically, there was very
8 little review of step adjustments. But I would
9 also add to that that step adjustments were much
10 smaller in prior rate cases.

11 So, given the size of the step
12 adjustments that we had seen, and not just with
13 Eversource, but with other utilities, we felt at
14 the time that it would be a good idea to actually
15 suggest a review period to review some of these
16 projects.

17 So, the process that was proposed in
18 the last Settlement Agreement was fairly new to
19 us. We weren't quite sure how it was going to
20 play out, only that it would give us a greater
21 opportunity to review some of these projects.

22 Q And going back to the transcript at 221, Lines 6
23 through 7, you're discussing the annual blanket
24 projects. And you state that "if there's a cost

[WITNESS: Dudley]

1 overrun, if something doesn't add up in the
2 project documentation, it's very time-consuming
3 to try and flesh that out." Is that correct?

4 A That's correct. And that's borne out in a couple
5 of projects that we've seen in this step
6 adjustment, concerning the Annual Reliability
7 Projects, and also the Transformer Projects, the
8 information that we received, and I said this in
9 my testimony at the last hearing, was the
10 information that we received were Excel
11 spreadsheets, work orders, and associated
12 expenditures that were hundreds of lines long;
13 and to sort through all that information is very
14 time-consuming.

15 Q And do you recall testimony on September 20th
16 from the Company's witness, Russel Johnson, where
17 he explained that a project authorization for
18 annual blanket projects that is developed at the
19 beginning of the year, is developed at the
20 beginning of the year, and then a Supplemental
21 Request Form is completed at the end of the year,
22 that represents the actual spend in that year.
23 And then, the next year's budget is based on that
24 Supplemental Request Form, subject to known and

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[WITNESS: Dudley]

1 measurable adjustments?

2 A Yes, I understand that. But that highlights
3 another concern for the Department. Because,
4 according to Eversource's own internal policy and
5 procedures, in particular APS 1, a supplement is
6 meant to be filed at the time a cost overrun or a
7 cost increase is experienced, in order to
8 highlight that development to management. And
9 we've seen more and more of these supplements
10 being filed a year later, after the occurrence of
11 a cost increase. And, so, that's concerning to
12 us. It doesn't appear that Eversource is fully
13 compliant with its own policy and procedures.

14 Q So, you would argue that goes to the Company's
15 processes that are being reviewed as part of the
16 business process audit?

17 A That's one of the areas, yes.

18 Q And, turning to Exhibit 1, at Bates 025, Lines 16
19 through 19, does it state here that "Dollar and
20 percentage variances are calculated between the
21 calendar year 2021 costs and the annual
22 authorized amount; the last supplemental
23 authorized amount and the annual authorized
24 amount; and the calendar year 2021 costs and the

[WITNESS: Dudley]

1 last supplemental authorized amount"?

2 A Yes. That's all provided.

3 Q Does it say anything about calculating variances
4 for individual projects in the annual blanket
5 projects?

6 A I don't recall.

7 Q So, when you say that more time would be needed
8 to review cost overruns, are you aware that the
9 Company's documentation process does not create
10 pre-construction budgets for each of these
11 numerous lower-cost projects that are conducted
12 under a blanket program?

13 A Yes. I understand that those figures are
14 historical.

15 Q And, so, it's not actually possible to determine
16 cost overruns on a project-by-project basis for
17 the annual blanket programs, is it?

18 A No. But our -- No. But our assumption is that,
19 because those estimates are based on historical
20 activity, that Eversource has a pretty good idea,
21 or at least should have a pretty good idea, on an
22 annual basis, given that these projects are
23 recurring, as to what the budget should be.

24 Q Even though these individual projects can't

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[WITNESS: Dudley]

1 always be reviewed, the cost of the program has
2 to be evaluated on an overall basis, because
3 there's no authorization or pre-construction
4 estimating of these smaller individual projects,
5 is that correct?

6 A I understand that. But, again, the Department's
7 view of these blanket projects is that they're
8 fairly routine. And, because they're routine and
9 reoccurring, and because Eversource has
10 experience with them, they should be able to come
11 pretty close to, in terms of budgeting, as to
12 what it's going to cost in a given year.

13 Q But, in these circumstances of numerous jobs,
14 with relatively smaller costs comprising the
15 annual blanket program, the primary driver
16 variances year-to-year would be how much work is
17 getting done, isn't that correct?

18 A Sure.

19 Q And, if you look at the transcript at Page 221,
20 Lines 20 to 23, you testified "when you look at
21 the Supplement Request Form, which is part of
22 Attachment DOE 1-014, that there was a cost
23 increase of \$913,000." Is that correct?

24 A Yes.

[WITNESS: Dudley]

1 Q And, at transcript, Page 222, Lines 9 through 10,
2 you testified that you asked the Company "what
3 makes up this additional \$900,000?" Correct?

4 A Yes.

5 Q And then, you testified, on the same page, at
6 Lines 16 through 19, that you received data in an
7 Excel file that breaks down not just the
8 \$900,000, but the full \$3.9 million that was
9 included on the list for inclusion in the step
10 adjustment, is that correct?

11 A Yes. It added up to 3.9 million.

12 Q But, if the cause for the additional \$900,000 was
13 simply that more of the same type of work got
14 done, how would the Company determine which
15 individual line items for the projects comprising
16 the \$913,000 variance from the budget?

17 A Well, how would we? Our understanding from the
18 tech session that, for this particular project,
19 and also the other project, the other blanket
20 project, was that Eversource was at least going
21 to make an attempt to drill down on those costs
22 that they thought contributed to the cost
23 overrun.

24 The Department has no way of knowing

[WITNESS: Dudley]

1 that. That is information that only Eversource
2 knows. And we were surprised, when we got the
3 data response, that that delineation was not
4 provided.

5 Q So, as you just testified, that Excel list was a
6 follow-up request from the August 31st technical
7 session, is that correct?

8 A It was.

9 Q And the Company identified a variance for this
10 annual blanket program in Exhibit 1, Bates 030,
11 Line 13, which you received on May 2nd, correct?

12 A Yes.

13 Q And, on June 8th, in response to the DOE's
14 request issued on May 26, the Company provided
15 you with Attachment DOE 1-014, which was the PAF
16 for the Annual Blanket Program for Reliability,
17 is that correct?

18 A Could you give me that information again,
19 Ms. Ralston?

20 Q Sorry. On June 8th, in response to a DOE data
21 request, DOE 1-014, the Company provided you with
22 Attachment DOE 1-014, which was the PAF for the
23 Annual Blanket Program for Reliability, is that
24 correct?

[WITNESS: Dudley]

1 A Let me just turn to that, if you can just give me
2 a moment.

3 Q Sure.

4 MR. DEXTER: And, if the witness or the
5 counsel could provide an exhibit number, that
6 would be helpful, I believe?

7 MS. RALSTON: Yes. If you can look at
8 Exhibit 8, I think it's Page 1.

9 **BY THE WITNESS:**

10 A So, on Exhibit 8, I have the Supplement Request
11 Form. I have the Operations Project
12 Authorization Form. I have Data Response TS
13 3-003. I do not see the data response that
14 you're referring to.

15 BY MS. RALSTON:

16 Q Exhibit 8 starts with Attachment DOE 1-014 that I
17 was referencing.

18 A Yes. Okay. So, that was part of DOE 1-014.

19 Okay. I'm sorry, I misunderstood.

20 Q Uh-huh.

21 A I see what you're saying now.

22 Q Okay.

23 A Yes.

24 Q So, in Exhibit 8, Attachment DOE 1-014, the

[WITNESS: Dudley]

1 document explained that the cost of the
2 "distribution line reliability program was higher
3 than originally budgeted because more work was
4 performed than anticipated", and it also provided
5 a breakdown of the cost variances by cost
6 category, comparing budget to actual for the work
7 performed. Is that correct?

8 A Yes. But the -- my reaction to that explanation
9 was that it was very cryptic, it was very vague,
10 and it provided no detail.

11 Q So, you would not agree that the response showed
12 exactly where the difference in terms of
13 categories of costs had increased?

14 A It shows where the costs increase, but in a very
15 general -- at a very 10,000 foot level. But we
16 have no way of knowing what the -- what the
17 specifics are behind these numbers.

18 What we like to do, Ms. Ralston, is we
19 like to get behind the numbers to see what
20 happened and why. And we were not able to do
21 that, because that information was not provided.

22 Q Referring back to the transcript, at
23 Page 223 [222?], Lines 19 through 20, you
24 referred to a "pivot table" that was provided,

[WITNESS: Dudley]

1 with "about 800 line items". Is that correct?

2 A Yes. That was in response, I believe, to TS
3 3-003.

4 Q And a little further up that page, at Lines 12
5 through 13, in response to a question from your
6 attorney as to whether you can assess "whether
7 the projects listed in the pivot table are
8 prudently incurred", you state that "And neither
9 can I parse out the components of the \$913,000
10 cost overrun." Is that correct?

11 A Yes. I believe I said that in my previous
12 statement.

13 Q And, in your response to your attorney's
14 statement that "you can't tell the initially
15 budgeted from the overrun", you stated "No",
16 meaning that you could not tell what the
17 pre-construction budget estimate was, as compared
18 to the post-construction cost for each individual
19 project in the blanket, is that correct?

20 A That's correct.

21 Q And, as we just discussed, you were never able to
22 examine an initially budgeted amount from an
23 overrun to these programs -- projects, is that
24 correct?

[WITNESS: Dudley]

1 A When you say "initially budgeted amount", what
2 are you referring to? I don't understand.

3 Q You were not able to compare an initial project
4 estimate versus a final project cost for these
5 individual projects under the blanket?

6 A Well, that information -- that information is
7 contained on the Supplemental Request Form, which
8 is part of DOE 1-014. You have the current
9 authorization amount. You have the Supplement
10 Request. And then, you have the total request.
11 And that's what we looked at.

12 We did notice that the Supplement
13 Request was not totally expended. But that the
14 project was still over budget by \$913,000.

15 Q Correct. I don't know if you answered my exact
16 question. I was asking, were you able to compare
17 on a project-by-project basis?

18 A No, we were not.

19 Q Okay.

20 A Because, as we recently discussed, these blankets
21 contain hundreds of subprojects.

22 Q Okay. So, you would agree that the reason you
23 were not able to compare on a project-by-project
24 basis is because that's not the nature of how

[WITNESS: Dudley]

1 these annual blanket projects work?

2 A Well, I would -- I would agree that the
3 information is there. We just don't know which
4 part of that information to drill down on; only
5 Eversource knows that.

6 Q So, what detail did the Company provide in
7 relation to each of the projects in the pivot
8 table?

9 A The pivot table contained a listing of work
10 orders and associated expenditures. About, if
11 I'm recalling correctly, it's about 400 line
12 items.

13 MR. DEXTER: And, again, if the witness
14 or the counsel could provide an exhibit number?
15 I believe it's number "Exhibit 15". But I think
16 an exhibit and a page number would be helpful.

17 MS. RALSTON: Sure. It is Exhibit 15.
18 And I will get a page number for you.

19 So, Exhibit 15, and the pivot table
20 starts at Bates Page 012.

21 WITNESS DUDLEY: Are you referring to
22 the Excel spreadsheet?

23 MS. RALSTON: I was referring to the
24 pdf version of the exhibit.

[WITNESS: Dudley]

1 WITNESS DUDLEY: *Pdf*, okay. All right.

2 MS. RALSTON: You don't need to
3 necessarily go there. It was just for
4 everyone -- keep everyone on the same page.

5 BY MS. RALSTON:

6 Q And was the pivot table sortable, the Excel
7 version, so you could see all of the work
8 orders --

9 *[Court reporter interruption, asking*
10 *for a repeat of the question.]*

11 MS. RALSTON: Sure.

12 BY MS. RALSTON:

13 Q Was the pivot table sortable, so that you could
14 see all of the work orders associated with each
15 individual project?

16 A Yes, it was.

17 Q Is it possible that more work was performed in
18 2021 for reliability purposes than originally
19 planned, and that's the reason that there were
20 additional costs?

21 A It is possible, yes.

22 Q And your disallowance relates only to the over
23 budget amount, and your only basis for that
24 disallowance is that it's over budget, is that

[WITNESS: Dudley]

1 correct?

2 A No. The only basis for the disallowance is that
3 Eversource was unable to provide us with any
4 support for that overrun.

5 Q Did you hear the Company's testimony on
6 September 20th about how this work was
7 identified, through daily work meetings, through
8 the outages from the prior day, and other
9 management meetings?

10 A Yes. I have no knowledge, firsthand knowledge of
11 those meetings. So, I don't know what was
12 discussed.

13 Q Is it your testimony that it would be imprudent
14 for the Company to move ahead with reliability
15 installations in response to specific customer
16 outages that are occurring?

17 A No, that's not imprudent. What's imprudent is
18 that the burden *[sic]* has the obligation of
19 supporting its expenditures, especially when
20 there are cost overruns. And, in this particular
21 case, Eversource was not able to do that.

22 Q In Appendix 2 of the Settlement Agreement, does
23 it state that the "Company's budgeting and
24 approval process" and "development of budgets,

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[WITNESS: Dudley]

1 cost estimates, revised budgets and budget
2 variances" will be part of the scope of the
3 business process audit?

4 A That's correct.

5 Q And is it your knowledge or expectation that that
6 examination will include these annual blanket
7 projects?

8 A I assume that it would.

9 Q Thank you.

10 A But the selection of projects is at the
11 discretion of the auditors.

12 Q I'm going to move on now to the Maintain Voltage
13 Blanket Project. And, for this annual blanket
14 program, that's referred to as "Maintain Voltage"
15 in Exhibit 1, at Bates 030, Line 10. Did the
16 Company identify the variance for this project?

17 A Let me just get to that section, Ms. Ralston.

18 Q Yes. Let me know when you're there.

19 CMSR. SIMPSON: Exhibit 1, Bates Page?

20 MS. RALSTON: 030.

21 CMSR. SIMPSON: Thank you.

22 MS. RALSTON: Line 10.

23 **BY THE WITNESS:**

24 A Yes, I have it. And your question was?

[WITNESS: Dudley]

1 BY MS. RALSTON:

2 Q My question was, at Line 10 of Bates Page 030,
3 did the Company identify the variance for this
4 program as part of its initial filing?

5 A Yes, it did.

6 Q And give me one second, I just need to get an
7 exhibit reference for you.

8 If you can refer to Exhibit 12, at
9 Bates 594. And, if you're looking at the
10 electronic version, it's Exhibit 12, Part 2.

11 A I'm sorry, Ms. Ralston. I'm sorry, which exhibit
12 was that?

13 Q Exhibit 12.

14 A Exhibit 12? I do not have it up here with me.

15 CMSR. CHATTOPADHYAY: Can you repeat
16 the page number again?

17 MS. RALSTON: Yes. The Bates page is
18 594. If you're looking in the electronic
19 version, it's the *pdf* Page 97 of Exhibit 12,
20 Part 2.

21 Do you need a hard copy, Mr. Dudley?

22 WITNESS DUDLEY: I think I do, yes.

23 MS. RALSTON: Okay.

24 WITNESS DUDLEY: I'm sorry.

[WITNESS: Dudley]

1 *[Atty. Ralston handing document to the*
2 *Witness.]*

3 WITNESS DUDLEY: Yes. Thank you. Oh,
4 I apologize, Ms. Ralston. I do have this
5 information. I'm sorry I made you go to the
6 trouble of digging it out.

7 MS. RALSTON: No problem.

8 BY MS. RALSTON:

9 Q So, this exhibit is providing a copy of
10 Attachment DOE 1-012, which was the Project
11 Authorization Form and Supplemental Request Form
12 for the 2021 Annual Blanket Program for Voltage
13 Maintenance, is that correct?

14 A That is correct, yes.

15 Q And is it correct that this document explained
16 that the costs of the Voltage Maintenance Program
17 was higher than originally budgeted due to an
18 increase in the amount of work required to
19 maintain voltage within regulatory limits in
20 2021, and also provided a breakdown in the
21 increased costs by category, including material,
22 construction, labor and overtime?

23 A Yes. If I could just have an opportunity to get
24 my notes on that one?

[WITNESS: Dudley]

1 Q Sure.

2 [Short pause.]

3 MR. DEXTER: Is the exhibit we're
4 looking at also Exhibit 9?

5 WITNESS DUDLEY: That's what I have. I
6 have it as "Exhibit 9".

7 MS. RALSTON: I do not see that
8 attachment in Exhibit 9. But I could be
9 mistaken.

10 MR. DEXTER: Could I look at the
11 attachment that counsel provided to the witness
12 please?

13 CMSR. SIMPSON: Yes. Go ahead and
14 approach the bench.

15 MS. RALSTON: I'm referring to
16 Attachment DOE 1-012, Mr. Dexter. And I think
17 Exhibit 9 has DOE 1-4. You can correct me, if
18 I'm wrong.

19 Exhibit 9 certainly would have been
20 easier.

21 WITNESS DUDLEY: Okay. I'm ready, Ms.
22 Ralston.

23 MS. RALSTON: Okay. Do you want me to
24 repeat my question?

[WITNESS: Dudley]

1 WITNESS DUDLEY: Yes, please.

2 MS. RALSTON: Okay.

3 BY MS. RALSTON:

4 Q So, is it correct that Attachment DOE 1-012
5 explained that the cost of the Voltage
6 Maintenance Program was higher than originally
7 budgeted due to an increase in the amount of work
8 required to maintain voltage within regulatory
9 limits in 2021, and also provided a breakdown of
10 the increased costs by category, including
11 materials, construction/outside services, labor
12 and overtime?

13 A I do see that, yes.

14 Q And is it possible that more work was performed
15 in 2021 for Voltage Maintenance than was
16 originally planned, and that was the reason for
17 the additional costs?

18 A That can be possible, yes.

19 Q And is it correct that your disallowance relates
20 only to the over budget amount, and that your
21 basis for this disallowance is that it's over
22 budget?

23 A No. The basis for the disallowance is that we do
24 not have enough information to drill down on

[WITNESS: Dudley]

1 those specific expenditures and why they
2 occurred, which is what we would -- the
3 information we would need in order to determine
4 whether or not the cost overrun was prudent.

5 Q So, you just testified that you "haven't had
6 sufficient information". But I think, when we
7 began our discussion of the blanket projects, you
8 stated that "the amount of information provided
9 can be too extensive to review in this tight time
10 period"?

11 A Did you say "expensive"?

12 Q No, I said "too extensive".

13 A "Too extensive". Very time-consuming. Again, we
14 received these spreadsheets from Eversource. We
15 appreciate Eversource sharing those spreadsheets
16 with us. They contain a lot of information,
17 which is part of the problem. What we need, what
18 we don't know, is what information in those
19 spreadsheets to drill down on; only Eversource
20 knows that.

21 And, so, during the course of our
22 review, what we would have appreciated is some
23 guidance from Eversource that would pinpoint
24 where, in these hundreds of line items, they

[WITNESS: Dudley]

1 thought the cost increases arose from. And, at
2 that point, we could look at those individual
3 expenditures, analyze them, and perhaps take a
4 deeper dive with Eversource on the cause of those
5 expenses.

6 The starting point is to pinpoint which
7 expenses they were. And, frankly, Eversource
8 just hasn't been helpful to us in doing that.

9 Q And you're referring to the -- when you say "line
10 item", you're referring to the pivot tables that
11 were provided in August?

12 A Yes.

13 Q Following the tech session?

14 A Yes.

15 Q So, would it be your testimony that if DOE had
16 requested those pivot tables as part of one of
17 the earlier tech sessions, that perhaps there
18 would have been additional time to go through
19 those with Eversource and ask follow-up
20 questions? Is that sort of where the problem
21 lies is timing?

22 A I don't know. I don't know. Maybe. Maybe, if
23 Eversource had assisted us in drilling down on
24 those different line items, it may have resulted

[WITNESS: Dudley]

1 in additional questions.

2 So, I don't know. My answer is "I
3 don't know."

4 Q So, the pivot table provides a list of individual
5 projects under the blanket program. So, what
6 additional information would have been helpful to
7 the Department of Energy's review?

8 MR. DEXTER: Asked -- objection. Asked
9 and answered. The witness has said about three
10 times that he needed specific information about
11 the cost overruns.

12 BY MS. RALSTON:

13 Q Do you agree that there are no cost overruns for
14 these projects, as we previously discussed,
15 because there are no initial project estimates?

16 A No, I don't. I don't agree. Because, again, I
17 think that -- our assumption is that Eversource's
18 budgeting process is, should be, you're
19 experienced enough and rigorous enough to come
20 close to what they're going to spend in a given
21 year.

22 Again, as I stated earlier, and as you
23 said, Ms. Ralston, that Eversource uses
24 historical information. And going back several

[WITNESS: Dudley]

1 years, that's a lot of history.

2 Now, I understand that there are some
3 things that can arise that aren't expected.
4 That's understandable. The question we have is
5 that, when that does arise, were those additional
6 costs prudent?

7 And, without more specific information
8 on what those costs were, we can't make a
9 determination. And, therefore, we cannot make a
10 recommendation to this Commission that those cost
11 overruns were, in fact, prudent, because we don't
12 know.

13 Q And, so, would you expect that an examination of
14 this process will be included in the business
15 process audit as it relates to the blanket
16 project for Maintaining Voltage?

17 A I understand that that's probably part of their
18 assignment, yes.

19 Q And did you hear the Company's testimony on the
20 20th of September that "it has no real control
21 over the work for this blanket project", or "the
22 costs are incurred when there's a really hot
23 summer, when people are running air
24 conditioners", and "in reaction to people

[WITNESS: Dudley]

1 identifying low voltage on the system or customer
2 complaints about voltage issues"?

3 A Yes, I do recall that. Are we still referring to
4 the Reliability Annual?

5 Q No, we're in the Maintain Voltage Project.

6 A Maintain Voltage, okay. Yes, I recall that.

7 Q You recall the Company's testimony, yes?

8 A Yes.

9 Q So, would it be your testimony that it would be
10 imprudent for the Company to move ahead with
11 voltage maintenance projects, in response to
12 specific customer complaints of low voltage?

13 A I don't know that.

14 Q If you could turn to the transcript, at Page 215,
15 Lines 5 through 12. And let me know when you're
16 there.

17 A I'm there.

18 Q And you say here that you're recommending a
19 disallowance of approximately "\$3 million"
20 associated with the Purchase of Transformers
21 Annual Blanket Project, is that correct?

22 A Yes.

23 Q And you testified that the reason for your
24 recommendation is that the "over budget amount

[WITNESS: Dudley]

1 was not adequately explained", correct?

2 A That is correct. And my recollection, from the
3 last hearing, is that the Eversource witnesses
4 were not able to provide an explanation for it
5 either.

6 Q The initial estimated amount for this program was
7 "\$11.5 million", and the final amount was "14.5
8 million", is that correct?

9 A Let me just get to that page. Thank you.

10 Q On the same page of the transcript, if you look
11 at Lines 19 through 22, I think it's there.

12 A So, I believe this is part of Exhibit 7,
13 correct?

14 Q Correct.

15 A Okay. Yes. Okay. Okay, I'm at this point, I'm
16 at my exhibit. Thank you.

17 Q And, if you look at the transcript, at Page 216,
18 Lines 2 through 7, your testimony is that you had
19 heard the Company's testimony at the hearing
20 regarding "a change in the Cost of First
21 Installation." Does it state that there in the
22 transcript?

23 A Yes, it does.

24 Q And then, at Lines 9 through 12, you stated that

[WITNESS: Dudley]

1 "it does not explain the entire cost of the
2 overrun", and you referred to "Attachment DOE
3 1-4", which is included in Exhibit 7, at 399 to
4 400?

5 A Yes.

6 Q And, on the next page of the transcript, Page
7 217, at Lines 4 through 9, you stated that
8 "internal labor and outside services are not
9 included in the cost summary, for the initial
10 cost summary"?

11 A No, it was not. When we first read this, we
12 thought that the entire budget amount was for the
13 purchase of transformers. But, then, we learned
14 in the hearing that there was -- that the -- or,
15 actually, the over budget amount was for the
16 purchase of transformers. And then, we found out
17 in the hearing that it was actually for
18 overheads.

19 Q And those categories of costs were added into the
20 Supplemental Request, is that correct?

21 A Yes, they were.

22 Q And at -- and, in the transcript, at Lines 18
23 through 22, your attorney asked you "Do we have
24 breakdown of how that overall \$3 million increase

[WITNESS: Dudley]

1 fell into three categories of CFI changes,
2 outside services, and internal labor?" And your
3 answer was "No. We have no detail on that." Do
4 you see that?

5 A I'm sorry, could you tell me which line is that?

6 Q Eighteen (18) through 22.

7 A And that's on Page?

8 Q Two eighteen (218).

9 A Yes. Well, the issue there is that -- is that
10 the supplement attempts to explain that the cost
11 overruns were due to, and I quote on -- this is
12 on Page 1 of the Supplemental Request Form, in
13 the third paragraph, the "CFI is a calculated
14 cost based on internal labor and contractor
15 rates. The CFI calculation was updated in 2021
16 for the first time in several years."

17 And, so, it was due to that updating
18 that there was a dramatic increase in the -- in
19 the overheads and labor costs. And, so, one of
20 the questions in our minds is, "why isn't this
21 information updated annually every year?" That
22 would be one way to avoid some of these
23 surprises. And I imagine that this \$3 million
24 amount did come as a surprise to some folks at

[WITNESS: Dudley]

1 Eversource, because they probably believed, as we
2 did, that the initial budget amount was for
3 transformers, and not for additional labor.

4 So, our concern there, with the CFI
5 calculation, is the updating of the information
6 on which it's based.

7 Q I'm not sure you answered my question, was just
8 to refer you to Lines 18 through 22, and confirm
9 that you see where your attorney asked you "Do we
10 have a breakdown of how that overall \$3 million
11 increase fell into three categories of CFI
12 changes, outside services, and internal labor?"
13 And your answer was "No. We have no detail on
14 that." Do you see that testimony?

15 A Yes.

16 Q All right.

17 A Yes.

18 Q Thank you.

19 A We have no specific detail on that.

20 Q And then, on the next page of the transcript, at
21 Page 219, at Lines 7 through 13, you corrected
22 that statement, and indicated that the Company
23 "did respond to a Data Request TS 3-005 on
24 September 9th", that you characterized as "not in

[WITNESS: Dudley]

1 detail". Do you see that?

2 A I do, yes.

3 Q But the \$3 million variance was first identified
4 in the Company's initial filing, isn't that
5 correct? If you refer to Exhibit 1, at
6 Bates 030, Line 19?

7 A That, I can find that on which document,
8 Ms. Ralston?

9 Q Exhibit 1, Bates Page 030.

10 A And that is line what?

11 Q Nineteen (19).

12 A Yes, I see that.

13 Q And then, on May 26, the Company provided its
14 response to Data Request DOE 1-4, which is
15 included in Exhibit 7, at *pdf* Page 2. The
16 Department asked for the PAFs associated with all
17 of the listed supplements that was provided in
18 DOE 1-4. And then, the Company -- and the
19 Company provided the Supplemental Request Form,
20 which showed a breakdown of \$3 million. Do you
21 recall that?

22 A Yes, I do.

23 Q And also, on May 26th, in response to DOE 1-15,
24 which is included in Exhibit 12, Part 2, at

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[WITNESS: Dudley]

1 Bates 636, if you need a moment. The Company
2 provided the original form and the supplementals
3 as Attachment DOE 1-15, again showing a breakdown
4 of this \$3 million amount?

5 A Could you again describe what you're referring
6 to?

7 Q Yes. If you look at Exhibit 12, at Page 636.

8 A You're referring to the Supplemental Request
9 Form?

10 Q Yes.

11 A Okay.

12 Q The Company again provided a breakdown of the
13 \$3 million, would you agree?

14 A Yes. And you're referring to the "Supplement
15 Cost Summary"?

16 Q Yes.

17 A Okay. Yes, I have that.

18 Q Okay. So, your testimony on September 20th,
19 regarding a "detailed breakdown", referencing
20 only the Company's response to Data Request TS
21 3-005, which you stated was received on
22 "September 9th", and "did not provide detail", is
23 not exactly the whole story, is it?

24 A Well, the detail is what's behind those numbers.

[WITNESS: Dudley]

1 What's behind the "Internal Labor" increase?

2 What's behind the Outside Services? Why did
3 those two items increase? That's the information
4 that we do not have and we do not know.

5 Q But, if you flip back to Exhibit 7, --

6 A Yes.

7 Q -- does it not state that "the CFI calculation
8 was updated in 2021 for the first time in several
9 years, resulting in the increases to labor and
10 contractor costs"?

11 A Yes, it does. And that's of concern to us.

12 Q And below that, does it state that "Cost
13 increases in the table below include increases in
14 outside services and increases in internal
15 labor", with those exact costs, and that those
16 increases "resulted in the need for the
17 supplement"?

18 A Yes, we see that.

19 Q So, despite having this breakdown, and the
20 explanation regarding increased labor costs,
21 since as early as June, your recommendation
22 continues to be that the \$3 million should be
23 disallowed?

24 A It is, because we still don't have sufficient

[WITNESS: Dudley]

1 detail behind those labor cost numbers. And
2 we're also very concerned by the fact that
3 Eversource does not, or did not, or neglected to
4 update its CFI model.

5 Q Do you expect that to be reviewed as part of the
6 business process audit?

7 A I don't know.

8 Q Let's turn now to Exhibit 6, and the Goffstown
9 Pad Mount Project.

10 A Okay. Just give me a moment.

11 Q Sure. My first questions will be pointing you to
12 the transcript. But, if you want to have
13 Exhibit 6 ready, that's probably helpful.

14 A Okay. Thank you. Okay. I'm there.

15 Q So, if you can refer to the transcript, at
16 Page 208, Lines 17 through 24, you state there
17 that you're "recommending a disallowance of
18 \$371,000" associated with a budget overrun for
19 the Goffstown Pad Mount Transformer. Is that
20 correct?

21 A Can I have those lines one more time,
22 Ms. Ralston?

23 Q Yup. Seventeen (17) through 24.

24 A And this is Page 208?

[WITNESS: Dudley]

1 Q 208.

2 A Okay. What I'm seeing is a question from Mr.
3 Dexter.

4 Q Yes. Because I think you answered "yes" to his
5 question.

6 A Okay.

7 Q So, I will assume you agree with his statement.

8 A If I may just read it?

9 Q Sure.

10 A Yes. Okay. I see that. Thank you.

11 Q Okay. And then, turning to the next page, Page
12 209, at Lines 7 through 11, you stated that your
13 "take away from the project documentation, in
14 particular, the Supplement Request Form, is that
15 some of the cost overruns were known or could
16 have been known at the time of project
17 inception." Is that correct?

18 A Yes, that's correct. And that is based on the
19 "Lessons Learned" section of the Supplement.

20 Q Yes. And, so, the Company outlines, in the
21 "Lessons Learned" portion of its project
22 documentation, it identified improvements for
23 future in order -- for the future, in order to
24 control project costs. And you're using those

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[WITNESS: Dudley]

1 lessons learned to argue that the statements
2 there warrant a cost disallowance of half the
3 project costs, is that accurate?

4 A It's not a cost disallowance. But it highlights
5 the problems with the scoping, planning,
6 budgeting these projects.

7 Q Which we would expect to be addressed in the
8 business process audit, correct?

9 A That's part of their review, yes.

10 Q And, if we turn back to the transcript, at
11 Page 209, Lines 12 through 19, which refers to
12 "Attachment TS 2-001B". And states that "if you
13 look at Page 2 of 11, you have kind of a
14 breakdown of the additional costs. And what's
15 noted is that there were costs that not
16 previously estimated in the original PAF." Is
17 that what it states there in the transcript?

18 A Yes, it is.

19 Q And, if we look at Attachment TS 2-001B, which is
20 provided in Exhibit 6, we can see the lessons
21 learned. And, by the "breakdown of additional
22 costs", are you referring to the chart on Page 3
23 that shows the "Prior Authorized" and "New Total
24 Request"?

[WITNESS: Dudley]

1 A I'm referring to the "Supplement Justification
2 Detail" section.

3 Q And where in that document is there a correlation
4 between the lessons learned to particular cost
5 changes?

6 A Well, for example, Item 6, "Project Management
7 Team", it states "Costs previously not estimated
8 in the original PAF." Again, for "Property
9 Taxes", "costs not in the original PAF".

10 It appears to us that most of these
11 costs, "Right-of-Way/Easements/", for example,
12 "Land Acquisition", that obviously was not
13 contained in the original PAF. The need for
14 "Environmental Approvals and Permits", that was
15 not in their additional engineering and design.
16 "Materials", such as "Retention oil system,
17 pre-cast concrete". Those, to us, those are all
18 items that could have been known or should have
19 been known by Eversource.

20 As I stated in my testimony in the rate
21 case, our expectation is that Eversource has the
22 expertise and the knowledge to plan these things.
23 And, indeed, they have the expertise and the
24 experience in planning many projects like this.

[WITNESS: Dudley]

1 And one of our problems, one of the problems in
2 the rate case, and continues to be a problem in
3 the step adjustments, is what we are seeing is we
4 are continually seeing projects where certain
5 expenditures, certain things that needed to be
6 done were missed in the original planning
7 process.

8 And I'll only go back, Ms. Ralston, to
9 a quote from this Commission, a ruling from this
10 Commission, in Docket -- in Docket 19-064, which
11 states "Prudent decisions cannot be made if
12 significant foreseeable cost elements of a
13 project are overlooked at the outset. And
14 meaningful reexamination of costs does not take
15 place during project execution as costs increase.
16 At a minimum, failure to demonstrate that
17 overlooked costs were meaningfully reexamined
18 makes it difficult for a utility to meet its
19 burden to prove its actions were prudent."

20 And it's certainly, in the "Lessons
21 Learned" section, someone at Eversource picked up
22 on that, by stating "Engineering must validate
23 existing conditions prior to finalizing scope and
24 launching detailed engineering."

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[WITNESS: Dudley]

1 This highlights another problem that
2 we've seen in the past. In that, existing
3 conditions are not considered. We found out in
4 the rate case, for example, that there are many
5 cases in which Eversource does not conduct site
6 visits, they do not do site walk-downs. Instead,
7 they rely on drawings on file at their office to
8 make these estimates and to scope these projects.

9 It also goes on to say "A scope
10 document should be developed as well as
11 conceptual engineering prior to obtaining an
12 accurate estimate for full funding."

13 "A statement of work should be
14 developed for contracts purposes. This statement
15 of work will give the contractor(s) a better
16 understanding of the scope of work for the
17 project."

18 So, to us, it's all stated in the
19 Lessons Learned, Ms. Ralston. And, you know, we
20 appreciate the fact that someone at Eversource
21 recognized that and highlighted that for
22 management to consider going forward.

23 But the problem we have is that we see
24 these types of things, we see these types of

[WITNESS: Dudley]

1 deficiencies over and over and over again. If it
2 were just one or two projects, maybe three, we
3 wouldn't be quite so concerned about it. But
4 what we see, in these cases, is a continuation of
5 the same problems.

6 CMSR. SIMPSON: Mr. Dudley, what were
7 you just reading from?

8 WITNESS DUDLEY: I was reading from the
9 Supplemental Form that is a part of TS 2-001,
10 it's in Exhibit 6.

11 CMSR. SIMPSON: Do you have a Bates
12 page?

13 WITNESS DUDLEY: I'm sorry. My pages
14 are not Bates. But it is on Page -- it's Page 4
15 of 11 of the Supplement.

16 CMSR. SIMPSON: Okay. Thank you.

17 MS. RALSTON: Thank you.

18 BY MS. RALSTON:

19 Q And, so, what you just testified to, that would
20 all be addressed as part of the business process
21 audit, correct?

22 A That is part of scope, yes.

23 Q And, in the "Lessons Learned" section you were
24 just referring to, does it state anywhere that

[WITNESS: Dudley]

1 there were costs that could have been identified,
2 but that were not?

3 A No. Only that certain things were not
4 identified.

5 Q And do you recall the Company's testimony on
6 September 20th that, after this project was
7 funded, that there were additional field survey
8 and topographic information that had to be
9 obtained, as well as onboarding of a site design
10 firm to complete the site design and site plan
11 application, as well as a Zoning Board
12 application to the Town of Goffstown?

13 A Yes.

14 Q And is it your testimony that the Company could
15 have quantified these additional costs revealed
16 by the completed site design work without
17 completing the site design work?

18 A That is a question that remains unanswered.

19 Q Is it your testimony that the Company should have
20 done all this work to complete the site design
21 and incur the associated cost, before it decided
22 to go forward with the decision to fund the
23 project?

24 A That is a reasonable expectation.

[WITNESS: Dudley]

1 Q And did you hear the Company's testimony that,
2 after it was funded, and after the completion of
3 the site design, that the Company went back to
4 the civil vendor with a revised design, which
5 included significant impact of select fills,
6 drainage, paving, fencing and gates, which were
7 not specifically available at the time of the
8 previous estimate?

9 A We don't know whether or not those items were
10 available. That wasn't explained to us.

11 Q Well, I just asked "did you hear the Company's
12 testimony to that?"

13 A I did hear the Company's testimony, yes.

14 Q And did you hear the Company's testimony that,
15 after energization of the completed project, that
16 the Company had to remediate transformer sound
17 levels for the neighbors?

18 A I'm sorry, could you repeat that again?

19 Q Do you recall the Company's testimony that, after
20 the project was energized, that the Company had
21 to remediate transformer sound levels for the
22 neighbors?

23 A Yes, I do.

24 Q And is it your testimony that the Company should

[WITNESS: Dudley]

1 have known that transformer sound levels were
2 going to bother the neighbors after the unit was
3 energized?

4 A I believe transformer noise is a common problem
5 with neighbors. That's experienced, yes.

6 Q And, if we go back to the Lessons Learned that
7 you were referring to, does it state that the
8 site design should have been completed at the
9 conceptual stage of estimating the project?

10 A Well, it does say "prior to finalizing scope".
11 So, my assumption is "yes."

12 Q And, under the Lessons Learned, the three bullets
13 mention a "scope document", is that correct?

14 A Yes.

15 Q Is it possible that these references to a "scope
16 document" simply mean that the Company -- mean
17 what the Company witness testified, which was
18 that all the project appeared to be was a typical
19 roadside distribution project similar to all
20 other pad mount transformers, but that the
21 suburban location, on a newly acquired land
22 caused a larger project?

23 A I don't know what specifically is meant by a
24 "scope document". My reading of that, of that

[WITNESS: Dudley]

1 paragraph, is that it's a recommendation, a
2 suggestion. But I'm not aware of any "scope
3 document".

4 Q Even if the larger project profile could have
5 been known, the costs emanating from the
6 completed site plan would not have been known
7 before the project was given the go-ahead, is
8 that correct?

9 A I apologize, Ms. Ralston. Could you repeat it
10 one more time? I'm sorry.

11 Q Even if the larger project profile could have
12 been known, the costs emanating from the
13 completed site plan would not have been known
14 before the project was given the go-ahead, is
15 that correct?

16 A Well, my understanding from Mr. Plante was that
17 it had -- the project was originally at about
18 \$675,000 at the initial funding request, and then
19 there was a request of 75,000 to complete the
20 initial engineering.

21 But, then, we noticed that, in the
22 actual Operations Authorization Form, the project
23 was actually at 407,000. And which we found that
24 confusing, and Mr. Plante was unable to elaborate

[WITNESS: Dudley]

1 on that in his testimony.

2 So, you know, here we are, now we have
3 a project that was budgeted at 407,000, and we
4 have a nearly doubling in the cost amount of this
5 project.

6 Q The Company's capital project authorization
7 framework allows for staged estimates, knowing
8 that it will be necessary to authorize work to
9 move forward before detailed engineering plans
10 being finalized, is that correct?

11 A I'm not familiar with the "staged estimate"
12 process.

13 Q Okay. Isn't it correct, though, that the total
14 cost of the project still came in at half the
15 cost of the alternatives?

16 A It did. But the alternatives weren't chosen.
17 And, also, the "Alternatives" section was
18 deficient, because it did not explain why the
19 preferred alternative was chosen. It only talked
20 about the two alternatives which were not chosen.
21 And, again, there's no explanation as to why the
22 initial estimate was placed at 675,000, and then
23 the request -- the budget request was for
24 407,000.

[WITNESS: Dudley]

1 Q So, if the Company managed this project well
2 within the range of reasonableness, below the
3 cost of the identified alternatives, you would
4 still argue that a disallowance would be
5 appropriate?

6 A Well, it depends. What do you mean by the "range
7 of reasonableness"?

8 Q That the costs were prudently and reasonably
9 incurred consistent with the estimate.

10 A Well, the estimate was "407,000". And then, what
11 we have now is a project that costs almost double
12 that. And our understanding is that it's because
13 a lot of those costs were not considered in the
14 original scoping and planning of the project.
15 And, again, we believe that the Lessons Learned
16 section confirms that.

17 So, within -- within the bounds of
18 reasonableness, I guess, for us, "within the
19 bounds of reasonableness" is whether or not you
20 can build a project within its budget, it's
21 ascribed budget.

22 Q Would you agree that this project is used and
23 useful for customers?

24 A If it's in the 2021 step, yes, it's used and

[WITNESS: Dudley]

1 useful. But the "used and useful" standard does
2 not reach the "prudence" standard.

3 Q And would you also agree that the final project
4 costs were still below the alternatives?

5 A It was below the alternatives. But, again, the
6 alternatives were not -- were not implemented.

7 MS. RALSTON: Thank you. Those are all
8 my questions on that project. I do have some
9 more questions. But would it be possible to take
10 a brief break?

11 CMSR. SIMPSON: Yes. Let's take a
12 ten-minute break. We'll return here at 10:45.

13 MS. RALSTON: Thank you.

14 CMSR. SIMPSON: Off the record.

15 *(Recess taken at 10:35 a.m., and the*
16 *hearing resumed at 10:52 a.m.)*

17 CMSR. SIMPSON: Please proceed,
18 Attorney Ralston.

19 MS. RALSTON: Thank you.

20 BY MS. RALSTON:

21 Q Mr. Dudley, we're going to discuss Emerald Street
22 now.

23 A Okay.

24 Q So, if you can turn to the transcript, at

[WITNESS: Dudley]

1 Page 196, Lines 13 through 18.

2 A Okay, I am there.

3 Q Okay. And do you see that you were asked a
4 question by your counsel as to whether "it is
5 correct that the underlying Settlement sort of
6 has a threshold that says...the step adjustment
7 won't include "growth-related projects"?" And
8 you answered "yes", that is your understanding of
9 the Settlement. Do you see that?

10 A Yes, I do.

11 Q And, on the following page, 197, Lines 14 through
12 22, do you see where your counsel is asking you
13 whether "it is your understanding that the reason
14 for not including load growth or growth-related
15 projects in a step adjustment is because the step
16 adjustment is one-sided," meaning that it
17 "doesn't recognize any changes in the Company's
18 revenues, as were examined in the underlying test
19 year?" Do you see that?

20 A Yes, I do.

21 Q And your answer -- and your answer to that was
22 "our understanding" -- "That is our
23 understanding, yes." Correct?

24 A Correct. Yes.

[WITNESS: Dudley]

1 Q And by "our", you mean "Department of Energy",
2 correct?

3 A Correct.

4 Q And, turning now to transcript Page 201, at Lines
5 17 through 24, your testimony is that Department
6 of Energy "does not contest the whole idea that
7 the equipment in the substation is at or near its
8 obsolescence." But that the project
9 documentation references "new additional
10 loading". Is that correct?

11 A Yes.

12 Q And did you hear the Company's testimony on
13 September 20th that the area study referencing
14 3.1 percent growth was developed in 2012?

15 A Yes.

16 Q And did you hear the Company's testimony, also on
17 September 20th, that that "3.1 percent load did
18 not materialize"?

19 A Yes, I did.

20 Q And did you hear the Company's testimony that the
21 "growth forecast played no role in the solution
22 ultimately selected for Emerald Street"?

23 A Yes, I did hear that.

24 Q Did you hear the Company's testimony that it

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1 acquired a mobile transformer to address the
2 particular loading issue identified to occur in
3 2014, eliminating that issue from consideration?

4 A I recall the use of the mobile transformer, yes.

5 Q And did you hear the Company's testimony that the
6 capacity of the substation is lower today than
7 before the Emerald Street upgrade?

8 A Yes, I did hear that.

9 Q And did you hear the Company's testimony that
10 "the station is not oversized", and it is "needed
11 for reliability purposes to provide redundancy
12 and backup"?

13 A Yes, I do recall that.

14 Q So, is it your testimony today that the Emerald
15 Street upgrade was completed to address load
16 growth?

17 A Well, my testimony today is that, first of all, I
18 heard Mr. Johnson's testimony. He mentioned
19 that -- that the load growth did not materialize.
20 Our understanding is that Eversource came to that
21 realization once the project was underway.

22 But our view of what Mr. Johnson told
23 us is essentially hindsight. In other words,
24 hindsight doesn't apply to our review of what's

[WITNESS: Dudley]

1 going on here. And, by that, I mean that what
2 we're interested in is what the Company knew, or
3 should have known, at the time it made its
4 decision. And it's obvious to us, from the --
5 from the Keene Area Study itself, and the initial
6 technical statement, which went to approval at
7 Eversource for the project, both of those
8 documents represent load growth. And the
9 technical statement from Eversource stated that
10 it "relied on the Keene Area Study", and that
11 part of that was additional loading at the
12 substations provided by that load growth.

13 So, all the indications to us that
14 we've -- from reading that initial documentation
15 is that, at the time of project inception, load
16 growth was a key factor in driving the need for
17 the project.

18 Q I think we established earlier that the
19 Settlement Agreement provided for three step
20 adjustments, correct?

21 A Yes.

22 Q Okay. And those three step adjustments are
23 addressed in Section 10.3 of the Settlement,
24 correct?

[WITNESS: Dudley]

1 A Yes, they are.

2 Q Okay. And do you recall that the Settlement
3 Agreement spelled out the terms and conditions of
4 each of the three step adjustments?

5 A Yes, I do.

6 Q And do you recall the language that -- do you
7 recall that language was included specifying the
8 types of projects and programs that would be
9 included in each step?

10 A Yes.

11 Q Is there language in Section 10.1 of the
12 Settlement Agreement specifying the types of
13 projects and programs that would be included in
14 each step?

15 A Let me just get there.

16 Q Sure. Exhibit 16, at Bates 020.

17 A Okay. And you said "Section 10", correct?

18 Q 10.1.

19 A 10.1. Yes, I have it.

20 Q Okay. And do you see Section 10.1(c)ii, where it
21 states "This step shall include only allowed
22 projects and programs closed to plant in 2021,
23 excluding new business/growth-related projects"?

24 A Yes.

[WITNESS: Dudley]

1 Q And that's referencing "Step 3", correct?

2 A Correct.

3 Q Okay. And is this the language that you are
4 relying on to recommend that the Emerald
5 Substation Project be excluded as a growth
6 project?

7 A Yes.

8 Q Do you recall that this exact same language was
9 used for Step 1, in Section 10.1(a)ii? And you
10 can just look, you don't have to recall.

11 A Yes, I see that.

12 Q Okay. And do you see the same language for Step
13 2, in Section 10.1(b)ii?

14 A I do, yes.

15 Q Okay. And do you recall that Step 2 contained a
16 provision, Section 10.1(b)iii, regarding
17 specification of the projects that were eligible
18 to be included in the step recovery?

19 A I'm sorry, you're referring to Subsection iii?

20 Q Yes, 10.1(b)iii, where it states "The projects
21 and programs that may be included in this step
22 are identified in the listing attached as
23 Appendix 5. The Settling Parties agree that the
24 Company may substitute projects prior to the

[WITNESS: Dudley]

1 commencement of the review period if projects
2 identified in this appendix are not deployed."

3 A Yes. I do see that.

4 Q Okay. Since the time of the Settlement
5 Agreement, have you reviewed the list of projects
6 included in Appendix 5 to refresh your memory?

7 A No. My focus was primarily on what was submitted
8 by Eversource in this docket, which was the --
9 what we referred to as the "Master List".

10 Q Okay. If we turn to Appendix 5, which you should
11 have in front of you, at Page 6 of 10, do you see
12 that the title says "Step Adjustment 2 - Projects
13 Anticipated to be Placed in Service in 2020
14 Excludes New Business Projects"?

15 A Yes, I do see that.

16 Q And do you see, on Page 7 of 10, at Line 56, it
17 states "Specific Project A14W01: Emerald Street
18 S/S"?

19 A That's "Line 59".

20 Q Oh. Thank you.

21 A Yes, I do see it.

22 Q Okay. And Step 2 covered completed plant
23 additions in 2020, is that correct?

24 A Yes.

[WITNESS: Dudley]

1 Q So, your testimony is that the Settlement
2 Agreement went so far as to include a specific
3 listing of projects designated as "not new
4 business", and that may be recovered in the step,
5 but also included the Emerald Street Substation
6 that you're asserting is ineligible for recovery?

7 A Well, I don't -- I don't recall that from the
8 second step adjustment. I guess my question
9 would be, what part of the Emerald Street
10 expenditure was included in Step Adjustment 2,
11 since it's also being -- since recovery is also
12 being sought in the third step adjustment? I
13 guess that would be a question.

14 Q Well, this is --

15 A But I do -- I don't argue with you that it's here
16 on the list.

17 Q Okay. And just to clarify, this was the list of
18 projects expected to be included in Step 2.

19 A Okay.

20 Q Not necessarily what was included in Step 2.

21 A Okay.

22 Q And I believe earlier you testified that you
23 participated in the development of the Settlement
24 Agreement, including review of documents,

[WITNESS: Dudley]

1 correct?

2 A I did. But I did not draft the language
3 concerning growth.

4 Q Okay. Why would the Parties specifically state
5 that "the listed projects may be included in this
6 step", and then include a project like Emerald
7 Street, if it could not be included?

8 A Your question is "why was it included if it
9 cannot be included?"

10 Q Yes.

11 A I don't know.

12 Q Okay. The Emerald Substation Project was
13 completed and closed in 2021, instead of 2020, is
14 that correct?

15 A Yes.

16 Q Okay. And, so, can I refer you back to
17 Exhibit 1, the Master List?

18 A Yes. Just one second. Yes. Okay, I'm there.

19 Q Okay.

20 CMSR. SIMPSON: Do you have a Bates
21 page on Exhibit 1?

22 MS. RALSTON: Yes. Bates 029.

23 CMSR. SIMPSON: Thank you.

24 MS. RALSTON: On Line 15.

[WITNESS: Dudley]

1 BY MS. RALSTON:

2 Q And do you see that Line 15 is for Project Number
3 "A14W01", "Emerald Street S/S"?

4 A Yes, I do.

5 Q And did the Company provide information in
6 Exhibit 15, at Bates 009 through 010, explaining
7 the reasons that this project completion was
8 delayed from 2020 to 2021?

9 A The actual explanation for the delay was actually
10 contained in a data response, as I recall.

11 Q Yes. Exhibit 15 is the data request I'm
12 referring to.

13 A Okay. And that would be -- I'm just checking,
14 but I believe it's "Data Request TS 1-006"?

15 Q I think I'm referring to the one from TS Set 3,
16 but there could be additional information in
17 another request.

18 A Okay.

19 CMSR. CHATTOPADHYAY: Can you repeat
20 the page number for Exhibit 15?

21 MS. RALSTON: Yes. Bates Page 009.

22 **BY THE WITNESS:**

23 A Yes. Okay, Ms. Ralston. So, it also involves
24 TS 3-002?

[WITNESS: Dudley]

1 BY MS. RALSTON:

2 Q Okay. Yes. That's the one I'm referencing.

3 A Okay.

4 Q Yes. Okay. And then, if we could turn to the
5 transcript, at Page 207, Lines 2 through 4. You
6 state here that "it is correct that there was
7 nothing in the initial filing that went to
8 address the variance", is that correct?

9 A If I may just read it?

10 Q Sure.

11 A You're referring to Mr. Dexter's question?

12 Q Yes. Yes, I guess you didn't state it, but you
13 agreed with Mr. Dexter's characterization.

14 A Yes. And I believe Mr. Dexter is referring to
15 the \$3 million variance.

16 Q Okay. And at Lines 13 through 17, you state that
17 "the Company did provide the project documents
18 that were required as laid out in the
19 Settlement", correct?

20 A Yes, they did.

21 Q But your testimony is that a detailed variance
22 analysis should have been included in the initial
23 filing?

24 A Well, what we discovered in looking at the

[WITNESS: Dudley]

1 project documentation was that we did receive the
2 Supplement, which involved the \$5 million
3 increase, \$5.8 million increase in 2009, for a
4 total of \$16.8 million. But what we found in
5 Exhibit 1, in the Master List, was that the
6 amount actually put into rate base was
7 approximately 20 million. So, there was a
8 \$3 million variance, which is disclosed here.
9 But there's nothing -- there's nothing in the
10 project documentation that discusses that or
11 describes it.

12 Q If we turn to Exhibit 1, at Bates 029, Line 15
13 again, you see the "Emerald Street Substation"
14 listed there?

15 A Yes.

16 Q And it calculates a variance of approximately
17 \$3.4 million, in Columns N and O, respective --
18 or, 20 percent, in Column N and Column O,
19 respectively?

20 A Yes, I see that.

21 Q Okay. Does it also state, in Column U, over to
22 the right, that a "Supplement is not needed as
23 the direct costs were 9.5 percent over and below
24 the threshold for a supplement"?

[WITNESS: Dudley]

1 A Yes. I saw that. And I understand it. Our
2 problem is that we -- we noticed it immediately,
3 and we were wondering what was behind it, and
4 there was nothing in the filing to explain it.
5 But I understand why a supplement wasn't filled
6 out, that's under the policies and procedures.

7 Q So, earlier you testified that the "initial
8 filing was satisfactory to Department of Energy",
9 but you also are testifying that they should have
10 included additional details?

11 A Well, what we have is, Ms. Ralston, in Exhibit 1
12 is a Master List, showing a variance of
13 \$3 million. But nothing in the filing to explain
14 it. So, obviously, we're going to ask the
15 question.

16 Q And do you recall that, pursuant to the Company's
17 capital authorization policy, that a Supplemental
18 Request Form is a document that would require a
19 written justification for an increase?

20 A Yes, I understand that.

21 Q And do you recall that a Supplemental Request
22 Form is not needed for distribution operation
23 projects over \$250,000, if the actual direct
24 costs do not exceed 10 percent of budgeted direct

[WITNESS: Dudley]

1 costs?

2 A Yes. Yes, I understand all of that.

3 Q Okay. And did you check to see whether the
4 documentation produced for the Emerald Street
5 Project was consistent with the capital
6 authorization policy?

7 A My assumption was that it was.

8 Q And, if the project documentation was consistent
9 with this policy, then a variance of direct costs
10 less than 10 percent does not need a written
11 variance justification, correct?

12 A That's correct, but we do.

13 Q And, so, you state that you had to inquire about
14 it at the August 31st technical session, but that
15 the variance was also identified in the original
16 filing, correct?

17 A Yes.

18 Q Okay. Out of the 66 projects listed in Exhibit
19 1, at Bates Page 029, approximately 50 of those
20 have negative variances, between pre-construction
21 and post-construction costs, indicating that
22 project costs were less than estimated. Would
23 you agree with that?

24 A I did not make a count. But I'm willing to

[WITNESS: Dudley]

1 accept your statement.

2 Q Of the 16 projects that have positive variances,
3 only eight have variances greater than 10
4 percent. Would you agree to that, subject to
5 check?

6 A Subject to check, yes.

7 Q So, if you wanted an explanation of the variance
8 that went beyond the Company's project
9 documentation requirements, why didn't the
10 Department of Energy issue data requests?

11 A Well, I thought that we did. We certainly talked
12 about it in the tech session, which gave rise
13 to -- if you just give me a moment to get there.

14 Well, first of all, it gave rise to
15 TS 1-006S, only because it was explained to us in
16 the tech session that there were additional costs
17 associated with environmental cleanup, including
18 PCB contaminated material that contributed to
19 that cost overrun.

20 We did inquire about it further. We
21 did inquire about it further in TS 3-002, where
22 we discuss the \$3.4 million cost that was in
23 excess of the approved, the supplement --
24 approved supplement amount. So, we did inquire

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[WITNESS: Dudley]

1 about it.

2 Q So, you just referenced "TS 1-006". The Company
3 provided that response in July, would you agree?

4 A Yes, they did.

5 Q Okay. And do you recall whether that response
6 reflected the total project cost?

7 A I'm looking through it now.

8 Q I'm looking at Exhibit 5, at Bates 038.

9 A Just a moment.

10 Q 039, sorry.

11 A No, I don't see the total cost mentioned. What I
12 do see are additional costs that came into play
13 as the project progressed.

14 Q Can you turn to Bates Page 039 of Exhibit 5? Do
15 you see the chart on that page?

16 A Again, I'm sorry, I don't have the Bates pages.
17 But I'm assuming it's Page 3 of that response?

18 Q Page 5.

19 A It's Page 5? Okay. I have a chart on Page 7,
20 Page 7 of 7 of that data response.

21 Q Are you looking at TS 1-006 or a supplemental
22 response?

23 A I'm looking at "TS 1-006S".

24 Q Okay. I think that's where the problem is. I'm

[WITNESS: Dudley]

1 looking at the original response.

2 A You're looking at the original?

3 Q Yes.

4 A Okay. All right. Let me see if I can pull that
5 up.

6 [Short pause.]

7 **BY THE WITNESS:**

8 A Okay. I think this was part of a -- if I'm not
9 mistaken, it was part of a mass filing of
10 responses. So, if you have a hard copy you can
11 share with me, Ms. Ralston, that would be
12 wonderful.

13 MS. RALSTON: Give me one moment.

14 *[Atty. Ralston distributing document to*
15 *the Witness.]*

16 WITNESS DUDLEY: Okay. Thank you.

17 BY MS. RALSTON:

18 Q And, if it's helpful, if you turn back to Bates
19 Page 035, Part (d) of the request was to provide
20 a "Final cost breakdown...of the \$19.5 million".

21 A Yes, I see that. And the reason for that was to
22 confirm that there's an associated project with
23 this project, which was a transmission project.
24 And the reason for that request was to make sure

[WITNESS: Dudley]

1 that costs from the transmission project were not
2 commingled with the distribution project.

3 Q Yes. And then, on Bates Page 039, there's a
4 chart showing a breakdown of the costs, correct?

5 A Yes.

6 Q Okay.

7 A Showing both distribution and transmission.

8 Q Right. And, so, the Company received that
9 breakdown as part of this response. And then,
10 the Company also received the additional detail
11 you previously mentioned, in response to TS 3-002
12 on August 31st, correct?

13 A Yes.

14 Q Okay. So, is it your position that the Company
15 has failed to provide sufficient documentation or
16 that you simply had additional questions?

17 A Well, we had additional questions. TS 1-006,
18 again, involved costs that may have been from the
19 transmission project that may have been carried
20 over to the distribution project. We're not
21 saying that they were, we just wanted to confirm
22 that they weren't. We were able to confirm that
23 they were not.

24 But, then, as time went on, we became

[WITNESS: Dudley]

1 more curious about what led up to the 3.4 million
2 cost overruns. And then, we had the follow-up --
3 or, actually, Eversource provided us with the
4 Supplement. And that is where we see, on Bates
5 Page, I do have Bates pages on this one, Bates
6 Page 005, we see, in TS 3-002, there's a chart or
7 a table that provides the \$3.4 million amount.
8 Again, that was TS 3-002.

9 Q Correct.

10 A So that, actually, in a roundabout way to answer
11 your question, that's what we were looking for,
12 in terms of the 3 million.

13 Q What was provided in 2- -- 3-002?

14 A Yes.

15 MS. RALSTON: Okay. Thank you. No
16 further questions.

17 CMSR. SIMPSON: Okay.

18 MR. DEXTER: Commissioner, could I just
19 ask for an exhibit number on that last exchange?
20 When Mr. Dudley said it was provided in "TS
21 1-003", is that Exhibit 9? No. Fifteen.

22 MS. RALSTON: I think he was referring
23 to 3-002, correct?

24 MR. DEXTER: 3-002.

[WITNESS: Dudley]

1 WITNESS DUDLEY: Yes. I have it,
2 Mr. Dexter, as Exhibit 15.

3 MR. DEXTER: Exhibit 15. And can you
4 give the page number please?

5 WITNESS DUDLEY: And it starts on
6 Page 4.

7 MR. DEXTER: Okay. Okay. Thank you.
8 Exhibit 15, starting at Page 4. Thank you.

9 WITNESS DUDLEY: Yes.

10 CMSR. SIMPSON: Ms. Ralston, you
11 referred to a letter from the Department of
12 Energy filed on September 16th of 2022, listing a
13 list of recommended disallowances?

14 MS. RALSTON: Yes.

15 CMSR. SIMPSON: Do you intend to offer
16 that as an exhibit?

17 MS. RALSTON: No, I do not.

18 CMSR. SIMPSON: Okay.

19 MS. RALSTON: I think it's been covered
20 through testimony. I was just trying to give a
21 helpful reference.

22 CMSR. SIMPSON: Okay.

23 MR. DEXTER: Commissioner, I wrote the
24 letter. I'd be happy to offer it as an exhibit,

[WITNESS: Dudley]

1 if it's helpful to the Bench.

2 CMSR. SIMPSON: Okay. I'll premark
3 that.

4 MR. DEXTER: So, that would be "Exhibit
5 18"?

6 CMSR. SIMPSON: I believe it will be --
7 I believe "18". Thank you.

8 (The document, as described, was
9 herewith marked as **Exhibit 18** for
10 identification.)

11 CMSR. SIMPSON: And, Attorney Dexter,
12 was your question answered --

13 MR. DEXTER: Yes.

14 CMSR. SIMPSON: -- with respect to the
15 prior exchange?

16 MR. DEXTER: Yes, I just -- yes, I just
17 wanted the exhibit and page number, which Mr.
18 Dudley provided, Exhibit 15, starting at Page 4.

19 CMSR. SIMPSON: Great. Thank you. All
20 right. I'll recognize Commissioner
21 Chattopadhyay.

22 CMSR. CHATTOPADHYAY: Thank you,
23 Commissioner Simpson.

24 BY CMSR. CHATTOPADHYAY:

[WITNESS: Dudley]

1 Q So, I heard that, just based on the responses
2 that you were providing to the questions,
3 basically what I grasped was that, you know, the
4 Company was providing information to you about
5 lots of projects. Some of the projects had
6 overruns, and you are focused on the overruns.
7 And then you needed more explanation as to why
8 there were the overruns.

9 The Company did get into specific
10 elements of each project, but it's still not
11 sufficiently explained to your satisfaction as to
12 why those overruns are there. So, that's how
13 I'm -- I kind of -- I thought that's what I was
14 hearing at least.

15 So, the question that I have for you to
16 start with is, can you give me a sense of, just
17 pick any project, and what kind of information
18 would you need to come to a conclusion that,
19 okay, that properly explained, you know, why
20 there was an overrun?

21 And I understand your point about the
22 burden of proof lies with the Company. But give
23 me a little bit of sense as to, when you look at
24 a project, and then they have provided the

[WITNESS: Dudley]

1 information, what additional information you
2 would have required to be able to properly
3 conclude whether a project should be included or
4 not?

5 A Well, Commissioner, we have the amounts. We know
6 what the amounts of the cost overruns were. So,
7 that's the starting point.

8 Next, we have to figure out what
9 that -- we have to get behind that number and
10 figure out what it represents. And that
11 typically involves different line items,
12 different expenditures, and what gave rise to
13 those additional expenditures.

14 So, we have the "what", in terms of the
15 numbers. We have the spreadsheets that provide
16 the numbers. But what we don't know is why those
17 costs -- why those expenditures contributed to
18 the cost increases. And not only why, but why
19 could they have not been foreseen by the Company
20 at the time of scoping and planning? That's the
21 information we don't have.

22 For example, as I stated, in a couple
23 of these projects -- a couple of the blanket
24 projects, we have these very large spreadsheets.

[WITNESS: Dudley]

1 And, yes, they total to the exact amount. They
2 list all the work order numbers, and the
3 expenditures associated with those work order
4 numbers. But what we are unable to do is to pin
5 down, within those 400 line items of
6 expenditures, what expenditures contributed to
7 the cost increase, and why? If we had that
8 information, then we could say "Okay, you know,
9 such and such a work order number, you know,
10 these problems were encountered, and that was the
11 reason for the cost increase." We don't have any
12 of that information. All we have is a 400-line
13 spreadsheet with expenditures. There's no
14 elaboration, there's no explanation.

15 And, so, as an analyst, and
16 representing the Department of Energy, I can't
17 say to you that that cost overrun was prudent,
18 because there's no support for it. In other
19 words, we need to -- we see these cost overruns,
20 we need to get behind those numbers and drill
21 down what the actual causes were. And that's the
22 information that's missing here.

23 Q So, for example, I'm just going to quickly look
24 at this, for example, Exhibit 7, right, it

[WITNESS: Dudley]

1 provides, again, to the best of my understanding,
2 what the Company is projecting initially
3 beginning of the year, and then what's --
4 whatever happened over the year, and then there's
5 a Supplement Request Form.

6 Are you saying that those, that
7 information within that document, isn't
8 sufficient for you to determine, you know,
9 whether something was done prudently or not?
10 And, if you have any opinion on what else you
11 needed, when you look at the -- that, for
12 example, what you have in Exhibit 7, what else
13 will you need to come to a conclusion that, "yes,
14 now, I can tell for sure whether this project
15 is -- the over/under is explainable or not"? So,
16 that's what I was trying to focus on. Can you
17 give me a sense of that?

18 A We need to determine what's behind those numbers.
19 For example, you're using the example of the
20 Purchase Transformers. And the explanation that
21 they provide is that "The CFI calculation was
22 updated in 2021 for the first time in several
23 years", meaning it has not been updated annually.
24 And I'm sure to their surprise, they found that

[WITNESS: Dudley]

1 those overheads had increased a lot with the new
2 formula information. And that's indeed what
3 happened.

4 Our concern -- that's one -- one of our
5 concerns is that the formula, which is used on a
6 lot of projects, wasn't updated for several
7 years. That's a big concern of ours. It should
8 be updated every year so this doesn't happen.

9 But the other problem with this is it
10 goes on to say the "Cost increases in the table
11 below include \$2.2 million increase in outside
12 services and 1.57 [1.457?] million in internal
13 labor." The question is, "what gave rise to
14 that?" Part of the answer is that they did not
15 update their model.

16 But the other part of the question is,
17 you know, "okay, so, what's actually behind those
18 numbers?" We don't know.

19 Q Did you specifically ask the questions that you
20 just raised in data requests to the Company, or
21 did you discuss those things in the technical
22 sessions?

23 A Both. We did both. We discussed them in the
24 tech session, and we also issued data requests to

[WITNESS: Dudley]

1 find out.

2 Q And your position is that those responses still
3 did not provide you enough information, as, for
4 example, the elements that you just talked about?

5 A They were not sufficient. They did provide us
6 additional information, but it wasn't specific.

7 Q Can you clarify whether those were DRs, or were
8 they something that you discussed at the
9 technical session?

10 A It was both. And, you know, we can -- at the
11 tech sessions, with some of these questions,
12 Eversource wasn't able to answer, understandably,
13 they had to take it back to the office and
14 consider it. And, so, then, we would have data
15 requests that memorialize those questions. Then,
16 we'd receive the data responses, which, as I
17 stated earlier, for at least a couple of the
18 blanket projects, we did receive the pivot
19 tables, with numerous lines of expenditures.

20 Again, our understanding with the
21 Company was they would try to pinpoint for us
22 which of those expenditures contributed to the
23 cost overruns; that didn't happen. We just got
24 the plain pivot table, and, apparently, we were

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1 supposed to figure that out for ourselves. So,
2 that's where we are.

3 Q But did you follow up on that, and ask, you know,
4 "This isn't sufficient information. The kind of
5 information we are looking at is this, and please
6 clarify"?

7 A Given the time in the procedural schedule, there
8 wasn't time for additional discovery.

9 Q But did you discuss it during a technical session
10 or --

11 A Those questions are what led up to the data
12 requests, yes.

13 Q So, you are talking post tech session?

14 A Yes. Yes. Correct. Yes. These were data
15 requests that arose out of the tech session.

16 Q When you talk about, you know, "the Company
17 should have foreseen", can you give me a sense of
18 what kind of information the Company should have
19 foreseen when providing, you know, when providing
20 estimates? Just give me some examples?

21 A Well, very generally, it's the --

22 *[Court reporter interruption.]*

23 **CONTINUED BY THE WITNESS:**

24 A -- permitting costs. When you undertake a

[WITNESS: Dudley]

1 project, our presumption is that, you know,
2 you're going to know, or you should know, that
3 there may be permitting issues, local permitting
4 issues, or state permitting issues. They go --
5 some of the supplements do go through the
6 additional costs, and state that "a lot of those
7 costs were not foreseen in the PAF." We have --
8 we have some supplementals that talk about
9 "lessons learned". Not all of them have a
10 "Lessons Learned" section, but some do. And they
11 point out the deficiencies in the original
12 scoping and planning of the project and what
13 should have been done, what should have been
14 looked like *[sic]*, like, you know, the need for a
15 contractor. Well, our presumption is that you
16 should know that, instead of hiring a contractor
17 halfway through the project. The need for
18 additional engineering around design. We feel
19 that -- we think that that's knowable.

20 Environmental issues with a project,
21 which we did find with Emerald Street.
22 Eversource has owned most of these substations
23 for many decades. There should be a history
24 there that, "Hey, we have an environmental

[WITNESS: Dudley]

1 problem at this particular location." But, as I
2 pointed out earlier this morning, a lot of the
3 time Eversource doesn't conduct a site visit,
4 they don't do a site walk-down to see what the
5 conditions are on the ground. Now, that doesn't
6 always occur; sometimes they do. What we find is
7 that that process is very spotty.

8 But, typically, those are the types of
9 things that you should do at the very least. In
10 our view, if you're going to expand the
11 substation, you should at least visit the
12 substation to find out what's going on on the
13 ground. You know, "How much is this going to
14 cost?" You know, "Do we need additional
15 fencing?" "Do we need additional permitting?"
16 "Are there going to be noise issues with the
17 neighbors, if we do this expansion?"

18 Those are all things that we believe
19 are knowable and should be considered. The list
20 is -- well, the list is quite long, Commissioner.
21 I mean, we can go on about that. But those are
22 things, to us, we believe are things that are
23 knowable, things that need to be considered.

24 And, again, you know, we go into this

[WITNESS: Dudley]

1 based on the presumption that the Eversource
2 engineers, the project managers are very
3 experienced, they're very knowledgeable. And,
4 frankly, when those types of things aren't
5 considered and aren't analyzed, we're very
6 surprised by that.

7 BY CMSR. CHATTOPADHYAY:

8 Q You mentioned "this is a long list." But did you
9 again specifically ask the Company about, you
10 know, why those elements of the list were not
11 looked at? Like, do you have any DRs or tech
12 session focused, focused questions that you can
13 remember that, you know, you actually asked the
14 Company to furnish more information why?

15 I know you were surprised. But I'm
16 just curious whether that was further probed?

17 A Well, I'm just -- I'm checking on some of them,
18 if you just give me a minute.

19 Q Yes.

20 A I know there were questions about that.

21 Q And, if it's part of the record, then good, but
22 I'm not sure it is. It may be just DRs that were
23 not provided as part of the record.

24 MS. RALSTON: If I may, the Company

[WITNESS: Dudley]

1 included all the DRs as part of our exhibits.

2 So, they should be in the record.

3 CMSR. CHATTOPADHYAY: Okay. Thank you.

4 **BY THE WITNESS:**

5 A Well, I don't have anything here, in terms of
6 DRs, Commissioner Chattopadhyay. But my
7 recollection is that they were discussed in the
8 tech session.

9 BY CMSR. CHATTOPADHYAY:

10 Q Okay. We all know that 2021, in fact, 2020 and
11 '21, they were quite peculiar years because of
12 the pandemic.

13 A Uh-huh.

14 Q Did you discuss how the pandemic may have
15 impacted what the Company had to do to get
16 projects done, given how, you know, generally, I
17 know, as far as, as an economist, that there were
18 a lot of supply bottlenecks and all of that
19 happening at the same time. Maybe that happened
20 with transformers as well.

21 And I'm just curious whether, did
22 you -- did the DOE probe the impact of pandemic?
23 And I'm just -- please respond, yes.

24 A No, we did not. We did not explore that in this

[WITNESS: Dudley]

1 docket.

2 Q Is there a reason why you didn't?

3 A Well, we took the project documentation that was
4 provided at face value. The project
5 documentation, some of which dates back two or
6 three years, mentioned nothing about the
7 pandemic. However, I do recall that we did look
8 at a project in Berlin, where Eversource did run
9 into some labor issues there, staffing issues,
10 because of the pandemic. But that was the only
11 place I recall seeing it. That Berlin project
12 was initially on our review list, but we took it
13 off. Because, frankly, we found -- we did find
14 good explanations as to why there was a cost
15 overrun on that particular project. So, we took
16 it off our list.

17 But, no. I mean, we rely on the
18 project documentation to tell us what the
19 conditions are, and under what conditions
20 Eversource made its decisions. What we reviewed,
21 except for that Berlin -- that instance with
22 Berlin, we didn't find any mention of COVID. So,
23 we didn't think to ask the question.

24 Q For that specific example, did the DOE raise the

[WITNESS: Dudley]

1 specter of pandemic or just came up as part of
2 the response, based on whatever the DR was?

3 A It would be -- it would be in the response.

4 Q Okay.

5 A But it's not the subject matter that we brought
6 up.

7 Q Okay. So, just maybe one or two more questions,
8 more just trying to understand the processes.

9 So, just going back to the Settlement,
10 if you look at Exhibit 5 -- sorry, Appendix 5 of
11 the Settlement, for Step Increase 1 and Step
12 Increase 2, there's a whole list of projects
13 there. Either part of the Settlement, or as part
14 of the discussions during the -- in the other
15 docket, I'm just curious whether there were
16 initial estimates provided for the projects?

17 A In terms of the attachment?

18 Q In terms of the attachment, but I'm saying not
19 necessarily just in the Settlement documents, but
20 you may have had a good sense of what those
21 estimates are from the docket itself. So, I'm
22 just -- I'm just curious whether you had a sense
23 of what the costs are going to be?

24 A We had some sense of what the costs were,

[WITNESS: Dudley]

1 because, subject to check, I'm going on
2 recollection, but it was either Mr. Lajoie or
3 Ms. Menard provided a forecast for the step
4 adjustments, and the forecasted expenditure
5 amounts were provided. But, again, those are
6 just forecasts. This, in the attachment, is just
7 a forecast.

8 But, yes, we did have some -- some
9 sense, in terms of what Eversource had projected
10 for step adjustments.

11 Q So, for Step 2, when you were -- if you were
12 thinking about the "overrun" question, you did
13 have a benchmark?

14 A We had a -- what we had was a projected budget
15 amount. We didn't have a firm budget amount at
16 that time. So, we didn't -- we really didn't
17 have any information on which to base a judgment.
18 That comes much later, after the project has been
19 completed, then we know or kind of know what
20 happened.

21 Q You didn't have any, even if projections, any
22 numbers for the initial estimate for Step 3, did
23 you?

24 A I don't recall. I don't believe those numbers

[WITNESS: Dudley]

1 were provided, but I would have to check on that
2 for you.

3 Q Are you concerned or DOE concerned about also
4 what those estimates may be, and whether those
5 estimates themselves are properly arrived at?
6 Just talking about the initial estimates.

7 A No, we don't have a great deal of concern about
8 it. Again, these are projections, we take them
9 at face value. We take them as we find them.
10 When the rubber hits the road is when the
11 projects are completed, and then they come in for
12 the actual step adjustment.

13 But one of our concerns, though, with
14 these kinds of step adjustments, is that they
15 essentially contain the entire capital project of
16 the utility. And that, because of that, it's
17 become a very cumbersome process to review them.
18 When I first started, when I first started with
19 the PUC, as PUC Staff, in my first two rate cases
20 I worked on, the number of projects, under a
21 single step adjustment, were about three or four
22 very large projects. Somehow, over the years,
23 this snowballed into the whole kitchen sink.

24 And, so, that's a big concern of DOE,

[WITNESS: Dudley]

1 like we are just talking about it and discussing
2 it in the IR docket that was recently opened.

3 But that's our primary concern with some of these
4 step adjustment proposals in these rate cases, is
5 that they are very, very large.

6 Q So, what I'm hearing is you kind of take the
7 initial estimates at face value, and like you
8 don't -- and then you're more concerned about the
9 overruns around that. Is that -- is that a fair
10 assessment of what I can take from what you're
11 saying?

12 A Yes. The way -- the way Eversource's budgeting
13 system operates is that, you know, when these
14 projects are proposed, you know, we get a project
15 that's a forecast. There typically is no project
16 documentation, such as a Project Authorization
17 Form, available for any of those projects during
18 this stage of the rate case, because those
19 projects are still in the inception form. So,
20 there's nothing for us to look at at that point
21 in time. That's why I say, you know, we take the
22 projections at face value, and it gives us some
23 idea of what to expect. But, short of that, we
24 have to wait until the actual step adjustment

[WITNESS: Dudley]

1 filing comes in.

2 Q Do you believe that the pandemic reality may have
3 contributed to the overruns? And I know that you
4 said you did not probe it. But do you think it's
5 possible that that might have happened?

6 A I think it's possible. However, if it was an
7 issue, our presumption is that Eversource would
8 have discussed it in the documentation.

9 CMSR. CHATTOPADHYAY: Okay. That's all
10 I have. Thank you, Commissioner Simpson.

11 CMSR. SIMPSON: Thanks, Commissioner
12 Chattopadhyay. Thanks for being here, Mr.
13 Dudley.

14 WITNESS DUDLEY: Uh-huh.

15 CMSR. SIMPSON: I have a few general
16 questions to clarify some issues, and then I'd
17 like to jump over to the letter that outlines the
18 recommended disallowances on behalf of the
19 Department of Energy.

20 BY CMSR. SIMPSON:

21 Q So, looking at the 19-057 Settlement, you were
22 involved in that case, and you're familiar with
23 the terms of the Settlement Agreement?

24 A Yes, I am.

[WITNESS: Dudley]

1 Q Do you know why we had an expected project list
2 for Steps 1 and 2, but not an expected project
3 list for Step 3?

4 A As I recall, the list for Step 3 wasn't
5 available -- it had not yet been compiled and was
6 not available.

7 Q And that would have been the Company would have
8 had some projection of projects for calendar year
9 2021?

10 A Yes. They had projections for calendar year 2020
11 and 2019. But, as I recall, that particular
12 projection was not available or not ready.

13 Q And, in principle, do you have an objection to
14 projects that were characterized as eligible for
15 either Steps 1 or 2 moving to a subsequent step?

16 A Well, it's hard to say, because, again, these --
17 these are proposed projects. Some of them may
18 happen, some of them may go away. We don't know
19 at this point in the process. So, I don't know.
20 This is a proposal. Except for the amount of
21 projects contained in it, we had some concerns --
22 well, we had concerns about the size of it. But
23 there was nothing that immediately jumped out at
24 us to make -- cause any alarm, in terms of what

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1 they were proposing, again, except for the number
2 of projects and the size.

3 Q Okay. And, as a general matter, thinking about
4 eligibility of capital placed in service for a
5 step, do you have an objection to the Company
6 doing more than they plan, if they're able to
7 strongly justify it?

8 A If they're able to strongly justify it and
9 support it, no, we have no problem with that.

10 Q Okay. There was some discussion with respect to
11 a "CFI model", and my recollection is that it
12 pertained to the Purchase of Transformers?

13 A Yes.

14 Q Is that correct?

15 A Yes. But my understanding of the formula is
16 that, if I may, I think I have that still here.

17 Q And, if you could start at the beginning of the
18 "CFI model" for me, in your own words, explain to
19 me your understanding of it and how the mechanism
20 works, that would be very helpful.

21 A Well, I can't -- I have no inner knowledge of how
22 the formula actually works. I only know what it
23 is. It's the Cost of First Installation formula,
24 and used to calculate overheads for a project.

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1 Whether or not it's used for every project, I
2 don't know that. How it is calculated, I don't
3 know.

4 What I do know, what this, the project
5 documentation, this Supplement Request Form for
6 the Purchase Transformers Project tells us is
7 that it was not updated for several years.
8 Which, as I stated, that's a concern for the
9 Department.

10 But I can't -- I wish I could tell you
11 how the formula works, but I don't know. Perhaps
12 some of the Eversource witnesses can.

13 Q Have you reviewed or interacted with that formula
14 in other cases before the Commission?

15 A I have heard of it before, yes.

16 Q And, historically, the topic of it being
17 "updated" to reflect market conditions or
18 business practice, that's not something that
19 you've been part of in the past?

20 A No, I haven't. And I don't recall, there may
21 have been discussions about it, but I don't
22 recall.

23 Q Okay.

24 A Only that I'm aware that it exists and it's used.

[WITNESS: Dudley]

1 Q Okay. Commissioner Chattopadhyay asked you some
2 questions about the impacts of the pandemic, and
3 whether the global pandemic affected the
4 Company's planning and implementation of these
5 projects. When do you think the 2021 projects
6 that are before us within the step agreement
7 would have been scoped and planned?

8 A Well, the planning process, my understanding of
9 Eversource's process, is that it begins early,
10 typically, in the last quarter of the previous
11 year. That's when they do a lot of their
12 planning. That's when the technical statements
13 go to the budget committees for approval.

14 Q Okay. All right. So, we've marked the list of
15 recommended disallowances from the Department as
16 "Exhibit 18". I'd like to jump over to that
17 please.

18 And one of the challenges that the
19 Commission has faced, in understanding both the
20 very vast record, which has several thousand
21 pages within the exhibit list, and then,
22 subsequently, the Department's recommended
23 disallowances, is trying to square both of those,
24 because we primarily have this list of

[WITNESS: Dudley]

1 disallowances and the Audit Report from the
2 Department of Energy. Is that a fair
3 characterization --

4 A Yes.

5 Q -- of what's before us?

6 A Yes.

7 Q Okay.

8 A Aside from the project documentation that was
9 submitted.

10 Q Uh-huh.

11 A And the data responses.

12 Q Which I'm including within that --

13 A Yes.

14 Q -- several thousand pages of documentation within
15 the record before us.

16 So, the Nashua Work Center Renovation
17 and the Millyard Substation Project, the Company
18 has agreed to remove those from the step. So,
19 they're not on the table anymore?

20 A Correct. Yes.

21 Q All right. And you've gone through exhibits in
22 your letter, 5 through 10. And it appears to me
23 that your concerns are driven by either two
24 issues that you've recognized in your review:

[WITNESS: Dudley]

1 Either an issue with documentation and support
2 that's been provided for inclusion within the
3 step adjustment, and/or a business process issue.
4 And we've removed the topic of the audit that's
5 ongoing. So, I don't want to bring that up.

6 A Uh-huh.

7 Q But concerns that you have with how the Company
8 has conducted themselves in planning, executing,
9 and subsequently supporting these projects. Is
10 that a reasonable characterization of your
11 concerns?

12 A That is a reasonable characterization,
13 Commissioner Simpson, but there is a different
14 aspect to that. That is that the Department has
15 a statutory obligation to provide, as much as
16 possible, a complete record for the Commission to
17 consider. And that's what we strive to do.

18 And, if we are -- if the quality of the
19 information that we get isn't sufficient for us
20 to make a recommendation to the Commission
21 regarding prudence, then we can only recommend
22 that the expenditures were imprudent. That's our
23 obligation. That's what we do. We're obligated
24 to study these projects, and to determine whether

[WITNESS: Dudley]

1 or not they were prudent and reasonable.

2 Q Okay. So, looking at Exhibit 5, would you
3 characterize your recommended disallowance as
4 primarily driven by a lack of information
5 provided to the Department by the Company, or a
6 perceived lapse in business judgment by the
7 Company?

8 A Well, Exhibit 5 is the Emerald Street Substation,
9 and we're not recommending a disallowance on that
10 one. We're recommending a deferral to the next
11 rate case.

12 Q I guess I should be clear, a disallowance from
13 this step adjustment?

14 A From the step adjustment, yes.

15 Q Okay.

16 A Yes.

17 Q And --

18 A Well, the fact -- the primary factors for us,
19 again, is "what did the Company know or should
20 have known at the time they approved the
21 project?" Well, what they -- what they did know
22 was that the project, one of the primary driving
23 factors for the project was load growth in the
24 Keene area, and that was provided in the Keene

[WITNESS: Dudley]

1 Area Study, and also asset condition. And we
2 find that repeated, not just -- we do find that
3 repeated in the Keene Study, but we also -- Keene
4 area study, but we also find it in Eversource's
5 own initial project documentation. They
6 acknowledge and accept the find -- at that time,
7 they acknowledged and accepted the findings of
8 the Keene Area Study. So, our only conclusion
9 was that "Okay, at the time that they approved
10 the project, they understood that there was going
11 to be load growth in the area, and that was a
12 factor."

13 Q So, with that in mind, why do you think, within
14 the approved Settlement Agreement, that there is
15 a line item for Emerald Street as eligible for
16 Step 2?

17 A I don't recall. I'd have to go back and look at
18 that, to see whether or not it was actually
19 included. My understanding, from Ms. Ralston's
20 questioning, was that that project was taken out
21 of Step 2. But I'd have to go back and confirm
22 that.

23 Q Okay.

24 A And the reason why it was taken out of Step 2 is

[WITNESS: Dudley]

1 it appeared in Step 3. The utilities, with these
2 step adjustments, the utilities are allowed to,
3 again, these, the list that they provide us in
4 settlement, are proposals, they're forecasts, and
5 they are allowed -- they are allowed to make
6 substitutions, if they find that necessary.

7 Q And that was primarily why I was asking you
8 earlier about the list of eligible projects
9 within Step 1 and 2, and whether you have a
10 general objection to moving projects between
11 steps for some reason or another?

12 A No. I have no objection to it.

13 Q Okay.

14 A You know, as long as it's reasonable, and we are
15 aware of it and we understand it, we have no
16 objection to it.

17 Q Okay. So, then, Exhibit 6, which is the
18 Goffstown Project, now, this one you are
19 recommending a disallowance over and above not
20 including it within the step, correct?

21 A Yes. That's correct.

22 Q And, looking at the -- recognizing the statutory
23 obligation that the Department has,
24 characterizing a gap that you see, whether in the

[WITNESS: Dudley]

1 record or in a business judgment, would you
2 characterize this disallowance in either one of
3 those or both?

4 A I would say it's both, in this particular
5 instance. Mostly business judgment, and, again,
6 that -- that is specified in the "Lessons
7 Learned" section of the Supplement.

8 Q Do you have a -- can you refresh my memory as to
9 the exhibit?

10 A That is contained as part of Exhibit 6. It is
11 the Supplement Request Form, that's dated January
12 14th, 2021.

13 MR. DEXTER: The "Lessons Learned"
14 appear on Page 4 of 11?

15 WITNESS DUDLEY: Yes.

16 BY CMSR. SIMPSON:

17 Q So, if the Company, they had a project scoped,
18 they went through the project, and at the end of
19 the day the results were not in line with what
20 they had initially predicted. And there's a
21 reflection of opportunities for improvement.
22 Explain why you believe this should be a
23 disallowance, from a business process standpoint?

24 A Well, again, the "Lessons Learned" piece to this

[WITNESS: Dudley]

1 is hindsight, right? "This is what we should
2 have done, could have done, would have done" --

3 Q Yes.

4 A -- "if we had known that to begin with." In
5 prudence review, hindsight is not applicable. In
6 prudence review, what we, again, what we look at
7 is "what did management know or what should they
8 have known at the time that they made the
9 business decision, at the time they made the
10 investment decision?"

11 Our determination on this particular
12 project, based on -- based on what was contained
13 in the "Lessons Learned" section, and based on
14 what we know from the rate case and from the last
15 two step adjustments of Eversource's scoping
16 process, that there were deficiencies in that
17 process. It wasn't scoped completely. It
18 wasn't -- there were known and knowable
19 expenditures that should have been considered,
20 and they were not. And, so, our only conclusion
21 that we can reach from that is that it was not a
22 prudent process, and that the cost overrun itself
23 is not prudent.

24 Commissioner Simpson, I mean, it's

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1 helpful -- our expectation certainly is that
2 their process is to improve. And, in some
3 respects, they have, based on some things that we
4 know about it. For example, I believe it was Mr.
5 Johnson mentioned in the last hearing about the
6 "challenge sessions" that they now have when
7 presenting a project before the capital
8 expenditure committee, the name escapes me, I
9 think it's called "EPAC". But they now have
10 challenge sessions where the judgment and the
11 completeness of an engineer's proposal is
12 questioned and challenged. That's a fairly new
13 process. My understanding is it's a fairly new
14 process. And we hope that that contributes to an
15 improved process going forward.

16 But what we are concerned with is the
17 decisions that were made in 2021. And why
18 certain elements of -- certain cost elements of
19 some of these projects were overlooked? We don't
20 have an answer to that question.

21 Q Okay. Thank you. Let's look at Exhibit 7,
22 Purchase of Transformers. So, once again, this
23 is not just a recommendation to not include these
24 costs within the step adjustment, this is a

[WITNESS: Dudley]

1 recommended disallowance in recovery, correct?

2 A Yes. Correct.

3 Q And your justification here is that the project
4 "has not been adequately explained". So, this is
5 an issue of the evidence in the record, not as
6 much a business decision?

7 A Well, no, it does include part -- it's part of a
8 business decision, because, as we -- Commissioner
9 Chattopadhyay and I talked about earlier, was
10 that the CFI formula was not updated. That's a
11 business decision. Again, it's the Department's
12 view that those formulas, those calculations
13 should be updated every year, so that this type
14 of thing doesn't happen.

15 But, no. We don't -- again, we don't
16 know what's actually behind those additional
17 expenditures. And we don't know enough about the
18 model to know what was driving it within the
19 model itself; that wasn't explained.

20 Q Okay. For Annual Reliability, once again,
21 disallowance "317,000", provide your
22 characterization for me, from fact and business?

23 MR. DEXTER: Commissioner, before the
24 witness answers, I just want to point out that

[WITNESS: Dudley]

1 that's the amount that I updated at the first
2 hearing. That's a typographical error. And the
3 recommended disallowance is "913,000".

4 CMSR. SIMPSON: Okay. Thank you. I
5 appreciate the clarification.

6 **BY THE WITNESS:**

7 A I'm sorry, Commissioner. You were talking about
8 the Reliability Annual Program?

9 BY CMSR. SIMPSON:

10 Q Yes.

11 A Okay. The problem with this one is, basically,
12 the Supplement provides no details on the
13 causes of the cost overrun. And that's on Page
14 1, if you see, if you look at Page 1 of the
15 Settlement [Supplement?], we have this, at the
16 very last line, the very last paragraph, we have
17 this very cryptic statement that says "Investment
18 in the distribution line reliability program was
19 higher than originally budgeted due to more work
20 being performed on the system than anticipated to
21 improve overall reliability of the system."

22 What that -- what that tells us,
23 basically, is "We spent more money because it
24 cost more." That's the extent of the explanation

[WITNESS: Dudley]

1 in this document. So, what are we supposed to
2 think of that?

3 You know, what -- you know, our
4 expectation at the Department is that these cost
5 overruns, these expenditures, be explained in a
6 way that we can ascertain what actually happened,
7 and why it happened. A statement like this
8 doesn't do that. It doesn't meet that standard.

9 Which is why we asked additional
10 questions in the data requests, that we received,
11 as I said, the 400 some odd line pivot table,
12 with a number of different expenditures. And
13 very interesting, you know, it all totals up to
14 the total, you know, it comes out to the exact
15 amount. But, again, it doesn't answer the
16 question as to the origin, and it doesn't answer
17 the question to the "why" of the cost overruns,
18 except for the fact that the CFI model was wrong.
19 But we still want to know what's behind those
20 numbers, and we don't. We don't know.

21 If Eversource had done what we had
22 asked them to do, which was to delineate which
23 one of those expenditures contributed to the cost
24 overruns, then it would have been easier, it

[WITNESS: Dudley]

1 would have been easier for us to ascertain. It
2 probably would have led to more questions, but at
3 least it was a starting point for us to figure
4 out what was going on. That didn't happen. We
5 don't have that information. We don't know.

6 Q We have a lot of witnesses in this docket that
7 provided testimony. Have you, and this is a
8 general question with respect to all of the
9 recommended either disallowances or deferrals,
10 have you found the responses that the Company
11 witnesses have provided on the record as
12 enlightening or informative, with respect to some
13 of the issues that you faced within your review?

14 A What we found was that the responses of the
15 witnesses pretty much mirrored what we learned in
16 the data responses. We did learn a few things
17 new about Emerald Street, and what the actual
18 load growth is there. As it turns out, it's
19 somewhere around one percent, which we would
20 argue it's still growth, it may be meager, but
21 it's still growth.

22 We learned a few other things about --
23 we learned from Mr. Plante some additional
24 information about the environmental issues that

[WITNESS: Dudley]

1 they ran into. That's all well and fine.

2 But, for the most part, no. We didn't
3 learn anything at the last hearing that would
4 cause us to change our opinion and our
5 recommendation.

6 Q Okay. In the interest of completeness, let's
7 look at 8 and 9, provide -- or, excuse me, 9 and
8 10, the "Maintain Voltage Project" and the
9 "Submarine Cable", provide a similar summary as
10 you just did for us for these two?

11 A Well, in Exhibit 9, which is the Maintain Voltage
12 Annual, again, these are all similar issues to
13 what we experienced in the Reliability Project.
14 Again, we requested, you know, a pivot table with
15 all of that cost information. We had asked
16 Eversource to please pinpoint for us in the table
17 those expenditures that contributed to the cost
18 increase; that was not done. Going down through
19 it line-by-line, we have no -- it's all very
20 interesting, but we have no idea what contributed
21 to the cost increase; only Eversource knows that.

22 And we have a justification in the
23 Supplement for additional resources that
24 Ms. Ralston referred to earlier. Again, that's

[WITNESS: Dudley]

1 fine. These are all -- these are all materials,
2 construction. But -- we have the numbers, but we
3 don't know what's behind the numbers. We don't
4 know why that happened.

5 Q And have you found the Company to be responsive,
6 when you've had the opportunity to ask them
7 questions about these issues?

8 A In some cases, yes. It's a mixed bag. In some
9 cases, yes; in some cases, no.

10 Q Do you think that looking at the step process
11 generally, the condensed timeframe presents a
12 challenge? I believe you testified to that
13 earlier.

14 A It does now, particularly now, only because we
15 are experiencing workload issues and staffing
16 issues within the Department. I've been here for
17 about eight years, and I've never witnessed
18 anything quite like that. We've lost, over the
19 past year, we've lost some very top-level people.
20 We have hired some additional people, a couple of
21 additional people. They're still in the very
22 beginnings, very infancy of their training. So,
23 much of the workload has fallen on two of us
24 within the Department.

[WITNESS: Dudley]

1 And, so, when a filing like this comes
2 in, it's, you know, it takes a lot of time, as
3 you well know now that you've look at it. It
4 takes a lot of time to go through all this
5 information and sort it out.

6 And, so, whether or not the 90 days is
7 still valid, I'm not so sure. Because, as I
8 stated before, this review process is fairly new,
9 it's only a couple of years old. And we were not
10 quite sure of what to expect when we proposed it
11 in settlement. We thought 90 days would be a
12 good timeframe to do it. Certainly, at that
13 time, we had the resources to do it, and now we
14 don't.

15 But the other -- the other major factor
16 is that this is the whole kitchen sink. Except
17 for growth projects, this is the entire capital
18 budget of the utility in every step adjustment,
19 and we have to go through it. And, in
20 Eversource's case, it's about 200 projects. So,
21 it's very time-intensive. We lost our
22 engineering expertise. We've now recaptured
23 that, with our consulting arrangement with RCG,
24 River Consulting Group. So, we do have access to

{DE 22-030} [Day 2] {10-17-22}

[WITNESS: Dudley]

1 some engineering expertise.

2 But, again, we would -- and, if you're
3 asking me what we'd recommend in the IR docket,
4 we'd probably recommend that the --

5 Q I'm not asking you that.

6 A Oh, all right. Okay.

7 Q When we, as the Commission, approved the
8 Settlement Agreement in 19-057, what do you think
9 the motivating factors were to enable the Company
10 to pursue three step adjustments prior to their
11 next base rate case?

12 A Well, the stated motivating factor is "regulatory
13 lag" is what they're concerned about, and the
14 time in between rate cases. And what this --
15 what step adjustments do is it essentially tides
16 them over until they are ready to file a new rate
17 case.

18 Q Why do you think the Commission supported step
19 adjustments at that time?

20 A They, going off recollection again, my assumption
21 is that they accepted the argument of "regulatory
22 lag". And they also saw the amount of investment
23 that the utilities were spending. And they
24 probably saw the -- and, again, this is just my

[WITNESS: Dudley]

1 presumption, they probably saw that there was
2 some justification for it.

3 I believe, in hindsight, we're now
4 relooking at that presumption. And, you know, we
5 may change it.

6 But, at the time, I think they
7 basically accepted the idea "Yes, there is
8 regulatory lag. The utilities continue to
9 invest, invest heavily in their infrastructure.
10 And we need a process to account for that."

11 That's the best I can tell you, based
12 on my understanding of what went on.

13 Q How do you think step adjustments provide for
14 rate incrementalism?

15 A I don't know. I don't know how to answer that.
16 They certainly have an impact on rates. But
17 it's -- the only thing that's missing from a step
18 adjustment review is that we're not reviewing
19 revenue requirements. It's not a revenue
20 requirement review. I've heard it referred to as
21 kind of a "mini rate case". I'm not too sure
22 that that characterization is accurate. But
23 we're certainly looking at the plant in service,
24 the rate base side of the ledger.

{DE 22-030} [Day 2] {10-17-22}

[WITNESS: Dudley]

1 And one would think that it would
2 have -- it would have an effect on the -- let's
3 say, let's refer to a term, I think I'm using the
4 right term, I'm talking about the rate shock that
5 you would see in a rate case if there were no
6 step adjustments. I don't know the extent of
7 that. That's not something that I've studied.
8 But it probably cuts down on the incrementalism,
9 the effect of not having incrementalism, in terms
10 of -- well, it also depends on how far -- how
11 many years there are in between a rate case as
12 well. That certainly has an impact.

13 But, again, I think at the time the
14 Commission's idea was "Okay, this is a smoothing
15 mechanism. This is a way to smooth it, smooth
16 things out in between rate cases. And we'll go
17 along with it."

18 CMSR. SIMPSON: I think that's all I
19 have. Thank you, Mr. Dudley.

20 WITNESS DUDLEY: Thank you.

21 CMSR. SIMPSON: Oh, excuse me.
22 Commissioner Chattopadhyay.

23 CMSR. CHATTOPADHYAY: Very quickly.

24 BY CMSR. CHATTOPADHYAY:

[WITNESS: Dudley]

1 Q Just looking at Exhibit 7, and I'm going back to
2 the issue of Cost of First Installation. I
3 recall that the first day of the hearing there
4 was a discussion about how the "Internal Labor"
5 and "Outside Services", those two rows, when the
6 numbers for the prior authorized number is zero,
7 then you have the supplemental request, and, you
8 know, that's what's driving the change, and
9 that's what's actually discussed in Page -- just
10 a moment. There's no -- there are no Bates
11 numbers. So, I'll go with -- it's 399 of 450.

12 So, you were discussing about "CFI".
13 What I'm trying to understand is, and I know
14 there was some issue with the number not being
15 reflected properly, leaving aside that issue,
16 you're essentially saying that "CFI should be
17 updated every year", right?

18 A Yes.

19 Q And have you -- have you personally, or do you
20 know of whether that is how it's done for other
21 utilities? And is that something that the DOE is
22 always aware of, you know, like there's a new
23 estimate for the CFI? Or, is that something just
24 you stumbled upon in this, in this docket?

[WITNESS: Dudley]

1 A We're not aware of it. But we did become aware
2 of it in this docket when we saw that. And, to
3 us, it's an obvious question. Economic
4 conditions change every year, inflation, the
5 inflation rate changes, especially now, interest
6 rates change. So, there's always -- there's
7 always a constant level of changes within the
8 economy and the marketplace, as you know,
9 Commissioner. And those things, those issues
10 impact, my understanding is, they impact this
11 calculation.

12 And, so, I guess the question is, "Well
13 why wouldn't they update it every year, so they
14 have an accurate result from the formula?" To
15 us, it's only prudent to update this kind of
16 information every year, again, to maintain
17 accuracy.

18 Q Purely based on my recollection, and, you know,
19 maybe I'll have to go back and read the
20 transcript again, but what is being described in
21 the chart here, which is the next page, which is
22 400 of 450, it's almost like, you know, it wasn't
23 accounted for properly, so, we're going to adjust
24 it. That's how it appears, the first two rows.

[WITNESS: Dudley]

1 Do you know what the actual numbers were?

2 And this may have been discussed in the
3 first day of the hearing. I'm just trying to get
4 a sense of "what is the actual change in the
5 CFI?" Because, clearly, the first two cells, you
6 know, this can't be true.

7 A Beyond what's represented here, Commissioner
8 Chattopadhyay, we don't know.

9 CMSR. CHATTOPADHYAY: Okay. Thank you.

10 CMSR. SIMPSON: Okay. Attorney Dexter,
11 do you have substantial redirect for your
12 witness?

13 MR. DEXTER: No. Minimal. I could do
14 it right now or we could take a break.

15 CMSR. SIMPSON: Please.

16 MR. DEXTER: Well, I think -- okay.
17 Then, I will do redirect right now.

18 CMSR. SIMPSON: Yes.

19 **REDIRECT EXAMINATION**

20 BY MR. DEXTER:

21 Q And I think I'm really just going to ask one
22 question. And it concerns Exhibit 7 that
23 Commissioner Chattopadhyay was just referring to.
24 And my question to Mr. Dudley is,

[WITNESS: Dudley]

1 there's been a lot of discussion today about the
2 "CFI", and "the Company not updating the CFI."
3 But I recall from your September 20th testimony
4 that a major concern that the Department had with
5 this Transformer Project is that the original
6 authorization listed all the transformers under
7 "Materials", and had a fairly minor amount of
8 indirect costs added to that. And that there was
9 no cost attributable to "Internal Labor" or
10 "Outside Services". Do you recall that being a
11 concern of yours on September 20th?

12 A Yes, I do.

13 Q And is that still a concern of yours?

14 A Yes, it is.

15 Q Is it a concern of yours because the information
16 that was provided in that first authorization,
17 where there was no breakdown of internal or
18 outside services, internal labor or outside
19 services, do you recall the Company testifying
20 that they had no explanation as to why that was
21 done?

22 A Yes, I do recall that.

23 Q And do you recall the Company saying that it was
24 a mistake?

[WITNESS: Dudley]

1 A Correct.

2 Q So, given that the information was incorrect, I
3 recall you testifying that that led to your
4 conclusion that the decision to purchase the
5 transformers was made on bad information, and,
6 therefore, in your mind, not a prudent decision?

7 A Yes.

8 Q Is that essentially what your testimony was on
9 September 20th?

10 A Yes, it was.

11 Q In addition to the CFI?

12 A Correct.

13 MR. DEXTER: That's all I have.

14 CMSR. SIMPSON: Okay. So, we're going
15 to take a ten-minute break.

16 Ms. Ralston, you intend to provide a
17 closing?

18 MS. RALSTON: Yes.

19 CMSR. SIMPSON: It would be helpful if
20 you're able to comment on the feasibility of
21 annual updates to the CFI in your closing.

22 MS. RALSTON: Okay.

23 CMSR. SIMPSON: If you can't, let us
24 know.

[WITNESS: Dudley]

1 MS. RALSTON: Could I ask Mr. Dudley
2 one follow-up question on the issue of CFI?
3 Would that be acceptable?

4 CMSR. SIMPSON: Attorney Dexter, do you
5 have any objection to that?

6 MR. DEXTER: I didn't ask about the CFI
7 on redirect, I don't think. And, so, I think any
8 recross would have to be limited to the redirect.
9 I think I only asked about the things other than
10 the CFI.

11 So, yes, I do object.

12 CMSR. SIMPSON: Okay. No.

13 MS. RALSTON: Okay.

14 CMSR. SIMPSON: All right. We're going
15 to take a ten-minute break. We'll return at
16 12:30.

17 MR. DEXTER: Commissioner, when -- oh,
18 we're off the record? I just wanted to --

19 CMSR. SIMPSON: We're still on the
20 record.

21 MR. DEXTER: I just wanted to ask, when
22 we return, are we moving directly to closing
23 arguments or is there anything else to do?

24 CMSR. SIMPSON: We will be moving

1 directly to closing.

2 MR. DEXTER: And could you give us the
3 order of presentation of closings before the
4 break, that might be helpful?

5 I mean, generally, this side of the
6 table goes first, and the Company gets the last
7 say. And I have no problem with that.

8 CMSR. SIMPSON: That's my intention.
9 So, we'll recognize the Department first, and
10 then the Company.

11 MR. DEXTER: Okay. Thank you.

12 CMSR. SIMPSON: Okay. We'll be back
13 at, let's say, 12:35. Off the record.

14 (Recess taken at 12:23 p.m., and the
15 hearing resumed at 12:38 p.m.)

16 CMSR. SIMPSON: Okay. Back on the
17 record.

18 I will recognize Attorney Dexter for
19 closing argument on behalf of the Department of
20 Energy.

21 MR. DEXTER: Thank you, Commissioners.

22 I want to note at the outset that I
23 indicated that our preparation for this hearing
24 today was impeded by the discovery matters that

1 arose just prior to the hearing, in an order that
2 we felt was -- at a time that we felt was not
3 consistent with the procedural schedule
4 established. And, while I appreciate the
5 Commissioners ruling on the motions, and removing
6 the business process audit from this case, which
7 I believe was the proper decision, the fact
8 remains, we appear today after a week of
9 substantial distraction. And we have done our
10 best today to present our case and our closing.
11 And we'll continue in that vein.

12 We also understand that those motions
13 have been denied, and that there's no reason for
14 us to submit further papers on those. And I
15 assume that's the case, but maybe the Bench could
16 just clarifying that at some point before we
17 close today. I am not planning on filing a
18 written response, as I indicated in my earlier
19 letter, based on today's ruling.

20 What I'd like to do in closing today is
21 essentially do what Commissioner Simpson did in
22 your cross-examination, and that is to focus this
23 case on the actual issues that are before the
24 Commission. And that are the -- those are the

1 five or six recommended regulatory treatments
2 that the Department of Energy laid out in its
3 September 16th letter, and which Mr. Dudley
4 expounded upon in testimony on the 20th of
5 September, as well as today.

6 And it's important, I think, because
7 this case is complicated. We actually have
8 different remedies proposed in some instances,
9 and we have different underlying reasons for
10 those remedies. Some of which was brought up
11 today, in the questioning by the Bench, but I
12 want to go over it in detail, because I believe
13 it's important. And I'm going to take them in
14 the order that we laid them out on in our
15 September 16th letter.

16 The deferral of the Elm [Emerald?]
17 Street Substation, our recommendation here is for
18 the Commission to keep this simple, and focus on
19 the actual -- the actual facts. The step
20 adjustment language, the language in the
21 Settlement, excludes growth-related projects.
22 That's not in dispute. The Emerald Street
23 Substation was undertaken to serve a forecasted
24 3.1 percent growth. That's not in dispute. The

1 Keene area has experienced one percent growth.
2 That's not in dispute. All of those figures are
3 annual numbers, in that they accumulate each
4 year.

5 Step adjustments don't allow for
6 growth-related projects, because step adjustments
7 don't include a revenue requirement calculation
8 of the company -- of the entire company. They
9 focus simply on the investments that are made by
10 the company on the cost side. But there's no
11 recognition of any changes in sales growth.

12 The Eversource witnesses I believe
13 indicated that there's a peak load in the Keene
14 area of 59 megawatts, if I'm not mistaken. I
15 don't know what one percent of 59 megawatts in
16 peak load, and whatever the baseload is,
17 translates into in terms of revenue. But I know
18 it's not zero. And, therefore, if the Emerald
19 Street Station is included in the step
20 adjustment, it means that the customers are
21 paying for the substation, but they are not
22 receiving recognition or a credit for the revenue
23 that was generated by the one percent growth that
24 was experienced.

1 For a citation reference for the
2 Commission to review this issue, I recommend that
3 you look at Exhibit 5, Pages 42 and 59, and
4 transcript at Page 80, which talks about the 3.1
5 percent expected growth and the one percent
6 actual growth.

7 Those are the simple facts. The rest
8 of it is sort of all noise. This is not a
9 recommended disallowance. It's not a recommended
10 imprudence. It is true that DOE and Mr. Dudley
11 explained that we have some -- we, at the DOE,
12 have some continuing questions about the \$3
13 million in cost overrun. But those are sort of
14 side issues. With respect to the Emerald Street
15 Substation, this has to do with growth.

16 Now, it is true that the Emerald Street
17 Substation was included on Appendix 2 of the
18 Settlement, which was a list of issues. There, I
19 guess what he have is a conflict within the
20 Settlement document itself. We have the
21 Settlement language that says "no growth-related
22 projects", and then we had a project on the
23 Step 2 list that's the Emerald Street Substation.
24 And we find out, after that project was actually

1 examined, that there was a Keene Area Study that
2 said that the Project was predicated on 3.1
3 percent growth. And we have testimony that one
4 percent growth actually was experienced.

5 We would not have had information like
6 that when that list was put together. And it's
7 not surprising to me that there might be a
8 project on that, I think there were 50 projects
9 on that appendix, that a project like that was on
10 that list. But the fact is, that list was for
11 year two, not year three. We're in year three.
12 We believe that the growth that was experienced
13 needs to be recognized. And the way to recognize
14 that is to defer recovery of the project until
15 the next rate case, when a revenue requirement
16 calculation that includes actual sales is
17 reflected.

18 The rest of the recommended treatments
19 are disallowances, which are different from
20 deferrals, as Mr. Dudley just stated. And the
21 reasons for the disallowances are different for
22 the various projects.

23 I want to move now to Exhibit -- the
24 Goffstown Pad-Mounted Transformer, the details of

1 which were laid out in Exhibit 6. I think
2 Commissioner Simpson asked Mr. Dudley "if this
3 was a project where the disallowance was based on
4 perceived deficiencies in the paperwork that the
5 Company provided or perceived deficiencies in the
6 management decision that was made?" And Mr.
7 Dudley answered "Yes. Both." And the reason he
8 answered "both" is because that's true. And what
9 we mean by that is, prudent decisions cannot be
10 made based on bad information. And that's
11 basically what we have here in the instance of
12 Goffstown.

13 We have a project that was brought to
14 senior management for approval at \$407,000. And
15 that project -- that \$407,000 estimate overlooked
16 many, many costs that should have been known to
17 the Company at the time it sought approval for
18 that project, including site costs, such as
19 permitting and drainage, and things that were all
20 in plain view, or should have been all in plain
21 view of the Company before they sought approval
22 for that project.

23 In fact, preliminary documents, before
24 the approval document, had a cost estimate out

1 there of \$675,000. And this is all in Exhibit 6.
2 It's only 11 pages. I can point you to Page 2 of
3 Exhibit 6, and transcript Pages 88 through 94,
4 which detail the costs that were overlooked.
5 I've pointed you to Page 11 of the Lessons
6 Learned. And I can point you to Page 6, where,
7 and the transcript at Page 99 through 100, where
8 the Company can't explain why the costs were left
9 out of the estimate -- why the site costs were
10 left out of the estimate of \$407,000.

11 Subsequently, the project cost almost
12 double, \$780,000. And the reason was, for the
13 overruns, was that many costs were not
14 considered.

15 Again, what we are looking at, in terms
16 of recovering prudent investments, are the
17 decisions that were made by the utility
18 executives at the time they were made, with the
19 information that they had or should have had. I
20 don't think there's any dispute. The Company has
21 agreed that their initial estimate, on which the
22 decision was made, was inaccurate. And,
23 therefore, the decision itself is faulty.

24 Now, the question then becomes "Well,

1 what do you do with this?" Who bears the -- who
2 bears the risk of these bad decisions?

3 The standard that we're dealing with is
4 "prudent, used and useful". No one would be able
5 to argue that the pad mount transformer in
6 Goffstown is not used and useful. It's in place,
7 and is presumably providing service. Was it
8 prudent? That gets back to the decision that was
9 made at the time. What we've proposed here is a
10 sharing of the costs of the investment in
11 Goffstown. And the sharing that we're
12 recommending is that the Company be allowed to
13 recover, in this step adjustment, the amount of
14 its initial estimate. And that they, not the
15 customers, bear the brunt of the cost overruns,
16 which are directly attributable to costs that
17 should have been included in the initial
18 analysis.

19 This is completely consistent with the
20 treatment that the Commission gave to a training
21 center built by Liberty Utilities, in Docket
22 17-048. Their decision in that case was issued
23 in April of 2018. This happens to be a much --
24 these happen to be much smaller numbers, but the

1 analysis is essentially the same. I urge the
2 Commission to review that case, and apply the
3 same result, which was a sharing of the costs.
4 In that case, Liberty was allowed to recover the
5 cost of the project at one of the estimates
6 that -- that they had presented.

7 This next disallowance that the
8 Company [Department?] recommended has to do with
9 the Purchase of Transformers. This is a little
10 bit different, because this is a so-called
11 "blanket" or "annual" project. It's not a
12 specific project that was like the Goffstown,
13 that had a specific site in mind. This is a --
14 this is a project that involved hundreds of
15 smaller projects.

16 And what we learn from Exhibit 7, Page
17 395 of 450, that, before 2021 began,
18 specifically, on December 18th, 2020, Eversource
19 went to senior management and said "We need to
20 purchase \$10.8 million in transformers." And we
21 have a document that says "Eversource will
22 purchase \$10.8 million in transformers. There
23 will be 0.8 million in overheads." And, so, the
24 request was for total transformers -- it's

1 actually transformers and regulators, total
2 budget of \$11.6 million. Ninety-three (93)
3 percent of what senior management approved was
4 going to go to materials.

5 The next document we have on this
6 project is after the year is over. On
7 January 13th, 2022, Exhibit 7, Page 400 of 450,
8 says that, in reality, only 66 percent of the
9 money that was spent in this project actually
10 went to transformers and regulators, and the rest
11 went to materials and contractors. Significantly
12 different from the 93 percent that was presented
13 to senior management.

14 Eversource has testified that the
15 original paperwork upon which senior management
16 decided to purchase the \$10.8 million in
17 transformers was wrong. It simply was wrong, and
18 they could not explain why. And I point you to
19 transcript Pages 103 to 104. They don't know why
20 it was presented that way, but it was wrong. And
21 this was confirmed on Exhibit 15, Page 33. The
22 initial paperwork was wrong.

23 So, why is this significant? It's
24 significant, because prudence of an investment is

1 determined at the time the decision was made.

2 How can a utility make a prudent decision based
3 on incorrect information?

4 I could just imagine the conversation
5 that might have occurred at Eversource, when the
6 Operations people went to senior management and
7 said "Oh, those \$10.8 million in transformers and
8 regulators that you approved, at a total cost of
9 11.6 million, that really cost a lot more." And
10 senior management says "Well, why did it cost a
11 lot more?" And Eversource says "Well, the Cost
12 of First Installation went up." And senior
13 management says "Well, what's that?" And
14 Eversource says "Well, that's labor and
15 contractor rates." And management says "Well,
16 that wouldn't affect this project. There are no
17 labor. There is no management. There is no
18 contractors. You gave me paperwork that said
19 that we needed \$10.8 million in transformers, and
20 all there was was a little under a million
21 dollars of overhead." And Eversource Operations
22 says "Well, that was wrong. Those documents were
23 wrong. And it ended up costing a lot more."
24 "Well, how much did it cost?" "Well, it cost

1 \$14.6 million." And Eversource management says
2 "Well, at least I got my \$10 million in
3 transformers, right?" And Operations says "No,
4 you only got \$9.6 million in transformers. The
5 rest went to contractors and overheads." And
6 management says "Well, you told me we needed
7 \$10.8 million in transformers. That's what we
8 needed based on history. How are we going to get
9 by with \$9.6 million?" "Well, it turns out
10 \$9.6 million of transformers was all we needed."

11 Obviously, I'm simplifying this, and I
12 don't mean to be facetious. But the question the
13 Department has is, "How can this be a prudent
14 operation?" How can a decision, based on
15 information that was so completely wrong at the
16 time the decision was made, be relied upon? How
17 can Eversource come in here and ask customers to
18 pay for \$14.9 million in transformers based on
19 the analysis that was provided here?

20 And, as Mr. Dudley testified over and
21 over today, the reason for the extra 4.something
22 million, a large contributing factor was that
23 this Cost of First Installation had not been
24 updated for many years. And, so, we have sort of

1 a two-part -- a two-part problem here. The
2 initial paperwork ignored all the contractor and
3 outside labor costs. And, when they did finally
4 put it in, they put in an amount that was far
5 more than what it would have been at the time the
6 decision was made. So, I guess what I'm saying
7 is, even if Eversource had included the
8 contractor and labor costs in a CFI in the
9 initial documentation, which they didn't, even if
10 they had, that number would have been wrong,
11 because the CFI hadn't been updated in many
12 years.

13 Again, this is -- this is a project
14 where, yes, the paperwork -- we have all the
15 paperwork that we needed. The paperwork just
16 doesn't support a prudent decision. And that's
17 why we recommended a disallowance. Again, we're
18 not recommending a disallowance of the full
19 transformer amount. We're asking that the
20 customers bear the initial estimate, and that the
21 Company bear the cost overruns. And we believe
22 that's a reasonable sharing, again, referring
23 back to that Liberty Utilities case.

24 Exhibit 8 is another annual

1 reliability -- it's an annual project, it
2 concerns reliabilities. Again, we have a cost
3 overrun of 30 percent. Annual Reliability
4 Projects, as we understand them, are estimated
5 based on past history. And that's what was
6 included in the budget.

7 We have documentation that says, when
8 asked "why the costs went up?" The answer in
9 Exhibit 8, Bates 001, says "Investments in the
10 distribution line reliability program was higher
11 than originally budgeted due to more work being
12 performed on the system than anticipated to
13 improve the overall reliability of the system."

14 So, again, paraphrasing, that says "We
15 overspent, because we overspent, because there
16 was more work." That's not really an adequate
17 answer for the Department to say "Yes, those
18 costs should be recovered. Those were prudently
19 incurred."

20 Mr. Dudley talked about the "why", as
21 opposed to the "what". We got a lot of
22 information about the "what". We got a table,
23 Exhibit 15, Bates 012 through 016, that laid out
24 line-by-line all of the various reliability

1 investments that were made. It's not clear to us
2 what they are. The captions are truncated. And
3 I guess, sure, we could have gone back and asked
4 for the full captions, and so on and so forth.
5 We don't have any doubt that the money was spent.
6 We don't really have any doubt that the money was
7 spent on reliability investments, based on the
8 truncated captions included in the pivot table.

9 But what's not there is an explanation
10 as to why additional money was spent. Eversource
11 has been in business a long time. They, we
12 believe, should have a good grip on what
13 reliability issue are going to come up. And, if
14 there are circumstances that come up that they
15 can't explain -- I'm sorry, that weren't
16 originally estimated, when they relied on
17 historical experience, then they need to explain
18 those. We have not found that the documentation
19 provides us an explanation as to why.

20 We don't know what circumstances
21 happened in 2020 that led to higher reliability
22 installations being required. We don't know what
23 alternatives were considered when the extra --
24 when the call came in for extra reliability

1 investments. We don't know whether it's
2 weather-related. We don't know whether it's --
3 we just don't know what it's about.

4 Granted, the record is not bereft of
5 information on the reliability projects.
6 Eversource has provided a lot of information.
7 They may have provided information consistent
8 with their own internal planning standards, in
9 terms of when they have to submit a supplement
10 and when they don't. But that's not really the
11 standard. The standard is that the record has to
12 be complete. And, as Mr. Dudley stated, that's
13 our job at the Department of Energy, to try to
14 present a complete record to the Department -- to
15 the Commission to make a decision. We don't see
16 a sufficient explanation to indicate why an extra
17 30 percent of reliability projects over budget
18 were installed.

19 We'll just -- we'll let the Commission
20 decide that. If you're comfortable with that
21 level of documentation, then so be it. But, in
22 our opinion, we still don't know why.

23 I'm not going to repeat the same
24 argument for the Maintain Voltage Program, it's

1 essentially the same. And I will point out that
2 the initial explanation for the Maintain Voltage
3 Program in Exhibit 9, Page 6, says "An increase"
4 -- this is Eversource, "The reason for the
5 increase" -- "An increase in the amount of work
6 required to maintain voltage within regulatory
7 limits in 2021 has necessitated this Supplemental
8 request to an increase" -- "due to an increase in
9 the authorized Direct costs, increases in
10 Materials, Construction/Outside Services, Labor,
11 Overtime, and Other categories." In other words,
12 costs went up. The Project went up, because
13 costs went up. But, again, no explanation as to
14 why additional equipment was needed. Certainly,
15 broken down in detail into subcategories. But
16 what is missing there, as Mr. Dudley said, is the
17 "why".

18 Lastly, Exhibit 10, we didn't get to
19 the Submarine Cable today. We listened to the
20 testimony of Eversource at the September 20th
21 hearing. We understand that the Company was
22 ordered to write off \$163,000. We heard
23 testimony that explained that that's where they
24 got -- that it really wasn't 163,000, because of

1 depreciation. Depreciation had already been
2 taken. And, therefore, 148,000 was all that
3 needed to be written off.

4 Again, we ask the Commission to keep
5 this simple. If you ordered Eversource to write
6 off \$163,000 for this cable, that's what
7 Eversource needs to do. If you found their
8 testimony understandable and convincing, we will
9 defer to the Commission on that. We just weren't
10 able to reach that conclusion, based on the
11 testimony that we've heard.

12 So, those are our recommendations. The
13 dollar impact of those have been -- have been
14 calculated in Bench Request Number 4. We
15 recommend that the Commission issue a decision
16 consistent with those recommendations.

17 We appreciate the time that you've
18 provided us here today. Thank you.

19 CMSR. SIMPSON: I have one question for
20 you about the record request.

21 MR. DEXTER: Yes.

22 CMSR. SIMPSON: Can you point us to the
23 salient outcome in Record Request 4?

24 MR. DEXTER: I'll need a minute to pull

1 that up.

2 *[Short pause.]*

3 MR. DEXTER: So, I'm looking at Record
4 Request 4 that was submitted on September 28,
5 2022. It refers to an attachment, which is a
6 revenue requirement calculation. And it says
7 that "The final revenue requirement for the
8 Company's revised Step 3 adjustment is provided
9 in the attachment", and it equals "\$8.9 million".
10 It goes on to say that "DOE's proposed Step 3
11 adjustments as identified in their pre-hearing
12 letter filed on September 16th, results in a
13 total revenue requirement of approximately
14 \$5.377 million."

15 I don't have the attachment. Let me
16 see if I can find the attachment.

17 CMSR. SIMPSON: I'm looking at the
18 Excel version, too. All right. Thank you.

19 MR. DEXTER: And this is a big
20 attachment. It's 173 pages. I could probably
21 scroll here, through here, and find where the
22 calculation of the Staff recommendation is
23 included. But I imagine the Company could
24 provide it for you a lot quicker.

1 But the answer is 5.377 million.

2 CMSR. SIMPSON: Okay. Thank you.

3 MR. DEXTER: Thank you.

4 CMSR. SIMPSON: Okay. Thank you. I'll
5 recognize Attorney Ralston, on behalf of the
6 Company.

7 MS. RALSTON: Thank you. I'll start by
8 just addressing your question about the "CFI", if
9 that works?

10 CMSR. SIMPSON: Please. Thank you.

11 MS. RALSTON: Yes. So, this didn't
12 come up in any great detail during the docket,
13 how the calculation works or how frequently it is
14 updated. But, during the break, the Company
15 confirmed that it updates this calculation on an
16 enterprisewide level across its three states
17 periodically. It doesn't currently do it
18 annually, and hasn't historically. But it could
19 certainly look into that, if that was something
20 the Commission thought was appropriate.

21 CMSR. SIMPSON: Okay. Thank you. I
22 appreciate that.

23 MS. RALSTON: Thank you for the
24 opportunity to speak on behalf of the Company

1 today. We would like to express our appreciation
2 for the Commission's latitude in giving us the
3 opportunity to make our case in this proceeding.
4 I know it's been a little challenging
5 procedurally. So, we appreciate the time and
6 attention of the Commission and the Department of
7 Energy to this important case.

8 In terms of our closing remarks, the
9 Company respectfully requests that the Commission
10 allow recovery of the amount of approximately
11 8.928 million starting on November 1st. The
12 Company's revenue requirement for its actual
13 plant additions in 2021 was 10.3 million. The
14 Company is capped at 9.3 million, pursuant to
15 Section 10.1(c) of the Settlement Agreement. And
16 the Company has accepted and incorporated the
17 results of DOE's audit process, as well as
18 agreeing to defer consideration of the Nashua
19 Renovation and Millyard Substation Replacement
20 Project costs to its next rate case. This
21 further reduced the request down to the total of
22 8.928 million.

23 This is a very important proceeding for
24 the Company. The Company committed to a rate

1 case stay-out in the last rate case, Docket DE
2 19-057. The current rate of return is
3 approximately 200 basis points less than
4 authorized in that case. The step adjustments
5 were intended as a mechanism to support and
6 enable the stay-out provision.

7 DOE's recommendation of a disallowance
8 of approximately \$4.7 million in costs, and the
9 deferral of a \$20 million capital project, that
10 was specifically included in the project listing
11 attached to the Settlement Agreement, cuts the
12 step allowance in half. And, for that reason
13 alone, the Commission should reject these
14 recommendations.

15 The \$4.7 million in costs that DOE
16 suggests should be disallowed are associated with
17 four projects, three of which are annual blanket
18 projects. DOE has produced no evidence showing
19 that the Company acted unreasonably or
20 imprudently in some fashion in relation to these
21 over budget amounts.

22 DOE is asking for an impossible
23 standard here. The standard would require
24 perfection before anything moves forward.

1 Real-life operations don't work that way. It's
2 not perfect, and that's exactly why the Company
3 has its internal processes and these
4 documentation practices that are put in place to
5 manage projects. And that's what we have focused
6 on and what we have produced in this docket.

7 The alleged over budget amounts for the
8 annual blanket projects are just the difference
9 between the forecasted and the actual work.
10 Nothing in the record is suggesting that these
11 programs or the costs incurred were mismanaged.
12 The Company has explained the reasons for the
13 over budget items, and demonstrated that they
14 have acted reasonably and responsibly with
15 respect to the projects in question.

16 With respect to the Emerald Street
17 Substation, the project was specifically included
18 as a project eligible for the step adjustment.
19 The project is not any way described or
20 designated as a "new business project" or
21 "growth-related". And the Company has explained
22 the reasons for the cost changes, although the
23 cost changes fall below the threshold for a
24 Supplemental Request Form.

1 Contrary to Mr. Dexter's arguments a
2 few minutes ago, the Company does dispute that
3 this is a growth project. And the Company's
4 witness, Mr. Johnson, specifically testified, on
5 September 20th, that a growth forecast was not
6 the basis for this project. And I can direct you
7 to the transcript, at Pages 63 to 64.

8 Mr. Dexter's argument that, "because
9 some level of growth -- load growth actually
10 occurred, and that should be taken as proof that
11 the project is growth-related" must be
12 disregarded. Under that logical, it's possible
13 that no projects would be appropriate for a step
14 adjustment.

15 Thank you very much for the opportunity
16 to have this additional day of hearings, and for
17 the Commission's attention this morning.

18 CMSR. SIMPSON: Okay. Thank you.

19 So, without objection, we'll strike ID
20 on Exhibits 1 through 18 and admit them as full
21 exhibits.

22 Appreciate everybody coming back for a
23 second day today. Is there anything else before
24 we leave?

1 MS. RALSTON: Yes, Commissioner
2 Simpson. I believe it's Exhibit 4 was a
3 confidential exhibit related to the Nashua
4 Renovation Project that is no longer necessary.
5 So, I think maybe we shouldn't include that in
6 the exhibits. We discussed this on the first day
7 of hearings.

8 CMSR. SIMPSON: Okay. Just a moment.
9 *[Commissioner Simpson and Atty. Speidel*
10 *conferring.]*

11 MR. DEXTER: I think Attorney Ralston
12 brings up a good point. Having been reminded, I
13 think the idea was to exclude Exhibits 3, 4,
14 and 11, because those were not at issue in the
15 case. Is that your recollection?

16 MS. RALSTON: That's correct. Yes.
17 And I would just also add, while we're
18 considering exhibits, the four record requests, I
19 don't know if we need to assign exhibit numbers
20 to those, that were filed after the first day of
21 hearing.

22 CMSR. SIMPSON: Okay. Just a moment
23 please. Just when I thought we were done.

24 *[Short pause.]*

1 CMSR. SIMPSON: Okay. So, I think we
2 just said "Exhibits 3, 4, and 11".

3 MR. DEXTER: That's right.

4 CMSR. SIMPSON: So, in the interest of
5 completeness, Exhibit 1 was the Company's
6 prefiled direct testimony; Exhibit 2 were record
7 request responses; 5 were responses with respect
8 to the Emerald Street Substation, among other
9 things; 6 pertain to the Goffstown Pad Mount
10 Installation; 7 was on Purchase of Transformers;
11 8, the Annual Reliability Project; 9 was the
12 Maintain Voltage Project; 10, the Submarine
13 Cable; 12, 13, 14, and 15 were DOE responses to
14 data and tech session data requests; newly filed
15 exhibits were 16, which was the Settlement
16 Agreement in the Company's last rate case; 17 was
17 the approval for the River Consulting Group, with
18 respect to the business process audit; and 18 was
19 the DOE disallowance letter.

20 Did I get that right?

21 MR. DEXTER: I had two things. I think
22 you said "Exhibits 12, 13, 14, and 15 were DOE
23 responses", and those were, in fact, Company
24 responses to DOE requests.

1 CMSR. SIMPSON: That's correct.

2 "Responses to DOE's requests". Thank you.

3 MR. DEXTER: Right. And then, given
4 that the ruling on the business process audit was
5 made today, --

6 CMSR. SIMPSON: Seventeen (17).

7 MR. DEXTER: -- I would suggest that 17
8 not be admitted.

9 CMSR. SIMPSON: Does the Company have
10 any objection to that?

11 MS. RALSTON: Only our objection to the
12 business process audit being deemed "irrelevant".
13 But, subject to that, no.

14 CMSR. SIMPSON: Okay. So, then, we'll
15 strike ID on Exhibits 1, 2, 5, 6, 7, 8, 9, 10,
16 12, 13, 14, 15, 16, and 18, and admit them as
17 full exhibits.

18 Anything else?

19 MS. RALSTON: Will the Company's
20 responses to record requests also be admitted as
21 exhibits, the four record requests that were
22 filed after the last hearing? The Exhibit 2 was
23 a record request the Commission issued prior to
24 the hearing.

1 CMSR. SIMPSON: Uh-huh.

2 MS. RALSTON: And then, there were four
3 issued at the September 20th hearing.

4 *[Short pause.]*

5 CMSR. SIMPSON: And those were the
6 responses that the Company filed on the 29th,
7 correct, September 29th?

8 MS. RALSTON: Yes. That's correct.

9 CMSR. SIMPSON: Any objection to
10 admitting those responses from the Department?

11 MR. DEXTER: No objection.

12 CMSR. SIMPSON: So, we'll admit the
13 responses that the Company provided to the four
14 record requests from the initial hearing, or from
15 the morning of the 20th, as "Exhibit 19", in
16 addition to the other exhibits that we just
17 discussed.

18 (The document, as described above, was
19 herewith marked and admitted into
20 evidence as "**Exhibit 19**", and
21 **Exhibits 1, 2, 5, 6, 7, 8, 9, 10, 12,**
22 **13, 14, 15, 16,** and **18** were also
23 admitted into evidence.)

24 CMSR. SIMPSON: Okay. Anything else?

1 *[Atty. Ralston indicating in the*
2 *negative.]*

3 CMSR. SIMPSON: All right. Thank you,
4 everybody, today. We'll take the matter under
5 advisement and issue an order. We're adjourned.
6 Off the record.

7 *(Whereupon the hearing was adjourned*
8 *at 1:16 p.m.)*

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