

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DOCKET NO. DE 16-383**

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

**LIBERTY UTILITIES (GSEC ELECTRIC) CORP. d/b/a LIBERTY UTILITIES  
DISTRIBUTION SERVICE RATE CASE**

**DIRECT TESTIMONY OF**

**Jay E. Dudley  
Utilities Analyst IV  
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**

December 16, 2016

## Table of Contents

|   |   |
|---|---|
| I. Introduction and Qualifications  | 1 |
| II. Summary of Testimony  | 3 |
| III. Discussion of Permanent Rate Request                                   | 4 |
| IV. Discussion of Prudence and Staff's Standard of Review                   | 7 |
| V. Findings: Review of Sample Capital Projects and<br>Related Cost Overruns |   |
| VI. Conclusions and Recommendations   |   |
| Attachments   |   |
| Attachment JED 2-1  |   |
| Attachment JED 2-2  |   |
| Attachment JED 2-3  |   |
| Attachment JED 2-4  |   |
| Attachment JED 2-5  |   |
| Attachment JED 2-6  |   |
| Attachment JED 2-7a   |   |
| Attachment JED 2-7b   |   |
| Attachment JED 2-8  |   |
| Attachment JED 2-9  |   |
| Attachment JED 2-10a  |   |
| Attachment JED 2-10b  |   |
| Attachment JED 2-11   |   |

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Mr. Dudley, please state your full name and business address.**

3 A. My name is Jay E. Dudley. My business address is 21 South Fruit Street, Suite 10,  
4 Concord, NH 03301.

5  
6 **Q. Please state your employer and your position.**

7 A. I am employed by the New Hampshire Public Utilities Commission (“Commission”) as a  
8 Utility Analyst for the Electric Division.

9  
10 **Q. Please describe your professional background.**

11 A. I started at the Commission in June of 2015 as a Utility Analyst in the Electric Division.  
12 Before joining the Commission, I was employed at the Vermont Public Service Board  
13 (“PSB”) for seven years as a Utility Analyst and Hearing Officer. In that position I was  
14 primarily responsible for the analysis of financing and accounting order requests filed by  
15 all Vermont utilities, including review of auditor’s reports, financial projections, and  
16 securities analysis. As Hearing Officer, I managed and adjudicated cases involving a  
17 broad range of utility-related issues including rate investigations, utility construction  
18 projects, energy efficiency, consumer complaints, utility finance, condemnations, and  
19 telecommunications. Prior to working for the PSB, I worked in the commercial banking  
20 sector in Vermont for twenty years where I held various management and administrative  
21 positions. My most recent role was as Vice President and Chief Credit Officer for  
22 Lyndon Bank in Lyndonville, Vermont. In that position I was responsible for directing  
23 and administering the analysis and credit risk management of the bank’s loan portfolio,

1 including internal loan review, regulatory compliance, and audit. In performing those  
2 responsibilities, I also provided oversight for the commercial and retail lending functions  
3 with detailed financial analysis of large corporate relationships, critique of loan proposals  
4 and loan structuring, consultation on business development efforts, and advised the Board  
5 of Directors on loan approvals and loan portfolio quality. Prior to my role as Chief  
6 Credit Officer, I held the position of Vice President of Loan Administration. In this  
7 position, I was responsible for directing and administering the underwriting, processing,  
8 and funding of all commercial, consumer, and residential mortgage loans. My  
9 responsibilities also included the management of loan processing and loan origination  
10 staff and partnering with the Compliance Officer to monitor and ensure compliance with  
11 all banking laws, regulations, and the bank's lending policy. Previous to my position as  
12 Loan Administration Vice President, I held the position of Assistant Vice President of  
13 Commercial Loan Administration with Passumpsic Savings Bank in St. Johnsbury,  
14 Vermont. In that role, I was responsible for supervising loan administration and loan  
15 operations within the commercial lending division of the bank.

16  
17 **Q. Please describe your educational background?**

18 A. I received my Bachelor of Arts degree in Political Science from St. Michael's College.  
19 Throughout my career in banking, I took advantage of numerous CPE opportunities  
20 involving college level coursework in the areas of accounting, financial analysis, real  
21 estate and banking law, economics, and regulatory compliance. Also, during my tenure  
22 with the PSB I took advantage of various CPE opportunities including the Regulatory  
23 Studies Program at Michigan State University (sponsored by the National Association of

1 Regulatory Utility Commissioners “NARUC”), Utility Finance & Accounting for  
2 Financial Professionals at the Financial Accounting Institute, and Scott Hempling  
3 seminars on Electric Utility Law.

4  
5 **Q. Have you previously testified before the Commission?**

6 A. Yes. I previously submitted Staff testimony to the Commission in Docket No. DE 14-  
7 238, Public Service Company of New Hampshire, Determination Regarding PSNH’s  
8 Generating Assets; Docket No. DE 15-137, Gas and Electric Utilities Energy Efficiency  
9 Resource Standard; and in the temporary rates portion of the present docket.

10

11 **II. SUMMARY OF TESTIMONY**

12 **Q. Please describe the purpose of your testimony today.**

13 A. The purpose of my testimony is to provide Staff’s recommendation involving Liberty  
14 Utilities (GSEC Electric) Corp. d/b/a Liberty Utilities’ (“GSEC” or the “Company”)  
15 request filed on April 29, 2016, to implement a permanent distribution rate increase to be  
16 effective on and after July 1, 2016, pending the Commission’s final determination in this  
17 proceeding. Based on the reports of the Company filed with the Commission, and Staff’s  
18 extensive review of the Company’s revenue requirement, rate of return, and capital  
19 expenditures, Staff recommends that the Commission make a number of adjustments to  
20 the permanent rates as proposed by the Company. Staff is recommending the following  
21 adjustments to the revenue requirement and the rate base:

- 22       • Reduction to Proposed Revenue Requirement:       \$4,489,156  
23       • Reduction to Proposed Rate Base                       \$5,803,203

1 In addition, Staff recommends denial of GSEC's proposed step increases of  
2 approximately \$2.4 million annually, except for the first increase to take effect in 2017.

3  
4 **III. DISCUSSION OF PERMANENT RATE REQUEST**

5 **Q. What is the statutory foundation for a request for permanent rates?**

6 **A.** Permanent rates are specifically allowed pursuant to RSA 378:28 which reads as follows:  
7

8 **378:28 Permanent Rates.** – So far as possible, the provisions of RSA 378:27 shall be  
9 applied by the commission in fixing and determining permanent rates, as well as  
10 temporary rates. The commission shall not include in permanent rates any return on any  
11 plant, equipment, or capital improvement which has not first been found by the  
12 commission to be prudent, used, and useful. Nothing contained in this section shall  
13 preclude the commission from receiving and considering any evidence which may be  
14 pertinent and material to the determination of a just and reasonable rate base and a just  
15 and reasonable rate of return thereon.  
16

17 Following the completion of the full proceeding, a "permanent rate" level is determined,  
18 and the difference between the temporary rate level and the permanent rate level is then  
19 reconciled through either collection from or refund to customers.

20  
21 **Q. Please describe GSEC's request for the permanent increase in rates.**

22 **A.** According to GSEC, the Company has been unable to earn its authorized rate of return  
23 under existing rates because of a deficiency in distribution revenue of \$5,328,583 as of  
24 fiscal year-end 2015. As a result, GSEC's return on rate base for 2015, related to the  
25 distribution portion of the business, declined to 5.93% as compared with the Company's  
26 authorized return of 7.90%. GSEC is seeking recovery of the \$5.3 million revenue  
27 deficiency in permanent rates; however, to allow the Company to earn at least a portion  
28 of its authorized return until the Commission makes its final determination on permanent  
29 rates, the Company proposed a temporary rate increase of approximately 60% of that

1 amount, or \$3,180,666 in additional distribution revenue.<sup>1</sup> After hearing and review, the  
2 Commission approved a temporary rate increase of \$2,354,980 (the “June Order”).<sup>2</sup> In  
3 terms of the permanent rate request, the permanent rate amount constitutes an annual  
4 increase of 9.01% in distribution revenue, resulting in an increase to the total bill for the  
5 average residential ratepayer (650 kWh) of 5.89% or \$7.28 per month as of July 1, 2016,  
6 including an increase in the Customer Charge of \$2.71.<sup>3</sup> This rate increase also  
7 incorporates GSEC’s proposed step increase intended to recover an annual revenue  
8 deficiency of approximately \$2.4 million from January 1 through December 31, 2016,  
9 based on \$14,227,039 in projected capital additions over five years. The Company is  
10 requesting that the Commission make the step increase effective at the time that  
11 permanent rates become effective following the conclusion of this proceeding, but no  
12 earlier than January 1, 2017.

13 **Q. As part of this case, did Staff complete a financial audit of GSEC’s books and**  
14 **records?**

15 **A.** Yes. A copy of the audit report prepared by the Audit Staff is included as Attachment  
16 JED 2-1 to my testimony.

17 **Q. Did Audit Staff encounter problems in the audit process and how do the problems**  
18 **relate specifically to the instant rate case?**

19 **A.** Yes. First, problems with certain aspects of the accounting records created doubt for  
20 Staff with respect to the accuracy and reliability of some entries and adjustments made by  
21 GSEC in the test year filing. Although GSEC attempted to correct and update some line

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<sup>1</sup> Mullen/Gorman Testimony on Temporary Rates at 4 (Bates 0006).

<sup>2</sup> Docket No. DE 16-383, Order of 6/30/16 at 6, 9; and Attachment 1.

<sup>3</sup> Tebbetts/Simpson Testimony; Attachment RATES-9 at 1 (Bates 0310).

1 items as suggested and highlighted by Staff witnesses during discovery,<sup>4</sup> Staff continues  
2 to have lingering doubts about the accuracy and appropriateness of some entries  
3 contained in the modified filing. A more detailed discussion of specific test year line  
4 items and adjustments, and Staff's concerns associated with those items, is provided in  
5 the testimony of Staff Witness Donna Mullinax. Second, the difficulty experienced by  
6 Audit Staff in obtaining supporting documentation of good quality,<sup>5</sup> in particular  
7 documentation associated with capital projects, is an ongoing area of concern for Staff.

8  
9 **Q. Is Staff proposing a decrease to GSEC's revenue requirements in this proceeding?**

10 **A.** Yes. As noted above, please refer to the testimony of Ms. Mullinax in which she  
11 provides detailed support for Staff's recommended decrease of \$4.5 million in GSEC's  
12 revenue requirement. Adjustments to rate base, are addressed in my testimony below.

13  
14 **Q. Is Staff convinced that its recommendations in this case will provide just and**  
15 **reasonable results?**

16 **A.** Yes. A key element of the just and reasonable standard, coupled with the statutory  
17 requirement that a utility's capital improvements must be found to have been prudently  
18 incurred, is that the Commission must weigh the conflicting interests of both the utility and  
19 the ratepayer before finding the proposed rate is just. In doing so, the Commission must  
20 measure what the public must reasonably pay against what the utility is reasonably entitled to  
21 receive. In the present docket, Staff's analysis indicates that GSEC overstated its revenue  
22 requirement by \$4.5 million, and to allow such a requirement into rates would be unjust for

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<sup>4</sup> See Technical Statement of Steven E. Mullen and Howard S. Gorman filed on 11/21/16.

<sup>5</sup> Attachment JED 2-1 at 19, 69, 73-74, 84, 96-97, 105-107.

1 GSEC's ratepayers. In addition, the Commission's expectation that a utility's investments  
2 are prudent, as directed by the statutory requirement referenced above, also rests on the just  
3 and reasonable standard such that imprudent expenditures are inconsistent with the standard  
4 and should be disallowed. Consequently, Staff has found that approximately \$5.8 million in  
5 capital expenditures were imprudently incurred by GSEC and that ratepayers should not be  
6 required to pay those costs.

7  
8 **IV. DISCUSSION OF PRUDENCE AND STAFF'S STANDARD OF REVIEW**

9 **Q. How did the issue of prudence, or imprudence, involving GSEC's capital**  
10 **expenditures become an area of concern for Staff in the present rate case?**

11 **A.** As I outlined in my prior testimony of June 14, 2016, GSEC testified that the primary  
12 driver behind the need for an increase in permanent rates is approximately \$50 million in  
13 capital investments made by the Company over the last three years.<sup>6</sup> This level of  
14 investment represents an approximate 50% increase to GSEC's rate base since its last rate  
15 case in 2013, from \$64.3 million to 97.4 million.<sup>7</sup> During the course of the temporary  
16 rates portion of this proceeding, Staff became concerned after its initial review of Data  
17 Response Staff 1-3 in which GSEC provided its itemized construction budgets and  
18 expenditures for 2014 and 2015. The spreadsheet showed originally budgeted amounts,  
19 actual expenditures, and the variance amounts for each project.<sup>8</sup> I have attached this  
20 spreadsheet to my testimony as Attachment JED 2-2.<sup>9</sup> Staff's line-by-line examination of

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<sup>6</sup> Mullen/Gorman Testimony on Temporary Rates at 4 (Bates 0006); Mullen/Gorman Testimony on Permanent Rates at 5 (Bates 0099).

<sup>7</sup> Reported plant in service as of 12/31/15, per FERC Form 1 balance sheet, was a net of \$133,503,323, or a 58% increase over the 2012 prior test year net plant figure of \$84,199,842. Attachment JED 2-1 at 7.

<sup>8</sup> GSEC submitted its proposed capital budget for 2016 as part of its rate case filing. Full Rate Case Filing requirements, Tab 23 (Bates 0172).

<sup>9</sup> The spreadsheet contains two tabs: "2014" and "2015." Projects of interest to Staff are highlighted in yellow.

1 the Attachment, specifically the capital expenditures for 2014, revealed a significant  
 2 number of very large variances involving projects that were over-budget or not originally  
 3 budgeted at all (referred to by GSEC as “emergent projects”). Although covered in my  
 4 testimony on temporary rates, some of the more substantial variances are worth  
 5 reiterating here:

| 6  | <b>Project #</b> | <b>2014 Budget</b> | <b>Actual</b> | <b>Variance</b> |
|----|------------------|--------------------|---------------|-----------------|
| 7  | 8830-CNN015      | \$193,000          | \$1,716,402   | \$1,523,402     |
| 8  | 8830-CNN016      | \$ 26,000          | \$ 780,409    | \$ 754,409      |
| 9  | 8830-CNN014      | \$ 500,000         | \$1,896,007   | \$1,396,007     |
| 10 | 8830-CNN017      | \$ 220,000         | \$1,111,296   | \$ 891,296      |
| 11 | 8830-FINANCE     | \$ 0               | \$2,414,654   | \$2,414,654     |
| 12 | 8830-C18603      | \$ 800,000         | \$1,883,152   | \$1,083,152     |
| 13 | 8830-C18720      | \$ 250,000         | \$1,447,179   | \$1,197,179     |
| 14 | 8830-CD0376      | \$1,300,000        | \$2,305,671   | \$1,005,671     |

15 Also, the variances for 2015 are less numerous but still large:

| 16 | <b>Project #</b> | <b>2015 Budget</b> | <b>Actual</b> | <b>Variance</b> |
|----|------------------|--------------------|---------------|-----------------|
| 17 | 8830-CNN014      | \$ 400,000         | \$2,050,909   | \$1,650,909     |
| 18 | 8830-CNN015      | \$ 100,000         | \$ 957,039    | \$ 857,039      |
| 19 | 8830-C36435      | \$ 50,000          | \$ 550,444    | \$ 500,444      |
| 20 | 8830-CNN011      | \$ 575,000         | \$1,848,086   | \$1,273,086     |

21 The raw data as presented in my Attachment shows that the total amount budgeted in  
 22 2014 of \$18.4 million was exceeded in actual expenditures by \$12.3 million for a total of  
 23 \$30.7 million, or 60% over budget. In terms of the total 2015 budget, the overage was

1 less severe at \$1.5 million, but the individual overages, as indicated above, were still  
2 large. At the merits hearing for temporary rates, held on June 17, 2016, GSEC provided  
3 testimony and evidence suggesting that the total amount of the overages for 2014 and  
4 2015 should be adjusted to account for expenditures previously approved by the  
5 Commission or not included in rate base, specifically \$3.5 million in approved REP  
6 expenditures, plus \$4.5 million in IT investments that GSEC excluded from the rate base  
7 filing.<sup>10</sup> After accounting for those adjustments, the total overage for 2014 and 2015 was  
8 lowered to \$5.8 million which, in Staff's view, remains a significant amount for a small  
9 utility, and does not obviate the fact that many projects were severely over-budget, nor  
10 does it diminish the need for a full prudence review as outlined below. All of the capital  
11 improvements and additions to plant represented by these expenditures, except the \$4.5  
12 million in IT, are now included in GSEC's proposed rate base which, for the purposes of  
13 this rate case, the Company calculates to be \$97.4 million.<sup>11</sup>

14  
15 **Q. What were Staff's initial concerns associated with the cost overruns and have those**  
16 **concerns changed with the introduction of additional evidence?**

17 **A.** Staff found the disparity between budgeted amounts and actual expenditures to be both  
18 numerous and significant in size, especially the costs incurred in 2014, raising some  
19 concerns as to whether the Company was sufficiently diligent in controlling those costs.  
20 One could reasonably assume that once the doubling or tripling of budgeted costs had  
21 become apparent to GSEC, it should have been clearly foreseeable by project  
22 management that those costs were escalating and that some form of corrective action

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<sup>10</sup> See Docket No. DE 16-383, Order No. 25,917 of 6/30/16 at 8.

<sup>11</sup> Mullen/Gorman Testimony Permanent Rates at 5(Bates 0099).

1 would be needed to bring costs back under control. Given the increasing number of  
2 overages (approximately 42 out of 100 projects funded in 2014, and 49 out of 90 projects  
3 funded in 2015),<sup>12</sup> which in many instances increased originally budgeted costs several  
4 times over, and given that GSEC provided little in the way of specific information as to  
5 how or why those overages occurred, it was not clear to Staff at that time that GSEC was  
6 taking appropriate measures to control costs. Indeed, as the Commission observed in its  
7 June Order: “The Commission is persuaded that the number and magnitude of budget  
8 variances set out in Exhibit 6 at 18-23 raise questions about the appropriateness of basing  
9 temporary rates on Liberty’s recent investments. Liberty’s own engineer, Mr. Brouillard,  
10 agreed at the hearing that the variances raise questions in his mind that warrant further  
11 investigation.”<sup>13</sup> As Staff proceeded with its discovery and fact finding as part of the  
12 permanent rate portion of this case, coupled with the release of Liberty Consulting  
13 Group’s (“LCG”) Management and Operations Audit of Liberty Utilities on August 12,  
14 2016, Staff’s concerns involving GSEC’s capital budgeting and planning increased,  
15 creating doubt as to whether GSEC’s management was employing good utility practices  
16 with respect to its capital projects.

17  
18 **Q. Did Staff have sufficient time during the temporary rates portion of the present**  
19 **proceeding to perform an in-depth prudence review of the cost overruns incurred**  
20 **by GSEC?**

21 **A.** No. At the merits hearing for temporary rates held on June 17<sup>th</sup> I testified that due to the  
22 statutory time constraints involved with the assessment of temporary rates, Staff did not

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<sup>12</sup> Attachment JED 2-2. Curiously, many of the “Discretionary” projects funded in 2015, approximately 46 projects, had no initial budgeted amounts established at all.

1 have sufficient time to perform a prudence review. Consequently, I represented to the  
2 Commission that such a review would be more appropriate for the permanent rates  
3 portion of this docket,<sup>14</sup> which would allow additional time for discovery and fact finding  
4 relative to the prudence of GSEC's capital expenditures.

5  
6 **Q. What approach did Staff undertake in its prudence review of GSEC's management**  
7 **of capital budgeting and expenditures?**

8 **A.** Staff reviewed GSEC's capital planning, budgeting, and management with respect to five  
9 basic benchmarks:

10 **a.) Compliance with the statutory requirements established in RSA 378:27 and**  
11 **378:28.** As noted in my brief discussion of statutory requirements above, RSA 378:28  
12 specifically incorporates "the provisions of RSA 378:27" by reference. Staff interprets  
13 this to mean that the "reasonable doubt" standard of review contained in RSA 378:27 also  
14 applies to the review of permanent rates as it does to temporary rates. Moreover, RSA  
15 378:28 requires that approval of a return "on any plant, equipment, or capital  
16 improvement" will only be allowed if such investments are "found by the commission to  
17 be prudent."

18 **b.) The prudence standard requires reasonable behavior of the utility based on**  
19 **industry norms.** That is, did GSEC act in a manner consistent with the performance of  
20 other similarly situated utilities? This area of inquiry was considered by Staff, and in the  
21 testimony of Staff Witness Cannata; however, a more detailed discussion is provided in

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<sup>13</sup> Docket No. DE 16-383, Order No. 25,917 of 6/30/16 at 8.

<sup>14</sup> Tr. 6/17/16 at 86-87, 119 (Dudley).

1 the accompanying testimony of LCG, along with its Management and Operations Audit  
2 dated August 12, 2016, filed in this docket.

3 **c.) A utility is deemed to know only those facts available at the time of its decision.**

4 Staff understands that hindsight is irrelevant in a prudence analysis. Under this line of  
5 inquiry, Staff is not necessarily interested in whether GSEC's capital investment  
6 decisions produced a favorable or unfavorable result, but whether the decision making  
7 process was a logical one given industry norms, whether it was cost effective, and what  
8 information was known or knowable (foreseeable) at that time.

9 **d.) In assessing prudence, consideration must be given to the unique roles and  
10 duties of public utilities.**

11 An electric utility delivers essential services to customers  
12 lacking alternatives in most cases. Accordingly, Staff believes that a utility's assurance  
13 of efficiency and economy in its operations is directly related to the public interest, and  
14 that a utility's duties ultimately include responding prudently to changing conditions or  
15 new challenges. An important part of this concept is the reasonable presumption that  
16 utility management possesses the requisite expertise and skill to exercise due care and  
17 diligence in conducting its operations.

18 **e.) Prudence review and analysis is fact intensive.**

19 GSEC submitted a substantial  
20 amount of data in response to Staff's data requests and Staff dedicated a significant  
21 amount of time analyzing that data. As outlined below, despite the copious amount of  
22 information submitted concerning projects in Staff's sample, Staff was unable to reach a  
23 supportable conclusion that GSEC exercised reasonable managerial judgment and  
prudence in carrying out the projects reviewed by Staff.

1 **Q. Earlier you made two references to the Management and Operations Audit of**  
2 **Liberty Utilities NH performed by LCG. What prompted the audit?**

3 **A.** As part of the Commission's Order No. 25,797, dated June 26, 2015, approving the  
4 settlement agreement in Docket No. DG 14-180, the Commission authorized an audit to  
5 review the "effectiveness and efficiency" of Liberty Utilities NH ("Liberty") business  
6 processes, including among other areas, Liberty's business planning and budgeting.<sup>15</sup> As  
7 referenced in the Order, Staff's concerns involving Liberty's operational performance  
8 since the transition from National Grid, especially in the areas of customer service and  
9 IT, prompted the audit. It should be noted that the audit covered both the operations of  
10 GSEC and Energy North, Liberty Utilities' franchised gas utility in New Hampshire. For  
11 the purposes of this proceeding, Staff concerned itself primarily with the findings in  
12 sections involving budgeting and customer service. Regarding customer service, Staff  
13 Witness Amanda Noonan, Director of the Division of Consumer Affairs, is providing  
14 testimony in this docket on that issue.

15  
16 **Q. What, if any, commonalities exist between the findings contained in the audit report**  
17 **and the findings of Staff?**

18 In terms of capital budgeting and planning, the audit highlighted and confirmed many of  
19 the same issues encountered by Staff during discovery, including but not limited to:

- 20 a) Extremely large variances between budgeted and actual capital expenditures in  
21 2014.
- 22 b) Capital budget variances that continued into 2015.
- 23 c) Lack of detailed explanations supporting and justifying those variances.

- 1           d) Significant lags in timing between capital budget approval and actual capital  
2           expenditure analysis.
- 3           e) The commencement of capital projects well in advance of project analysis and  
4           approval by management.
- 5           f) Project proposals lacked sufficient detail and content and failed to conform with  
6           internal policy.
- 7           g) Lack of cost controls and effective monitoring of capital expenditures.
- 8

9   **Q.    What additional issues did Staff discover in its review of GSEC’s capital budgeting?**

10  **A.**   Staff also found that the cost estimates contained in the capital budgets were consistently  
11  inaccurate, and that the capital planning and budgeting process itself appears to be an ad  
12  hoc, hit-or-miss process. For example, local management is given a high level of  
13  discretion in terms of capital budget tolerances and accuracy with ranges as wide as  
14  +100%/-50% for investment grade projects, unusually broad when compared with  
15  similarly situated utilities.<sup>16</sup> It is also Staff’s understanding that GSEC does not utilize  
16  the discipline of a contingency budget per se but rather addresses contingencies on a  
17  project-by- project basis.<sup>17</sup> In addition, Staff found no evidence that GSEC considered or  
18  utilized basic capital budgeting techniques such the identification of alternatives or  
19  exclusivities and dependencies among alternatives, or least cost planning, for any of the  
20  over-budget projects reviewed in the sample. For a more detailed analysis of GSEC’s

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<sup>15</sup> See Docket No. DE 14-180, Order No. 25,797 of 6/26/15 at 15.

<sup>16</sup> Cannata Direct Testimony at 15. Liberty Consulting Group Direct Testimony at 15-16.

<sup>17</sup> During a Technical Session held on November 17, 2016, GSEC informed Staff that it does not have a contingency budget and addresses contingencies on a project by project basis.

1 budgeting process, Staff directs the reader to Section III of LCG's audit report and their  
2 testimony filed in this proceeding.

3  
4 **Q. At a high level, please briefly summarize the capital budgeting process at GSEC.**

5 **A.** The capital budget process for GSEC begins in August of each year with the New  
6 Hampshire Director of Engineering preparing the local capital expenditures budget based  
7 on feedback obtained throughout the year from operations managers, the director of  
8 electric operations, and engineering personnel.<sup>18</sup> With that information, the capital  
9 expenditure estimates are prepared covering numerous "blanket" programs, discretionary  
10 and mandatory projects, among other categories. A five-year capital budget forecast is  
11 also prepared. At a higher level, the Vice President of Finance for New Hampshire  
12 oversees budget preparation and serves as the primary contact with senior management  
13 located at the corporate headquarters in Oakville, Ontario. Under Liberty Utilities'  
14 Policy and Procedures: Capital Project Expenditures,<sup>19</sup> attached to my testimony as  
15 Attachment JED 2-3, the preparation of a "Business Case" for each budgeted project is  
16 required. Once all of the required information is compiled and finalized, a budget  
17 package is loaded into the "Clarity" system for access by management in Oakville.<sup>20</sup>  
18 Budgets are typically approved by the Algonquin Board of Directors in early December.

19  

---

<sup>18</sup> See Attachment 1, Final Report on a Management and Operations Audit of the Customer Service and Accounting Functions of Liberty Utilities, The Liberty Consulting Group, at III-11.

<sup>19</sup> Submitted by GSEC as an attachment in response to Staff Data Request 4-2.

<sup>20</sup> Staff learned in the Technical Session held on 11/16/16, that budget packages are not physically sent to Oakville for approval but are accessed electronically by management and the Board of Directors through the "Clarity" application.

1 **Q. What internal documentation from GSEC did Staff examine as part of its prudence**  
2 **review?**

3 **A.** Through Data Request Staff 10-40, Staff sought to obtain and review the following  
4 documents for Staff's project sample:

- 5 a. Business Cases and Capital Expenditure Summaries
- 6 b. Spending Schedules/Capital Plans/Capital Work Plans
- 7 c. Monthly Capital Reports
- 8 d. Work orders
- 9 e. Purchase orders
- 10 f. Change Orders
- 11 g. Over-spending Requests
- 12 h. Monthly Variance Reports
- 13 i. Year End Variance Reports for 2014 and 2015
- 14 j. Project Close-out Reports

15 Staff also requested and obtained the following additional information:

- 16 a. Emergent Projects (According to GSEC's response to Data Request Staff 10-30,  
17 GSEC did not have any emergent projects in 2014 and 2015; however, LCG's  
18 audit indicates otherwise.<sup>21</sup>)
- 19 b. Five-Year Investment Plans and Five-Year Capital Forecasts for 2014 and 2015  
20 (Data Request Staff 10-36)
- 21 c. Monthly President's Report for Liberty NH Operations 2014 and 2015. (Data  
22 Request Staff 10-38)

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<sup>21</sup> Attachment 1 at III-12 to III-15.

1 d. “Variances and Lessons Learned” Reports for 2014 and 2015 (Data Request Staff  
 2 10-39)

3 As referenced below, not all of the requested documentation was submitted or available.

4 **V. FINDINGS: REVIEW OF CAPITAL PROJECTS SAMPLE AND COST OVER**  
 5 **RUNS**

6 **Q. What specific projects did Staff include in its examination?**

7 **A.** Staff compiled a sample list of projects with cost over runs for 2014 (17 projects) and  
 8 2015 (12 projects) from the list of budgeted projects represented in Attachment JED 2-2.

9 That sample list for 2014 is provided in the table below:

10 **Table 1: 2014 Sample Projects**

| Priority                                | Project #    | Project Descript.   | GSE CY2014<br>Budgeted Capital | GSE CY2014<br>Actual Capital | GSE CY2014<br>Variance<br>(Over)/Under |
|---|--------------|---|--------------------------------|------------------------------|--|
| 2 – Mandated                            | 8830-CNN015  | GSE-Dist-Reliability<br>Blanket                                 | \$193,000                      | \$1,716,402                  | -\$1,523,402                           |
| 2 – Mandated                            | 8830-CNN016  | GSE-Dist-Load Relief<br>Blanket                                 | \$26,000                       | \$780,409                    | -\$754,409                             |
| 2 – Mandated                            | 8830-CNN014  | Dist-<br>Damage&Failure<br>Blanket                              | \$500,000                      | \$1,896,007                  | -\$1,396,007                           |
| 2 – Mandated                            | 8830-CNN017  | GSE-Dist-Asset<br>Replace Blanket                               | \$220,000                      | \$1,111,296                  | -\$891,296                             |
| 2. Mandated                             | 8830-C18750  | Security Conversion<br>GSE                                      | \$130,000                      | \$455,844                    | -\$325,844                             |
| 2. Mandated                             | 8830-FINANCE | Finance Accrual   |                                | \$2,414,654                  | -\$2,414,654                           |
| <b>Mandated Total</b>                   |              |   | <b>\$1,069,000</b>             | <b>\$8,374,611</b>           | <b>-\$7,305,611</b>                    |
| 3-Growth                                | 8830-CD0291  | Sky View URD -<br>Salem, NH                                     | \$175,000                      | \$339,845                    | -\$164,845                             |
| 3-Growth                                | 8830-CNN010  | GSE-Dist-New Bus-<br>Resid Blanket                              | \$569,000                      | \$910,508                    | -\$341,508                             |
| <b>Growth Total</b>                     |              |   | <b>\$744,000</b>               | <b>\$1,250,353</b>           | <b>-\$506,353</b>                      |
| 4 - Regulatory<br>Obligations           | 8830-C18603  | Bare Conductor<br>Replacement<br>Program                        | \$800,000                      | \$1,883,152                  | -\$1,083,152                           |
| <b>Regulatory Obligations<br/>Total</b> |              |   | <b>\$800,000</b>               | <b>\$1,883,152</b>           | <b>-\$1,083,152</b>                    |
| 5-Discretionary                         | 8830-C18710  | RTU Installations -<br>LU/NG Substations                        | \$300,000                      | \$716,710                    | -\$416,710                             |
| 5-Discretionary                         | 8830-C18720  | Refreshing Existing<br>Buildings                                | \$250,000                      | \$1,447,179                  | -\$1,197,179                           |
| 5-Discretionary                         | 8830-C18740  | GSE(Capital<br>Customer Walk In<br>Centers (Salem &<br>Lebanon) | \$100,000                      | \$483,410                    | -\$383,410                             |

|                            |                 |   |                    |                     |                      |
|----------------------------|-----------------|---|--------------------|---------------------|----------------------|
| 5-Discretionary            | 8830-C36324     | MICHEAL AVE<br>SUBSTATION                         | \$150,000          | \$508,794           | -\$358,794           |
| 5-Discretionary            | 8830-CD0376     | ENFIELD SUPPLY<br>01757 NN ARP                    | \$1,300,000        | \$2,305,671         | -\$1,005,671         |
| 5-Discretionary            | 8830-C32279     | Breakers &<br>Reclosers                           | \$350,000          | \$636,380           | -\$286,380           |
| 5-Discretionary            | 8830-C36427     | Feeder Getaway<br>Cable Replacement               | \$800,000          | \$1,049,360         | -\$249,360           |
| 5-Discretionary            | 8830-METER SHOP | Meter Shop & Meter<br>Test Board Lowell Rd<br>Sal |                    | \$350,978           | -\$350,978           |
| <b>Discretionary Total</b> |                 |   | <b>\$3,250,000</b> | <b>\$7,498,483</b>  | <b>-\$4,248,483</b>  |
| <b>Grand Total</b>         |                 |   | <b>\$5,863,000</b> | <b>\$19,006,599</b> | <b>-\$13,143,599</b> |

1

2

The sample list for 2015 is provided in the table below:

3

**Table 2: 2015 Sample Projects**

| Priority                         | Project #       | Project Description                    | 2015 Budget        | 2015 Actual        | 2015 Variance<br>(Over)/Under |
|----------------------------------|-----------------|--|--------------------|--------------------|-------------------------------|
| <b>2. Mandated</b>               | 8830-<br>CNN012 | GSE-Dist-St Light Blanket              | \$ 60,000          | \$ 248,768         | \$ (188,768)                  |
| <b>2. Mandated</b>               | 8830-<br>CNN014 | Dist-Damage&Failure Blanket            | \$ 400,000         | \$ 2,050,909       | \$ (1,650,909)                |
| <b>2. Mandated</b>               | 8830-<br>CNN017 | GSE-Dist-Asset Replace Blanket         | \$ 50,000          | \$ 535,187         | \$ (485,187)                  |
| <b>2. Mandated</b>               | 8830-<br>CNN015 | GSE-Dist-Reliability Blanket           | \$ 100,000         | \$ 957,039         | \$ (857,039)                  |
| <b>2. Mandated</b>               | 8830-<br>CNN023 | GSE Distributed Generation<br>Blanket  | \$ 50,000          | \$ 311,694         | \$ (261,694)                  |
| <b>2. Mandated</b>               | 8830-<br>C36435 | Lebanon Area Low Voltage<br>Mitigation | \$ 50,000          | \$ 550,444         | \$ (500,444)                  |
| <b>Mandated Total</b>            |                 |  | <b>\$710,000</b>   | <b>\$4,654,041</b> | <b>-\$3,944,041</b>           |
| <b>3. Growth</b>                 | 8830-<br>CNN010 | GSE-Dist-New Bus-Resid Blanket         | \$ 775,000         | \$ 1,103,201       | \$ (328,201)                  |
| <b>3. Growth</b>                 | 8830-<br>CNN011 | GSE-Dist-New Bus-Comm Blanket          | \$ 575,000         | \$ 1,848,086       | \$ (1,273,086)                |
| <b>Growth Total</b>              |                 |  | <b>\$1,350,000</b> | <b>\$2,951,287</b> | <b>-\$1,601,287</b>           |
| <b>4. Regulatory Programs</b>    | 8830-<br>C18603 | Bare Conductor Replacement<br>Program  | \$1,200,000        | \$ 1,473,533       | \$ (273,533)                  |
| <b>Regulatory Programs Total</b> |                 |  | <b>\$1,200,000</b> | <b>\$1,473,533</b> | <b>-\$273,533</b>             |
| <b>5. Discretionary</b>          | 8830-<br>C36427 | Feeder Getaway Cable<br>Replacement    | \$ -               | \$ 211,969         | \$ (211,969)                  |
| <b>Discretionary Total</b>       |                 |  | <b>\$0</b>         | <b>\$211,969</b>   | <b>-\$211,969</b>             |
| <b>Grand Total</b>               |                 |  | <b>\$3,260,000</b> | <b>\$9,290,830</b> | <b>-\$6,030,830</b>           |

4

5

As referenced above, all of the internal documentation obtained from GSEC, was

6

reviewed by Staff in connection with each of these projects. However, for the purposes

1 my testimony, only three of those projects will be discussed here as representative of  
2 GSEC's capital budgeting and planning deficiencies.

3  
4 **Q. Please provide the results of Staff's review of those projects.**

5 Below we provide our findings for the sample projects based on GSEC's responses to  
6 Staff Data Requests 10-39 and 10-40.

7  
8 **1. Project #8830-C18720 Refreshing of Existing Buildings**

9 **2014 Budget: \$250,000 Actual: \$1,447,179 Variance: \$1,197,179**

10 **2015 Budget: \$0 Actual: \$ 93,925 Variance: \$ 93,925**  
11 **(\$1,048,461?) (\$1,048,461?)**

12 Business Case: This project involved the renovations of existing buildings in  
13 Lebanon and Salem to accommodate the new walk-in centers. The Business Case  
14 is dated May 1, 2014, and sets the approved budget amount at \$250,000; however,  
15 two conflicting Capital Expenditure Applications are attached (only one is  
16 required) providing two separate estimates of the expected cost: \$170,000 and  
17 \$100,000.<sup>22</sup> The source of funding is the 2014 Capital Budget. No detailed  
18 analysis is provided in the sections addressing Alternatives/Options, Financial  
19 Assessment, and Risk Assessment. The Cost Estimate section of the Capital  
20 Expenditure Application provides no details except that "Cost estimates will be  
21 calculated on an individual job basis," nor does it provide any indication that pre-  
22 construction inspections of the buildings or sizing up the extent of needed

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<sup>22</sup> GSEC explained this ambiguity in response to Staff Tech Data Request 1-16 stating that "the budget for this project was revised to \$80,000 for CY 2014 and \$90,000 CY 2015, for a total of \$170,000," indicating that the intent in 2014 was to revise the budget downward.

1 renovations were performed.<sup>23</sup> Note: For a related project, also reviewed by  
2 Staff, Project #8830-C18740 Walk-in Centers, no business case was prepared.  
3 The Business Cases for all three projects reviewed are attached to my testimony  
4 as Attachment JED 2-4.

5 Spending Schedule for 2014 and 2015: This report shows capital expenditures on  
6 a looking forward basis and, among other things, assigns a risk score between 0  
7 and 50 for each project with 50 being the highest risk score. Surprisingly, this  
8 particular project was assigned a risk score of -0-, although a related project on  
9 which a much lower amount was spent, Project #8830-C18740 Walk-in Centers,  
10 was assigned a score of 50. The 2014 report confirms the initial budget amount of  
11 \$250,000 and forecasts additional expenditures for 2015 at \$60,000 and \$30,000  
12 in 2016. The report for 2015 contained no forecasted amounts for 2016 through  
13 2018. Both the report for 2014 and 2015 is attached to my testimony as  
14 Attachment JED 2-5.

15 Capital Work Plan for 2014 and 2015: The Capital Work Plan dated January 29,  
16 2014, references the project as a “Targeted Capital Project” at page 5 and assigns  
17 a budgeted amount of \$250,000, but mentions nothing further about the project.  
18 The Capital Work Plan for 2015 makes no mention of the projects and designates  
19 a budgeted amount of \$0 at page 21. The Capital Work Plans for 2014 and 2015  
20 are attached to my testimony at Attachment JED 2-6.

21 Monthly Capital Reports 2014 and 2015: Contained within this spreadsheet, aside  
22 from the monthly reports, is a tab that summarizes the capital expenditures for all

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<sup>23</sup> During a Technical Session held on November 17, 2016, GSEC informed Staff that no pre-construction site inspections were performed by GSEC at the Lebanon and Salem locations.

1 projects for the months January through November of 2014, attached as  
2 Attachment JED 2-7a (the 2015 report is attached as Attachment JED 2-7b).  
3 According to this report, no expenditures took place until August at which time  
4 this project was immediately over budget with a total expenditure for that month  
5 of \$294,283. Expenditures then escalated each month thereafter to \$336,318 in  
6 September, \$416,230 in October, and \$257,026 in November. The monthly  
7 reports offer no explanation as to the causes of the cost escalation. The report for  
8 December is non-descript but Staff assumes that the remainder of the overage of  
9 \$143,322 was spent in that month bringing the total expenditure for the year for  
10 refreshing the buildings to \$1,447,179. The “Notes” section of the reports for  
11 those months contained no comments. In addition, Attachment JED 2-2 for 2015  
12 shows an additional over budget expenditure for this project of \$93,925.  
13 However, in response to Staff Data Request 4-14, GSEC provided Attachment  
14 Staff 4-14.2 which shows an installed investment cost in 2015 of \$1.048 million,  
15 indicating that the total 2014-2015 expenditure for this project was \$2.5 million  
16 and not \$1.54 million. This variance was also discovered and confirmed by Audit  
17 Staff during the audit process and is explained in their audit report.<sup>24</sup> The January  
18 – November Monthly Capital Report is included in Attachment JED 2-7a. The  
19 January – November tab for the Monthly Capital Report for 2015 was never  
20 compiled by GSEC and is unavailable.

21 Purchase Orders/Work Orders/Change Orders: Staff examined the purchase  
22 orders submitted for this project under Data Request Staff 10-40, Attachment

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<sup>24</sup> Attachment JED 2-1 at 18-19. See also response to Data Request Staff Tech 1-17 and Attachment Staff Tech 1-17, attached to my testimony Attachment JED 2-10a and JED 2-10b.

1 Staff 10-40.xlsx (Attachment JED 2-11) which cross-references the purchase  
2 order numbers with the related project and job numbers. GSEC submitted only  
3 one purchase order for this project dated December 11, 2014, in the amount of  
4 \$18,675 (P.O. No. 4924). However, another purchase order filed under a related  
5 project, 8830-18740 “Walk-in Centers” (P.O. No. 3162), estimated the cost of  
6 renovation for just the Lebanon location to be \$875,000 while the budget for that  
7 project was estimated by GSEC to be only \$100,000. At the technical session of  
8 November 17, GSEC noted that some charges flowed between these two project  
9 types further complicating Staff’s review. No change orders or work orders were  
10 provided<sup>25</sup> despite the involvement of outside contractors and the significant  
11 amount of work performed. Nevertheless, Audit Staff did apparently have access  
12 to some change orders for this project, although like Staff, Audit Staff was unable  
13 to obtain details on the escalations in expenditures or the reasons why they were  
14 authorized.<sup>26</sup>

15 Over-spending Request Form: Although required under Liberty Utilities’ policy  
16 and procedures for capital expenditures,<sup>27</sup> and requested as part of Staff Data  
17 Request 10-40, this form was not produced by GSEC for this project.

18 Year End Variance Report for 2014 and 2015: The report for 2014 confirms the  
19 over budget amount of \$1,197,179. The “Explanation” section lacks sufficient  
20 detail stating only that “Phase II of Lebanon Building rebuild was accelerated  
21 from 2015 to 2014” and that construction was more expensive due to “age of  
22 building, foundation conditions, and asbestos abatement.” No explanation was

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<sup>25</sup> Attachment JED 2-11 at 3.

<sup>26</sup> Attachment JED 2-1 at 19, 84.

1 provided as to why the construction was accelerated or why it was continued  
2 given the asbestos contamination and the rising costs. The report for 2015 only  
3 states: “Carryover work from 2014.” These reports are attached as JED 2-8.

4 Year End Variance and Lessons Learned Report for 2014 and 2015: This report  
5 provides the same information as the Year End Variance Report for this project  
6 with for both 2014 and 2015 with no additional elaboration on causes for the  
7 overruns or “lessons learned.” This report is attached as JED 2-9.

8  
9 **2. Project #8830-CNN016 GSE Distribution Load Relief Blanket**

10 **Budget: \$26,000 Actual: \$780,409 Variance: \$754,409**

11 Business Case: This project involved one of GSEC’s “blanket” project categories  
12 and includes costs associated with addressing “overload challenges” involving  
13 “over-utilized feeders, equipment, imbalance issues,...transformer overloading.”  
14 The Business Case is dated May 1, 2014, and sets the approved budget amount at  
15 \$26,000.<sup>28</sup> The source of funding is the 2014 Capital Budget. No detailed  
16 analysis is provided in the sections addressing Alternatives/Options, Financial  
17 Assessment, and Risk Assessment. For example, the Alternatives and Risk  
18 Assessment sections state “None,” and the Financial Assessment section states:  
19 “This Blanket Project is based on historical trends and anticipated year-ahead  
20 activity in this investment category,” indicating that nothing unusual or out-of-  
21 trend was expected by GSEC for this category in 2014. The Cost Estimate

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<sup>27</sup> See Attachment 2-3 at 4.

<sup>28</sup> GSEC explained this ambiguity in response to Staff Tech Data Request 1-16 stating that “the budget for this project was revised to \$80,000 for CY 2014 and \$90,000 CY 2015, for a total of \$170,000,” indicating that the intent in 2014 was to revise the budget downward.

1 section of the Capital Expenditure Application provides no details except that  
2 “Cost estimates will be calculated on an individual job basis.”

3 Spending Schedule for 2014 and 2015: This report shows capital expenditures on  
4 a looking forward basis and, among other things, assigns a risk score between 0  
5 and 50 for each project with 50 being the highest risk score. This particular  
6 project was assigned a risk score of 36. The 2014 report confirms the initial  
7 budget amount of \$26,000 and forecasts budget amounts in the range of \$27,000  
8 to \$30,450 for 2015 through 2018. The 2015 report increases the forecasted  
9 budget amounts in the range of \$50,000 to \$100,000. The prior budget amount  
10 for 2013 held steady at \$26,000.

11 Capital Work Plan for 2014 and 2015: The Capital Work Plan dated January 29,  
12 2014, provides no specifics about the project except to confirm the initial budget  
13 amount of \$26,000. The 2015 report only refers to it as a “Targeted Project” with  
14 an initial budget of \$50,000.

15 Monthly Capital Reports for 2014 and 2015: According to the January-November  
16 report of 2014, this project was already over budget as of January with a total  
17 expenditure of \$128,795, but remained at lower levels over the ensuing months  
18 until August 2014. Expenditures then escalated consistently each month  
19 thereafter at \$100,630 in August, \$143,112 in September, \$117,235 in October,  
20 and \$109,821 in November. The 2014 monthly reports offer no explanation as to  
21 the causes of the cost escalation. The report for December is non-descript but  
22 Staff assumes that the remainder of the overage of \$45,344 was spent in that  
23 month bringing the total expenditure for the year \$780,409. The “Notes” section

1 of the reports for those months contained no comments. The reports for 2015  
2 were equally non-descript and not helpful in tracking overages.

3 Purchase Orders/Work Orders/Change Orders: Staff examined the purchase  
4 orders submitted for this project under Data Request Staff 10-40, Attachment  
5 Staff 10-40.xlsx (Attachment JED 2-11). GSEC submitted no purchase orders for  
6 this project for 2014 concerning Job No. 8830-16427855. The associated notation  
7 was “No PO’s.” However, two purchase orders for 2015 were submitted (P.O.  
8 Nos. 254 and 255) but they were both dated August 31, 2012 in the amounts of  
9 \$2,354 and \$3,414; however the total amount of the associated job, Job No. 8830-  
10 1302572, was \$35,953. No change orders or work orders were provided<sup>29</sup> despite  
11 the escalation in costs.

12 Over-spending Request Form: Although required under Liberty Utilities’ policy  
13 and procedures for capital expenditures,<sup>30</sup> and requested as part of Staff Data  
14 Request 10-40, this form was not produced by GSEC for this project.

15 Year End Variance Report for 2014 and 2015: The 2014 confirms the over  
16 budget amount of \$754,409. The “Explanation” section lacks sufficient detail  
17 stating only that “Over-charging of blanket projects occurred in 2014 due in part  
18 to conversion of the work management system from NG TSA based STORMS  
19 system to LU based Quadra and WennSoft systems.” How exactly this relates to  
20 the cost escalations and their causes is not explained. The 2015 report merely  
21 states: “Charges approximate to budget.”

---

<sup>29</sup> Attachment JED 2-11 at 1.

<sup>30</sup> See Attachment 2-3 at 4.

1           Year End Variance and Lessons Learned Report for 2014 and 2015: This report  
2 provides the same information as the Year End Variance Report for 2014 and  
3 2015 with no additional elaboration on causes for the overruns or “lessons  
4 learned,” except the notation that “Likely has specific project changes.”

5  
6           **3. Project #8830-Finance Accrual**

7           **2014 Budget: \$0      Actual: \$2,414,654      Variance: \$\$2,414,654**

8           Business Case: No business case was put together for this project category since  
9 it does not constitute an actual project. Instead, it is Staff’s understanding from  
10 testimony provided by GSEC at the temporary rates proceeding of June 17, 2016,  
11 that this category serves an accounting purpose to capture costs accrued from  
12 various projects but not yet allocated to those projects.<sup>31</sup> Since an accrual is an  
13 expense that has been incurred but not paid in a given accounting period, and the  
14 FINANCE category is apparently a conglomeration of various accrued expenses  
15 from other project categories; and given that GSEC included this amount as an  
16 additional unbudgeted capital expenditure and also included it with the total  
17 variances for “Mandated” projects of \$5.6 million,<sup>32</sup> it is Staff’s conclusion that  
18 the \$2.4 million amount constitutes an additional cost overrun. GSEC has not  
19 provided any details as to the specific types of costs contained in this category  
20 other than what was provided in the testimony referenced above.

21           Spending Schedule 2014: This report shows no line item for this project.

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<sup>31</sup> Tr. 6/17/16 at 46-47 (Mullen).

<sup>32</sup> Attachment JED 2-2 at 2.

1           Capital Work Plan 2014: No mention of this project is made in The Capital Work  
2 Plan, likely because it does not constitute an actual project as stated above.

3           Monthly Capital Reports: According to the January-November report of 2014,  
4 this project category accumulated sizable costs from month to month, especially  
5 in March at \$741,852, June at \$940,700, July at \$839,442, and November at  
6 \$606,644. Negative amounts were also recorded for January at -\$552,254,  
7 August at -\$582,075, and October at -\$444,626, indicating offsetting payments or  
8 adjustments. The monthly reports offer no explanation as to the specific source or  
9 reason for these accrued costs. The “Notes” section of the reports contained  
10 either no comments or “N/A” for that column.

11           Purchase Orders/Work Orders/Change Orders: No purchase orders were  
12 available for this project category. The associated notation included in  
13 Attachment JED 2-11 at page 2 is “No PO’s,” despite the fact that different job  
14 numbers were listed. Likewise, no change orders or work orders were provided.

15           Over-spending Request Form: Although required under Liberty Utilities’ policy  
16 and procedures for capital expenditures,<sup>33</sup> and requested as part of Staff Data  
17 Request 10-40, this form was not produced by GSEC for this project.

18           Year End Variance Report for 2014: Confirms the over budget amount of \$2.4  
19 million. The “Explanation” section only states: “Finance project for accounting  
20 and journal entries.”

21           Year End Variance and Lessons Learned Report for 2014: This report provides  
22 the same information as the Year End Variance Report for this project with no  
23 additional elaboration on causes for the overruns or “lessons learned.”

1 **VI. CONCLUSIONS AND RECOMMENDATIONS**

2 **Q. Based on Staff's review of the documentation and reports obtained from GSEC,**  
3 **what conclusions did Staff reach concerning GSEC's capital planning, budgeting,**  
4 **and implementation? What was the quality of GSEC's documentation?**

5 **A.** First, in terms of the basic process itself, it appears that GSEC was consistent in filing  
6 and processing all of the standard documentation and reports required under Liberty  
7 Utilities' internal processes and procedures. However, Staff also found that most of the  
8 documentation reviewed lacked sufficient details and analysis, providing only a cursory  
9 assessment of the capital projects mentioned, and largely containing information that can  
10 only be described as rudimentary in nature. Staff's general findings for each of the  
11 documents reviewed are as follows:

12 a) Business Cases: In Staff's view, this is a key piece of documentation since, under  
13 Liberty Utilities' policy and procedures for capital expenditures, the business case  
14 provides the essential details, and primary justifications for, a given capital  
15 project.<sup>34</sup> Specifically, for all of the business cases reviewed, most of the sections  
16 requiring detailed information and descriptions, such as "Recommendation,"  
17 "Background," "Alternatives," "Financial Assessment," "Risk Assessment," and  
18 "Implementation,"<sup>35</sup> provided only a perfunctory discussion, or in some cases, the  
19 word "None" was inserted. None of the business cases provided any basis for the  
20 proposed budget estimates.<sup>36</sup> Moreover, for all of the business cases reviewed,  
21 the estimated budget amounts were consistently wrong, in some cases by several

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<sup>33</sup> See Attachment 2-3 at 4.

<sup>34</sup> Attachment JED 2-3 at 10.

<sup>35</sup> *Id.* Appendix B at 10-11.

<sup>36</sup> Attachment JED 2-4.

1 times the amount of the estimate as reflected in Attachment JED 2-2 and Tables 1  
2 and 2 above. This came as a surprise to Staff since it is Staff's understanding that  
3 experienced personnel at GSEC are preparing these cost estimates.

4 Timing was another serious concern with the business cases. All of the business  
5 cases reviewed for 2014 and 2015 were either dated in May or June of the project  
6 year, approximately six to seven months after the capital budgets had been  
7 approved by the Board of Directors, and after construction on many projects had  
8 already commenced. Moreover, as noted above, some of the purchase orders  
9 reviewed for the projects were dated and received by GSEC well before business  
10 case submittal, with some purchase orders estimating higher costs for the projects,  
11 yet the budgeted amounts in the business cases were never revised or updated by  
12 GSEC. Under Liberty Utilities's Policy and Procedures: Capital Project  
13 Expenditures, attached as Attachment JED 2-3, all business cases must be  
14 completed for review at the time the capital budget is submitted for approval, and  
15 before any project is initiated.<sup>37</sup> This defect in the business case process, coupled  
16 with the consistent lack of necessary details covering the projects under  
17 consideration, leads Staff to conclude that management could not have properly  
18 assessed the necessity, scope, and costs of a given project at the time of budget  
19 preparation and approval. In addition, it is also clear to Staff that the  
20 requirements under Liberty's policy and procedures were largely ignored and not  
21 adhered to by GSEC, making it difficult for Staff to determine whether the  
22 estimated costs and financial justification for the sample projects were reasonable  
23 at the time of inception.

1 As mentioned earlier, the required analysis of alternatives and consideration of  
2 least cost planning were not included in the business cases.<sup>38</sup> In addition,  
3 business cases were never compiled by GSEC for some projects.<sup>39</sup>

4 b) Spending Schedule 2014: This report shows capital expenditures on a looking  
5 forward basis and, among other things, assigns a risk score between 0 and 50 for  
6 each project with 50 being the highest risk score. Based on the history for most of  
7 the projects in the sample, the budget estimate forecasts appear to be significantly  
8 underestimated, including those projects that continue through the 5-year forecast  
9 period. The report provided no useful information in terms of cost escalation for  
10 the sample projects.

11 c) Capital Work Plans 2014 and 2015: These reports, submitted by the NH Director  
12 of Engineering, identify mandatory and non-mandatory capital work projects for  
13 the coming year. Although the reports confirm the budgeted amounts referenced  
14 in the individual business cases, project descriptions are at a very high level and  
15 do not offer any detailed information as to the scope or necessity of individual  
16 projects. Indeed, much of the focus of the reports is on “target points” that are  
17 awarded based on the “completion expectation” of each project.<sup>40</sup>

18 d) Monthly Capital Reports: As noted above, these monthly reports attempt to track  
19 capital expenditures and variances on a monthly basis. Contained within this  
20 spreadsheet report, aside from the monthly reports, is a tab that summarizes the

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<sup>37</sup> *Id.* at 5.

<sup>38</sup> *See also* Liberty Consulting Group Testimony at 11-12, 14-15.

<sup>39</sup> Attachment JED 2-2. Projects identified in Staff’s sample without business cases were: 8830-C18740 “Customer Walk-in Centers,” 8830-CD0376 “ENFIELD SUPPLY,” 8830-METER SHOP, 8830-CNN023 “GSE Distributed Generation Blanket.”

<sup>40</sup> Attachment JED 2-6 at 3-4, 13-15.

1 capital expenditures for all projects for all months January through November  
2 (this part of the spreadsheet was unavailable for 2015). In 2014, no monthly  
3 reports were produced for the months of January, February, April, May, July,  
4 August, September, and October; however, those amounts were apparently  
5 captured in the January – November spread sheet. The few monthly spreadsheets  
6 that were prepared proved to be unhelpful because the expenditure amounts did  
7 not always match up with the amounts contained in the January – November  
8 report. As a result, Staff accepted the January – November spreadsheet as the  
9 more accurate report for purposes of tracking monthly expenditures. In addition,  
10 the monthly spreadsheets were not consistent and were provided in differing  
11 formats, *i.e.* some with comments and some without, some with completion  
12 percentages and some without.<sup>41</sup> Although updated by engineering on a monthly  
13 basis, no explanations of the incremental variances were provided as the projects  
14 progressed from month to month.

15 e) Purchase Orders/Work Orders/Change Orders: The purchase orders provided by  
16 GSEC were numerous and typically shared common characteristics in that they  
17 were usually dated well before the submittal of business cases by GSEC, and in  
18 some instances contained estimates that exceeded the budget estimates of the  
19 business cases. None of the purchase orders reviewed referenced the associated  
20 project numbers making cross-referencing difficult. In addition, purchase order  
21 totals for a given project often did not match, or approximate, the total costs  
22 provided in Staff's sample, indicating that additional costs were incurred but not  
23 documented (see Project #8830-C18720 and Project 8830-CNN016 above) . It is

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<sup>41</sup> Attachment JED 2-7.

1 Staff's understanding that when GSEC uses its own crews and personnel for such  
2 projects, the work is documented with internally generated work orders.  
3 Although copies of work orders were requested in Staff Data Request 10-40, none  
4 were produced and apparently none were available as noted in Attachment Staff  
5 10-40.xlsx, attached to my testimony as Attachment JED 2-11. Likewise, no  
6 change orders were produced, except for a limited number of purchase orders that  
7 merely billed out additional costs. Change orders are important because they  
8 document and authorize any material changes to designs, scope, or timing of a  
9 project. These omissions concern Staff because the scope and complexity of  
10 many of the projects increased substantially as they progressed, and in Staff's  
11 view such modifications should have been reviewed and documented as they  
12 occurred.<sup>42</sup>

13 f) Over-spending Request Form: This form is required under Liberty Utilities'  
14 policy and procedures for approval of any over budget variances (exceeding 10%,  
15 or a minimum of \$50,000) requested by project managers.<sup>43</sup> As noted above,  
16 these documents were requested as part of Staff Data Request 10-40, but they  
17 were not produced by GSEC. Instead, GSEC provided the Year End Variance  
18 Reports for 2014 and 2015 described below.

19 g) Year End Variance Reports for 2014 and 2015: These reports cover the total  
20 project variances for the year and confirmed the original budget amounts, actuals,  
21 and variances represented in Attachment JED 2-2. However, the "Explanation"  
22 column provides little or no details as to the cause of the variances or the decision

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<sup>42</sup> See for example Project Nos. 8830-C18720, 8830-C18740, 8830-C18603, 8830-CD0376.

<sup>43</sup> Attachment JED 2-3 at 4.

1 making process that took place to approve and move forward with certain  
2 projects. Instead, vague generalizations such as “carryover from prior year,”  
3 “mandated response,” or “project more complicated than anticipated” permeated  
4 most of the comments.

5 h) Variations and Lessons Learned Reports for 2014 and 2015: These reports are  
6 virtually identical to the Year End Variance Reports and contain the same  
7 generalizations in explaining the variances. Staff was unable to find references in  
8 the reports as to what specific lessons were learned by management as a result of  
9 the cost over runs or whether any type of self-assessment took place.

10 i) Monthly President’s Reports for Liberty NH Operations for 2014 and 2015:  
11 These reports consist of the actual-to-budget comparisons and financial results for  
12 each month after the accounting books close for both GSEC and Energy North.  
13 Other areas covered are capital spend tracking, human resources, various  
14 company initiatives, reliability issues, customer service, IT, and regulatory affairs.  
15 Staff reviewed each of these reports and found little to no mention of the cost  
16 overruns experienced in 2014 and 2015, or any indications of any capital  
17 expenditure problems, except for a couple of brief references to the cost overruns  
18 of the Bare Conductor project and RTU project in the December 2014 report. In  
19 fact, the section involving monthly capital spend tracking and reporting was  
20 apparently eliminated from the reports in 2015 beginning with the March 2015  
21 report and subsequent reports, leaving Staff with some questions as to how  
22 informed upper management was in terms of those expenditures.

1           j) Five Year Investment Plans and Five Year Capital Forecasts for 2014 and 2015:

2           This report merely replicates the 5 year forecast from the spending schedule  
3           report mentioned above and confirms that most budget estimates were  
4           significantly underestimated.

5  
6   **Q.    What were Staff's reasonable expectations in requesting these documents from**  
7   **GSEC?**

8   **A.**   Staff expected that it would obtain information from GSEC that would provide details  
9           and support for the presumption that some or all of the cost over runs were reasonably  
10          incurred. Staff attempted to weigh the reasonableness of GSEC's capital budgeting and  
11          planning process, and the cost overruns, based on the following measures:<sup>44</sup>

- 12               a) Specific causes of the cost increases for certain projects from inception to  
13               completion.
- 14               b) Extent of project management methodologies utilized to assure cost  
15               control.
- 16               c) Documentation evidencing the existence of cost-effectiveness and  
17               efficiency in project management, engineering, procurement, and  
18               construction.
- 19               d) Amount or level of interaction with contractors in containing costs.
- 20               e) Techniques used to review and measure the performance of project  
21               management and cost control.

22          Staff believes that these measures represent reasonable and typical management

1 practices. Unfortunately, Staff was unable to find sufficient evidence that GSEC’s capital  
2 budgeting and planning processes incorporated these types, or similar types, of cost  
3 control; thus Staff, based on the substantial record it reviewed, cannot conclude that such  
4 measures existed and is unable to conclude that the costs were reasonably incurred. A  
5 good guiding principle can be found in a 1984 decision of the Florida Public Service  
6 Commission denying a Florida utility rate base recovery on excess coal inventory based  
7 on imprudence: “...we insist that management’s judgment be substantiated in a way that  
8 permits intelligent review of it.”<sup>45</sup> Despite copious data requests from Staff, GSEC still  
9 has not provided sufficient answers to the basic questions of how and why the cost  
10 overruns occurred, and perpetuated, over the two year period of 2014 and 2015.

11  
12 **Q. Does GSEC’s capital budgeting and planning process compare favorably with other**  
13 **similarly situated utilities?**

14 **A.** No. This area was examined in detail by LCG in its audit report and is also covered in  
15 their testimony. According to LCG, GSEC’s capital planning and budgeting practices,  
16 particularly in the areas of analysis, monitoring, and cost performance, do not compare  
17 favorably with other similar utilities.<sup>46</sup>

18 **Q. Please summarize Staff’s findings.**

19 **A.** In summary, based on the extensive review outlined above, Staff asserts that a reasonable  
20 doubt exists involving the prudence of the cost overruns incurred by GSEC in 2014 and  
21 2015, and GSEC’s management of capital expenditures, for the following reasons:

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<sup>44</sup> See Proceeding on Motion of the Commission to Investigate the Prudence of Costs Incurred for the Construction of the Nine Mile Point 2 Nuclear Generating Facility, N.Y.PC Case No. 29124, dated Sept. 18, 1985; and In re Nine Mile Point 2 Nuclear Generating Facility, 78 PUR 4<sup>th</sup> 23 [N.Y. 1986].

<sup>45</sup> Gulf Power Co. v. Fla. Pub. Serv. Comm’n, 453 So. 2d 799, 802, 804 (Fla. 1984).

- 1           • Staff’s findings raise reasonable doubts involving the quality of the figures  
2           contained in GSEC’s reports and the prudence of some of GSEC’s capital  
3           investments in 2014 and 2015.
- 4           • Staff found initial budgeted amounts to be consistently underestimated,  
5           unreliable, and lacking documentary support.
- 6           • Staff found no evidence that GSEC analyzed alternatives, considered least cost  
7           planning, or complied with its own policy and procedures involving the  
8           preparation and submission of business cases.
- 9           • Staff found that GSEC did not observe Good Utility Practice and did not conduct  
10          its capital budgeting and planning in a manner that was economic, efficient, or  
11          comparable to other similarly situated utilities.
- 12          • GSEC provided no evidence that its project management employed any form of  
13          cost control methodology or techniques.
- 14          • GSEC’s imprudent management directly impacts rates given that this rate case  
15          was filed primarily because of \$50 million in capital expenditures invested by  
16          GSEC since the last rate case.
- 17          • GSEC bases the need for many of its capital improvements on more stringent  
18          build-out standards than other New Hampshire utilities, thus encouraging the  
19          building of projects beyond what is needed or necessary to maintain reliability.

20 **Q.     What recommendations does Staff propose as a result of its prudence analysis of**  
21 **GSEC’s capital budgeting and expenditures?**

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<sup>46</sup> Liberty Consulting Group Testimony at 13-15.

1 A. First, Staff accepts and adopts the recommendations of Staff witnesses Mullinax,  
2 Cannata, and Noonan. Ms. Mullinax recommends a total disallowance of \$4.489 million  
3 from the proposed revenue requirement based on her extensive review of GSEC's  
4 proposed revenue requirement and Staff's recommended adjustments. Mr. Cannata  
5 recommends the denial of the requested step adjustments proposed by GSEC of  
6 approximately \$2.4 million annually, except for the first step increase proposed for 2017,  
7 based on GSEC's failure to demonstrate that the benefits of its more conservative system  
8 planning criteria outweigh the increased costs to ratepayers. Staff also recommends that  
9 the Commission reject the step increases post-2017 given our overall determination that  
10 GSEC has exhibited imprudence in the management of its capital planning and budgeting  
11 process based on the evidence provided above.

12 Second, Staff agrees with and adopts the recommendations of Staff Witness Woolridge  
13 that GSEC's appropriate cost of capital should be 7.37% and that its ROE should be  
14 8.85%. Staff recommends that the 8.85% ROE be reduced by 50 basis points, from  
15 8.85% to 8.35%, based on GSEC's continuing poor performance related to customer  
16 service and customer satisfaction issues.

17 Lastly, based on our overall finding of imprudence, Staff recommends a disallowance to  
18 GESEC's rate base as follows:

|    |                                       |                                     |
|----|---------------------------------------|-------------------------------------|
| 19 | Total Budget Variances 2014 and 2015  | \$13,792,794                        |
| 20 | Less:                                 |                                     |
| 21 | Adjustment for IT Expenditures        | (\$ 4,466,536) <sup>47</sup>        |
| 22 | Adjustment for Bare Conductor Program | <u>(\$ 3,523,055)</u> <sup>48</sup> |

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<sup>47</sup> Docket No. DE 16-383, Order of 6/30/16 at 8.

<sup>48</sup> *Id.*

|   |                              |                       |
|---|------------------------------|-----------------------|
| 1 | Total Rate Base Disallowance | \$ 5,803,203          |
| 2 | Impact on Rate Base:         |                       |
| 3 | Rate Base                    | \$97,496,042          |
| 4 | Less Disallowance            | <u>(\$ 5,803,203)</u> |
| 5 | Adjusted Rate Base           | \$91,692,839          |

6 Staff understands that the \$5.8 million reduction is based on undepreciated gross book  
7 values, however, upon a finding of imprudence the entire amount is typically disallowed,  
8 including any depreciation taken, any interest expense incurred from financing the assets,  
9 and any return earned after the assets were placed in service. Ratepayers should not have  
10 to bear those costs if it is shown that the investment decisions were imprudently made.

11

12 **Q. Does Staff have any additional recommendations for the Commission to consider?**

13 **A.** Yes. Until such time as GSEC files its next rate case, the Commission should require  
14 GSEC to file a report involving of any capital project to be included in rate base that  
15 exceeds its initial budget amount by 10% (\$50,000 minimum). Such report should  
16 include the original budget amount, amount of the cost overrun, the associated business  
17 case, and a detailed explanation on the causes of the overrun, why the overrun was  
18 approved, and a forecast of final cost.

19

20 **Q. Does that conclude your testimony?**

21 **A.** Yes, it does.