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PUBLIC UTILITIES COMMISSION 21 S. Fruit St., Suite 10 Concord, N.H. 03301-2429 PENGAD 800-631-6989

FAX No. 271-3878

Website: www.puc.nh.gov

April 27, 2016

Debra A. Howland, Executive Director NH Public Utilities Commission 21 South Fruit Street, Suite 10 Concord, NH 03301

Re:

DE 15-137 Energy Efficiency Resource Standard

Settlement Agreement

Dear Ms. Howland:

I enclose for filing an original and six copies of a Settlement Agreement proposed by the Commission Staff and the following parties in the above-referenced proceeding: Liberty Utilities (Granite State Electric) Corp.; Unitil Energy Systems, Inc.; Public Service Company of New Hampshire d/b/a Eversource Energy; the New Hampshire Electric Cooperative, Inc.; Liberty Utilities (EnergyNorth Natural Gas) Corp.; Northern Utilities, Inc.; the Office of the Consumer Advocate; the Department of Environmental Services; the Office of Energy and Planning (OEP); New Hampshire Community Action Association; The Way Home; the Conservation Law Foundation; The Jordan Institute; Acadia Center; the New Hampshire Sustainable Energy Association; the New England Clean Energy Council; the NH Community Development Finance Authority; and TRC Energy Services (collectively, the "Settling Parties"). Based on information and belief, the Settlement Agreement is not contested.

The procedural schedule required the filing of a settlement agreement on April 25, 2016. That day, however, OEP, with the support of the Settling Parties, requested an extension of the filing deadline until April 26. By this letter, Staff, on behalf of the Settling Parties, asks the Commission to accept a late-filed settlement pursuant to N.H. Code of Admin. Rules Puc 203.20 (f), which provides:

Puc 203.20 Settlement and Stipulation of Facts.

- (f) The commission shall accept late-filed stipulations and settlements when such acceptance:
 - (1) Promotes the orderly and efficient conduct of the proceeding; and
 - (2) Will not impair the rights of any party to the proceeding[.]

Staff asserts that its request satisfies that standard, because the late-filed Settlement Agreement represents a full, negotiated resolution of all the issues between the Staff and all but one party.

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Consequently, the late-filed Settlement will allow for an orderly and efficient hearing, to the benefit of the Staff, the parties, and the Commission. The Settlement represents a culmination of three weeks of intense, continuous, multi-party negotiations, and its late filing was not the result of inattentiveness or neglect. Also, I am unaware of any objection to the Settlement Agreement or to the Commission's acceptance of it beyond the April 25 deadline in the schedule.

Thank you for your assistance.

Sincerely,

Rorie E. Patterson
Staff Attorney

Enclosure

ce: Service list (electronically)

STATE OF NEW HAMPSHIRE before the PUBLIC UTILITIES COMMISSION

ENERGY EFFICIENCY RESOURCE STANDARD

Docket No. DE 15-137

SETTLEMENT AGREEMENT

This Settlement Agreement relating to the implementation of an Energy Efficiency Resource Standard ("EERS") in New Hampshire is entered into this 26th day of April, 2016, by and among: Liberty Utilities (Granite State Electric) Corp. ("Granite State"); Unitil Energy Systems, Inc. ("UES"); Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"); and the New Hampshire Electric Cooperative, Inc. ("NHEC") (collectively, the "Electric Utilities"); Liberty Utilities (EnergyNorth Natural Gas) Corp. ("EnergyNorth") and Northern Utilities, Inc. ("Northern") (collectively, the "Gas Utilities") (the Electric Utilities and Gas Utilities are collectively referred to as the "Utilities"); the Staff of the New Hampshire Public Utilities Commission ("Staff"); the Office of the Consumer Advocate ("OCA"); the Department of Environmental Services ("DES"); the Office of Energy and Planning ("OEP"); New Hampshire Community Action Association ("CAA"); The Way Home ("TWH"); the Conservation Law Foundation ("CLF"); The Jordan Institute ("Jordan"); Acadia Center ("Acadia"); the New Hampshire Sustainable Energy Association ("NHSEA"); Acadia Center; TRC Energy Services ("TRC"); the NH Community Development Finance Authority ("NHCDFA"); and the Northeast Clean Energy Council ("NECEC") (all collectively referred to as the "Settling Parties"), with the intent of resolving the issues discussed herein. This

¹ In recognition of the limited jurisdictional status of NHEC, references to the Utilities or the Electric Utilities will be deemed to include NHEC, except where noted.

Settlement Agreement constitutes the recommendation of the Settling Parties with respect to the Commission's approval of an EERS in New Hampshire.

I. INTRODUCTION AND PROCEDURAL HISTORY

In March 2015 the Commission opened an investigation, docketed as Docket No. IR 15-072, for the purpose of receiving stakeholder input on Commission Staff's February 2015 report: Energy Efficiency Resource Standard, A Straw Proposal. That report noted that the Staff had undertaken an investigation at the request of the Commission to advance discussions on the potential implementation of an EERS in New Hampshire. Following the receipt of comments of numerous parties in that investigation, the Commission issued an order of notice commencing the instant docket in recognition of the fact that the investigation revealed "unanimous support for the Commission's establishment of an EERS at this time, under existing statutory authority, to advance a policy of energy-efficiency as a least-cost-supply resource for electric and natural gas utilities." May 8, 2015 Order of Notice in Docket No. DE 15-137 at 3.

In the months following the commencement of this docket, many parties met regularly in well-attended stakeholder technical sessions to discuss the issues surrounding the creation of an EERS. Various parties, including the Utilities, made presentations at each technical session, engaged with the spectrum of stakeholders, and provided perspectives and input on the issues raised in the order of notice. These sessions and presentations offered information on numerous topics including how other states are administering their EERS programs, the Utilities' insights and experience with these programs through their affiliates, and ideas of how New Hampshire could successfully implement an EERS in light of that information to capture more cost effective energy efficiency savings.

In December 2015, testimony was filed proposing frameworks and general terms for the implementation of an EERS in New Hampshire. Reply testimony was submitted by various parties in March 2016. Following the submission of the initial testimony, and before and after the filing of reply testimony, numerous parties engaged in extensive settlement discussions that have culminated in this Settlement Agreement presented for the Commission's consideration. In reaching this Settlement Agreement, the Settling Parties view this agreement as a positive step toward the long-term goal and purpose of an EERS to achieve all cost effective energy efficiency in New Hampshire.

II. <u>SETTLEMENT TERMS</u>

The Settling Parties agree that the Settlement Agreement as described below should be approved by the Commission. These terms are intended to be included in a comprehensive settlement and, as such, all terms are interdependent, and each Settling Party's agreement to each individual term is dependent upon agreement with all of the terms.

A. Extension of Core Programs

The Settling Parties agree that the energy efficiency programs established and operated by the Utilities as the Core programs shall continue in 2017, and shall continue to be administered by the Utilities. To facilitate the continuation of the Core programs in 2017, the Utilities shall file, by September 23, 2016, a continuation plan covering calendar year 2017. That continuation plan will be similar in content and detail to the 2016 update filing submitted by the Utilities on September 30, 2015, in Docket No. DE 14-216. As part of the continuation plan, the Utilities shall include proposals and recommendations on programs and measures intended to achieve, in 2017, statewide goals of 0.60% for electric savings and 0.66% for gas savings, as a percent of 2014 delivered sales, subject to receiving System Benefits Charge ("SBC"), Local

Distribution Adjustment Charge ("LDAC"), and other available funding sufficient and necessary to achieve those statewide goals. The Utilities' estimated costs to achieve the identified savings goals are shown in Electric Attachment A, Page 10 and Gas Attachment B, Page 7. In the continuation plan, the Utilities will provide updated estimated costs for achieving the identified savings levels, and final funding levels to be determined by the Commission prior to 2017. Should the Commission approve funding levels that differ materially from the estimates of the Utilities as provided in the continuation plan, the Utilities will be permitted to propose an adjustment to the goals to account for the approved level of funding.

B. Lost Revenue Adjustment Mechanism & Decoupling

For purposes of this Section II.B., all references to the Utilities or the Electric Utilities do not to include NHEC.² The Utilities shall implement a Lost Revenue Adjustment Mechanism ("LRAM") to recover lost revenue due to the installation of energy efficiency measures beginning on January 1, 2017. The LRAM shall continue following the implementation of an EERS, until replaced as described in this section. The Settling Parties agree that lost revenues shall not be considered a cost of the Core programs for the purpose of the benefit/cost test, nor a cost of the EERS when implemented pursuant to Section II.C., below. The LRAM shall be designed and implemented consistent with the LRAM proposal in the Utilities' December 9, 2015 testimony in Docket No. DE 15-137. More specifically, the LRAM will be calculated by dividing the projected cumulative lost distribution revenue associated with energy efficiency savings for a given period by the projected billed consumption for the period in which they would be recovered. Thus, the general calculation for a given period would be:

² LRAM is a non-jurisdictional issue with regard to NHEC. Also, the primary purpose of the LRAM is to address revenue recovery issues which are usually associated with distribution rate regulatory processes. NHEC, as a deregulated rural electric cooperative, is not subject to the same rate regulation processes as are the other electric utilities. Accordingly, NHEC does not propose a lost revenue adjustment mechanism.

Total Lost Revenues = Projected Cumulative Savings x Utility's Distribution Rate

Lost Revenue Rate = Total Lost Revenues / Projected Billed Consumption

In the calculation above, Projected Cumulative Savings and Projected Billed Consumption will

be measured in kilowatt hours ("kWh") for the Electric Utilities and therms for the Gas Utilities.

Beginning on January 1, 2017, Projected Cumulative Savings for the Utilities will be calculated

by summing, on a monthly basis, the total annual energy efficiency savings, and savings shall be

cumulative from year to year. Retirement adjustments will be made to savings achieved due to

expired measures, and shall apply to measures installed on or after January 1, 2017. Savings

associated with an expired measure will be removed from the lost revenues calculation on the

ending date of the measure's estimated useful life. Adjustments to savings from evaluation,

monitoring, and verification ("EM&V") studies shall be included in the calculation of lost

revenues for measures installed in the following program year, and the Utility's Distribution

The total lost revenues, as calculated consistent with the above, shall be recovered through an adjustment to the SBC for the Electric Utilities, and an adjustment to the LDAC for the Gas Utilities. For the Electric Utilities, the Lost Revenue Rate (or LRAM) will be the same for all rate classes, similar to the SBC, but shall vary by utility as necessary. For the Gas Utilities, the Lost Revenue Rate (or LRAM) will vary by utility and by sector consistent with the energy efficiency component of the LDAC. In each calendar year, for each utility, the savings for which lost revenue may be recovered will be capped at 110% of planned annual savings. Savings will be adjusted (i.e., reconciled) to account for the actual month the measures are installed within the year of installation. Representative calculations showing how the cap will be

Rate shall be an average distribution rate excluding customer charges.

applied, as well as estimated rate and bill impacts, are included in Electric Attachment A, Pages 3-5, and Gas Attachment B, Pages 5-6.

The LRAM shall be subject to annual reconciliation by each of the Utilities to account for lost revenue due to the installation of energy efficiency measures, as well as any under or over collection of such lost revenue in a prior year. For purposes of reconciliation, the Utilities will develop LRAM cost estimates based on agreed upon savings levels and, on an annual basis, will reconcile those estimates with actual savings achieved. The actual savings and costs shall be audited by an independent third party. Interest on monthly balances shall be calculated in the same manner and using the same interest rate as that used for the SBC and energy efficiency component of the LDAC. The Settling Parties agree that implementing the LRAM is reasonable and appropriate as proposed and described herein, and that it should not be otherwise adjusted, except as specifically provided herein. The savings used for calculating each utility's lost revenue will be reset at each utility's next rate case following implementation of LRAM.

The Settling Parties agree that the LRAM for each utility will cease when a new decoupling mechanism, or another mechanism as an alternative to the LRAM, is implemented. The Settling Parties further agree that each of the Utilities shall seek approval of a new decoupling mechanism, or another mechanism as an alternative to the LRAM, in its next distribution rate case following the first triennium of the EERS, 2018-2020. This provision does not, and is not intended to, prevent or preclude any of the Utilities from seeking approval of such mechanism prior to the end of the first triennium, but the Settling Parties acknowledge and agree that any utility seeking such approval shall do so in the context of a distribution rate case, consistent with the Commission's guidance in Order No. 24,934 (January 16, 2009). The Settling Parties agree that the Commission's approval of the Settlement Agreement does not in

any way restrict the Commission from investigating or implementing decoupling, or another mechanism as an alternative to the LRAM, at any time.

C. Energy Efficiency Resource Standard

The Settling Parties agree that the Utilities shall implement an EERS beginning on January 1, 2018, and that the Utilities shall be the ratepayer-funded efficiency program administrators for at least the first triennium, 2018-2020. To the extent any of the Settling Parties may seek to alter the administration of the EERS, the Settling Parties agree that they shall not make any such proposal to alter the administration prior to January 1, 2020, nor shall any proposal, if approved, be effective prior to January 1, 2021.

No later than September 1, 2017, the Utilities shall file for the Commission's review and approval a comprehensive plan for the implementation of an EERS on January 1, 2018. That comprehensive plan shall be developed in consultation and collaboration with the Settling Parties, the independent planning expert referred to in this Section II.C, the Energy Efficiency and Sustainable Energy ("EESE") Board and other stakeholders. In developing the comprehensive plan the Utilities shall incorporate the following statewide savings goals for the first 3-year EERS period, each as a percentage of 2014 statewide delivered sales:

YEAR	ELECTRIC	GAS	
2018	0.80%	0.70%	
2019	1.0%	0.75%	
2020	1.3%	0.80%	

The above savings goals are cumulative and are intended to reach overall savings of 3.1% of electric sales and 2.25% of gas sales, relative to the baseline year of 2014, by the end of 2020.

The Settling Parties acknowledge and agree that the described savings goals depend upon sufficient and necessary levels of funding through the SBC and LDAC and other sources if available, as approved by the Commission. The Settling Parties agree that the savings goals balance the goals of capturing more cost effective energy efficiency and benefits to ratepayers with the goal of gradually increasing funding for efficiency while minimizing the impacts on all ratepayers. The Utilities' estimated costs to achieve the identified savings goals are shown in Electric Attachment A, Page 10 and Gas Attachment B, Page 7. The Utilities will provide to the parties and the planning expert referred to in this Section II.C for review and comment updated estimated costs for achieving these savings levels as part of the comprehensive EERS plan, and shall propose adjustments to the Commission related to these savings goals should the authorized funding level differ materially from the estimated costs provided by the Utilities. Future goals will be determined in the planning process relating to the second and any subsequent 3-year periods, with the intent of attaining the goal of achieving all cost effective energy efficiency. Such future planning shall also include exploration of additional funding sources. During the first triennium, and for each 3-year period of the EERS thereafter, annual update filings shall be submitted for review by the Commission in an abbreviated process substantially similar to the mid-period submissions presently used in the Core dockets. Such annual update filings shall serve as an opportunity to adjust programs and targets and address any other issues that may arise from advancements, including but not limited to, evaluation results, state energy code changes, and/or federal standard improvements.

The Settling Parties also agree that a Settling Party may request to reopen matters covered by this Settlement Agreement in response to exogenous events, which are defined as

unforeseeable externally imposed legal or regulatory changes that affect a Utility's energy efficiency-related costs by at least 10% (positive or negative).

The Settling Parties agree that an independent planning expert shall be hired by the Commission, with a budget not to exceed \$95,000 annually and disbursed from the Core budget in 2017 or the EERS budget after 2017, to assist parties' participation in the planning process for the comprehensive plan described in this section and with the continuation planning described above in Section II.A. The independent planning expert shall provide advice and assistance to the EESE Board and other stakeholders as requested and appropriate, and shall be subject to the ultimate control of the Commission.

D. Performance Incentive

The Settling Parties agree that the Performance Incentive ("PI") levels shall be identical for the Electric Utilities and the Gas Utilities. The PI maximum is reduced to a cap of 6.875%, with a target of 5.5%, upon implementation of the LRAM in 2017. The cap and target shall remain at 6.875% and 5.5%, respectively, through at least the first triennium of the EERS.

The Settling Parties agree to review the existing PI formula prior to the filing of the 2018 EERS filing, and the Settling Parties, individually or in a group or groups, may make recommendations in that filing or during the Commission's review of that filing of modifications to the current formula. Such review shall include consideration of the achievements of energy efficiency savings for low income customers.

E. Low Income Program Activity

The Settling Parties agree that the low income share of the overall energy efficiency budget shall be increased to a minimum of 17% of the total budget. Such increase shall take

effect on January 1, 2017, and shall not be decreased from that level (but may be increased) through at least the first triennium of the EERS.

F. Evaluation, Monitoring, and Verification

The Settling Parties agree that evaluation, monitoring, and verification ("EM&V") activities shall be conducted by independent third-parties supervised by the Commission with advice and participation from the Settling Parties and the EESE Board.

The Settling Parties agree that upon request, an independent expert, separate from the independent planning expert described above in Section II.C., will be hired and supervised by the Commission to assist Staff, the Settling Parties, the EESE Board or successor, and others as determined by the Commission, in participating in EM&V activities. That independent expert shall be paid from the EM&V budget in the Core programs and in the EM&V budget under the EERS. The independent expert shall provide advice on issues including, but not limited to, scope, methods, scheduling, how EM&V results inform program improvement, ISO-NE's forward capacity market evaluation requirements, and standardization of EM&V recording and reporting. Among its deliverables, the independent expert shall assist the Settling Parties with developing by the end of the first triennium (2018-2020) a New Hampshire-specific technical resource manual. EM&V will be expanded to ensure programs are evaluated in an appropriate timeframe. The Settling Parties agree that the Utilities will facilitate and support the implementation of EM&V studies.

G. Reservation of Rights

The Settling Parties agree that the terms of this Settlement Agreement are not intended to limit or waive any rights associated with other Commission proceedings, except as to any

proceeding opened or continued by the Commission relative to the continuation plan or the comprehensive plan described in Sections II.A. and II.C., respectively.

H. General Provisions

The Settling Parties agree that all testimony and supporting documentation may be admitted as full exhibits for purposes of consideration of this Settlement Agreement. Agreement to admit all direct testimony without challenge does not constitute agreement by the Settling Parties that the content of the written testimony filed on behalf of the other Parties is accurate nor is it indicative of what weight, if any, should be given to the views of any witness. Furthermore, in light of the fact that they have entered into this Settlement Agreement, 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 Settlement 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.

This Settlement Agreement is expressly conditioned upon the Commission's acceptance of all of its provisions without change or condition. All terms are interdependent, and each Settling Party's agreement to each individual term is dependent upon all Settling Parties' agreement with all of the terms. If such complete acceptance is not granted by the Commission, or if acceptance is conditioned in any way, the Settling Parties shall have the opportunity to amend or terminate this Settlement Agreement or to seek reconsideration of the Commission's decision or condition. If this Settlement Agreement is terminated, it shall be deemed to be withdrawn and shall be null and void and without effect, and shall not constitute any part of the record in this proceeding nor be used for any other purpose. The Settling Parties agree to support

approval of this Settlement Agreement before the Commission. The Settling Parties agree that they shall not oppose this Settlement Agreement before any regulatory agencies or courts before which this matter is brought, but shall take all such action as is necessary to secure approval and implementation of the provisions of this Settlement Agreement.

The Commission's acceptance of this Settlement Agreement does not constitute continuing approval of or precedent regarding any particular issue in this proceeding, but such acceptance does constitute a determination that, as the Settling Parties believe, the provisions set forth herein are just and reasonable. The discussions which have produced this Settlement Agreement have been conducted on the understanding that all offers of settlement and discussion relating thereto are and shall be privileged, and 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 any manner in connection with this proceeding, any further proceeding or otherwise.

IN WITNESS WHEREOF, the Settling Parties have caused this Settlement Agreement to be duly executed in their respective names by their agents, each being fully authorized to do so on behalf of their principal.

By: MAlueller	Date: _	4-26-16
Michael Sheehan, Èsq. Senior Counsel		
NEW HAMPSHIRE ELECTRIC COOPERATIVE		
Ву:	Date: _	
Mark W. Dean, Esq.		
PUBLIC SERVICE COMPANY OF NEW HAMPS	HIRE D/B/A E	VERSOURCE ENERGY
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Matthew Fossum, Esq. Senior Counsel		
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Michael Sheehan, Esq. Senior Counsel		
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By: Mark W. Dean, Esq.	Date:
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By: Matthew Fossum Matthew Fossum, Esq. Senior Counsel	Date: 4/26/16
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Michael Sheehan, Esq.		
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NORTHERN UTILITIES, INC.		
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THE OFFICE OF THE CONSUMER ADVOCATE		
By: Denald M. Kreis, Esq. Consumer Advocate	Date:	4/26/2016
NEW HAMPSHIRE COMMUNITY ACTION ASSOCIATION		
By:Ryan Clouthier Energy Director	Date:	10-7
OFFICE OF ENERGY AND PLANNING		
By:	Date:	4/26/16
DEPARTMENT OF ENVIRONMENTAL SERVICES		
By: Rebecca Ohler Administrator, Technical Services Bureau	Date:	with the second of the second
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STAFF OF THE NH PUBLIC UTILITIES COMMISSION

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By: Donald M. Kreis. Esq.	Date: _	
Consumer Advocate		
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By: Ryan Clouthier Energy Director	Date:	4-210-160
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By: Meredith A. Hatfield, Esq. Director	Date:	part film (a) 2 miles (s)
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Staff Attorney		
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Donald M. Kreis, Esq. Consumer Advocate		
NEW HAMPSHIRE COMMUNITY ACTION ASSOCIATION		
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Meredith A. Hatfield, Esq. Director		
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Rebecca & Ohla		
By:	Date:	4/26/16
Rebecca Ohler	-	
Administrator, Technical Services Bureau		
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New Hampshire Legal Assistance	Date.	
Dennis Labbe, Esq.		

STAFF OF THE NH PUBLIC UTILITIES COMMISSION

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Rorie E. Patterson, Esq. Staff Attorney		
THE OFFICE OF THE CONSUMER ADVOCATE		
By: Donald M. Kreis, Esq. Consumer Advocate	Date: _	
NEW HAMPSHIRE COMMUNITY ACTION ASSOCIATION		
By: Ryan Clouthier Energy Director	Date:	
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By: Meredith A. Hatfield, Esq. Director	Date:	
DEPARTMENT OF ENVIRONMENTAL SERVICES		
By: Rebecca Ohler Administrator, Technical Services Bureau	Date:	
By: New Hampshire Legal Assistance Dennis Labbe, Esq.	Date:	April 26, 2016

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Melissa E. Birchard, Esq.		
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TRC ENERGY SERVICES		
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Vice President		
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Senior Analyst, Energy Systems and Carbon Markets		
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By:	Date:	
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By: Melissa E. Birchard, Esq.	Date.	
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Laura Richardson Executive Director		
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By: _ Ellen B. Hewe	Date: 4/26/16
Ellen Hawes Senior Analyst, Energy Systems and Carbon Markets	
NH COMMUNITY DEVELOPMENT FINANCE AUT	THORITY
By: Taylor Caswell	Date:
Executive Director	

Ву:	Date:
Melissa E. Birchard, Esq.	peg darming Tormer
THE JORDAN INSTITUTE	
By: Laura Richardson Executive Director	Date:
NEW HAMPSHIRE SUSTAINABLE ENERGY ASSO	CIATION
By: Kate Epsen Executive Director	Date:
TRC ENERGY SERVICES	
By: Tom Rooney Vice President	Date:
ACADIA CENTER	
By: Ellen Hawes Senior Analyst, Energy Systems and Carbon Markets	Date:
NII COMMUNITY DEVELOPMENT FINANCE AUT	HORITY
By: Taylor Caswell Executive Director	Date: 26 APRIL 16

NORTHEAST CLEAN ENERGY COUNCIL

Dy.	
Peter Rothstein	
President	

Date: __4-26-16_____

Estimated Total SBC Rate and SBC Rate by Component (5 in Millions)

									Curre	rs Fundin	0									(GE Cibs.	(MMM)	
2017	2014		Savings to	Annual		Total	1	RGGI		SAC		FCM	Incre	mential		LBR	Tat	ThbA la	EAP	EE	LBR	Total
Company	Sties (MWh)	Savings		Savings (MWh)	1	iludget*	Fi	anding	F	unding	1	Funding	Fun	ding	Fu	gnilige	Fu	nding	SAC	SBC	SBC	SEC
Eversource	7,886,054	0.64%	0.47%	50,503	- \$	23.36	- \$	1.92	\$	14,19	\$	3.82	\$	3.63	\$	0.58	\$	4.21	0.150	0.226	0.007	0.38
Uniti	1,225,254	0.51%	0.06%	6,251		3.54		0.30		2.21		0.48		0.56		0.10		0.88	0.150	0.226	800.0	0.38
Liberty	910,625	0.46%	0.04%	4,220		2.62		0.22		1.64		0.34		0.42		0.05		0.47	0.160	0.226	0.005	0.38
NHEC	760,840	0,42%	0.03%	3,222		1.99		0.19		1.37		0.09		0.35				0.35	0.150	0.226	0.000	0.37
Total	10,782,973		0.60%	64,197	\$	31.51	-	2.82	8	18.41	8	4.52	8	4.96	8	0.73	\$	5,69				
Table -		50.0							Curre	nt Fundin	rg									(centa	(MINITA)	
2018	2014		Savings to	Annual		Total		ROGI		SBC		FCM	Incre	mentlel		LBR	Tot	al Add'i	EAP	Œ	LBR	Total
Company	Saloe (MWh)	Bavings		Savings (MWh)		Budget	FI	Inding	F	unding	- 1	Funding	Fun	ding	Fu	ending	Fu	nding	SBC	8BC	88C	580
Eversource	7,888,054	0.68%	0.63%	67,734	\$	32.11	\$		\$	14.19	\$	5.82	\$	10.17	\$	2.25	\$	12.42	0.150	0.309	0.029	0.48
Unitil	1,225,254	0.67%	0.08%	8,241		4.79		0.30		2.21		0.70		1.58		0.33		1.91	0.150	0.309	0.027	0.48
Liberty	910,825	0.82%	0.05%	5,630		3.68		0.22		1.64		0.54		1.17		0.19		1.38	0.150	0.308	0.021	0.48
NHEC	740,840	0.58%		4,225	_	2.68		0.19		1.37		0.14		0.98				0.98	0.150	0.309	0.000	0.45
Total	10,762,973		0.80%	45,429	\$	43.16	\$	2.62	\$	18.41	\$	7.21	\$	13.91	\$	2.77	8	18.88				
day o									Curre	nt Fundin	8									(cents	/kiAfh)	
2019	2014		Savings to	Annual		Total		RGGI		SBC		FCM	Incre	mentiel		LBR	Tat	FbbA le	EAP	EE	LBR	Total
Company	Sales (MWh)	Savinga		Sayings (MWh)		Budget		and no	F	unding		Funding	Fun	ding	FL	inding	Fu	nding	SBC	SBC	SBC	380
Eversource	7,888,054	1.07%	0.78%	84,417	\$	41.02	- 5	1.82	8	14.19	8	5.59	8	19.32	\$	4.41	\$	23.73	0.150	0.425	0.056	0.63
Unite	1,225,254	0.85%	0.10%	10,471		8.24		0.30		2.21		0.73		3.00		0.82		3.63	0.150	0.425	0.051	0.82
Liberty	910,825	0.78%	0.07%	7,080		4.61		0.22		1.84		0.52		2.23		0.37		2.60	0.150	0.425	0.040	0.01
NHEC	780,840	0.72%	0.05%	6,471		3.58		0.19		1.37		0.14		1.86				1.86	0.150	0.425	0.000	0.57
Total	10,782,973		1.00%	107,439	\$	55.42	\$	2.62	\$	19.41	\$	6.97	\$	26.42	8	5.41	8	31.42				
		100								nt Fundin	g									(cents		
2029	2014		Savings to	Annual		Total		RCGI		SBC		FCM	incre	lettnem		LBR	Tot	al Add'i	EAP	EE	LBR	Total
Company	Sales (MWh)	Savings		Savings (MWh)		Budget*	F	entibre		undna		Funding	Fun	ding	Fu	The Spirit	Fu	nding	BBC	88C	880	SBC
Everaguiros	7,888,054	1.38%	1.01%	109,389	3	54.47	3	1.82	\$	14.10	\$	4.53	\$	33.83	\$	7.10	8	40.99	0.150	0.608	0.091	0.85
Unitil	1,225,254	1.11%	0.13%	13,626		A.32		0.30		2,21		0.56		5.26		1.01		6.26	0.150	0.608	0.082	0.84
Liberty	910,825	1.02%	0.09%	9,270		6.19		0.22		1.64		0.42		3.91		0,60		4.51	0.150	0.609	0.066	0.82
NHEC	760,840	0.97%	0.07%	7,400		4.93		0.19		1.37		0.11		3.28				3.20	0.150	0.608	0.000	0.75
Total	10,782,673		1.30%	139,065	3	73.91	- 3	2.62	8	18.41	\$	5.82	-	46.26	5	8.76	8	55.02				

^{*}Excluding Lost Base Revenue *Funding over Current Levels

	PSNH d/b/a Catalation of Enthropial Loss	Loss Stees Re	Parties (L. Dall)			1	Calculation	berty Ut	ilities o Hovemo (LBR) ovemens for 2017			Colculation Enterned i	Unitil of Lost Steen out Steen Stern	Rovenne (LEA)	
Line Company	2017 (NMN) Savenge	LER (BAMA)	2017 Total LSSR	Convoant	Line	Canany	2017 (NYN) Sevense	LBR (SAMA)	2017 Total LBR	Chrystell	Line Correctly	2917 (kWh) Sentron	LBR	2017 Total LBSR	Continued
1 Renderted 2 C&I 3 Telep	Cos. 8 4.807,800 18,225,046 20,632,868	0.04043 0.02564	\$ 184.364 386,239 \$ 882,623	OLE Papition Color Papition Color	2	Cos A Residential CAI Testal	Gal 6 485,838 1,160,851 1,682,787	0.04151 0.04151	6 20.562 27,816 6 48,189	Col. II Props 4, Line 6 Col. II Props 4, Line 8 Col. II	Col. A 1 Residential 2 Cal 3 Tutal	Cal 8 787,612 2,361,765 3,161,728	0.03728 0.03870	Cat 0 8 29,346 70,235 \$ 89,863	Cot E Propr & Lens 6 Cot. N Propr & Lens 6 Cot. N
	PSNH d/b/a Colodetim of Estimated Law	Louis Game Ra	PHEND GAPTER		F		Calculation		ilities e Arvens (LSA) rvense for 2716					Roverno (LEA) etimos for 2018	
Luna Sector	2016 (KWh) Service	CANAT	2016 LBR	Comment	Line	Sector	2018 (HM) Seenes	LER	2018 LBR	Commune	Lion Sector	2016 OWN Services	LBR	2016 LER	Personnel
Con. A 4 Residential 5 CAI 8 Total	CAL 8 16,000,048 60,001,084 77,071,008	Cal C 8,64643 0,62546	6 750,747 1,460,451 8 2,260,167	Cat 6 Page 2 Libre 12 Cat 6 Page 2 Libre 12 Cat 8	:	Cot A Recolaryted CAI Total	Gal 8 1,827,434 4,487,345 8,484,778	CA C BASSAT BASSAT	6 84,000 107,303 1 107,303	OLE Pape Lim ISCA II Pape Lim DCaLU	Ge A 4 Resolution in 6 CA1 6 Total	Out 8 2,801,467 7,804,480 10,483,800	OLC DASTIA BAZETO	Col. 0 8 84,632 231,793 8 335,738	Cod. 8 Propo 8, Lines 12 Cod. 86 Propo 8, Lines 13 Cod. 86
	PSNH d/b/a Calculation of Estimated Law	Loui Bare Re	WELD (LEE)				Catostation		Illities A Revenue (LBIQ					Servetus (LES) Street Sr 2018	
Lens Seasor	2018 (NYN) Severe	LER	2016 LER	Commerci	Line	Gector	2010 (MM) Server	LESS	2018	Consent	Litta Sector	2016 01701 Serings	LER	2018 LBR	Communi
Cos A 7 Restourted 8 CAI 8 Total	C44 8 38,413,404 115,308,112 181,722,818	0.02530 0.02530	\$ 1,472,194 2,840,382 \$ 4,412,696	Col.E Page 2, Late 19 Col. III Page 3, Line 29 Col. III		Call Total	Cal 8 3,780,734 8,635,889 13,682,419	On C 8.04151 9.62367	\$ 157,167 210,608 \$ 366,568	Cut. 6 Page 4, Lime 18 Cut. 18 Page 4, Lime 20 Cat. 18	7 Renadarted 8 CAL 8 Total	04.8 4,843,834 14,838,472 (6,771,380	Co C 0.03720 0.03770	6 624,679	Cal E Page & Line 19 Cal 11 Page & Line 19 Cal 11
	PSNH d/b/a Calculation of Eathyand Last	Land Street Par	TRRA GLERY				Calculation		Ilities Arrows (LAA) resums for 200					Revenue (LBSQ	
Len Sector	2020 004ft) Sevinsa	LER	2020 LBR	Comment	Lon	Sector	2020 Oxfoli Sevina	LER	2029 LBR	Comment	Lies Secre	(kWh) Seeinga	LBR	2030 LBR	Commate
Col. A 10 Resistantial 11 C&I 12 Testal	04.8 80,044,843 186,886,318 846,637,383	0.4043 0.02560	\$ 2,347,348 4,768,202 6 7,144,631	Cal. E. Prop 1 Line 20 Cal. In Prop 1 Line 20 Cal. III	10	Cosi 4 Resolvented	6-1 B 6,196,041 14,307,085	04 C 0.04151 0.02367	8 250,005 343,538	Col. 6 Page 4, Line 20 Col. 6 Page 4, Line 27 Col. 6	Cal A 10 Residented 11 CAU 12 Total	04.8 7,854,280 23,674,888 91,833,188	0.03778 0.03778	Cin. 9 8 298,526 709,064 6 1,000,611	Cal. 8 Page 4, Unit 20 Cal. 10 Page 6, Unit 20 Cal. 10

Docket No. DE 16-137 Electric Altactement A Page 3 of 10 Auril 28, 2018

PSNH d/b/a Evereource Energy Estimated Monthly Sevinge and Cummulative Savinge (kWh) (2017 - 2020)

		Cod A	Cd 8	Call C	OM 0	COL E	Call	04.0	Call H	Cat. I	Call	Cal fi	CALL	7017	Cur M Currentiative
ine	Suntain	Jan 2017	F-0 2017	Mar 2017	Apr 2017		June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nev 2017	Dec 2017	Annual Serings	Savings
1	Residential	444,429	444,429	444,428	\$220,808	808,052	808,062	787,648	787,848	787,848	2,020,130	2.020,130	2,020,138	12,120,779	12,120,77
2	CAI	1,407 357	1,407,357	1,457,257	2,553,831	2,559,631	2,558,831	2,430,890	2,430,800	1430,090	0,397,078	9,397,078	0,387,078	39,343,464	38,382,486
3	Total	1,861.700	1,451,798	1,881,786	7,366,883	3,300,663	3,366,883	2,100,630	3,199,530	3,194,539	8,417,208	8,417,208	8 417 208	60,600,240	50,503,24
4	Months in Service	12	11	10	•		7			4	. 3	2	1	2817	Commulative
										Dam 2017		Nev 2017	Day 2017	LER Sertege	LER Sarringa
		Jan 2017	Feb 2017	Wer 2017	Apr 2917		Atria 2017 471,384	383,625	310,854	258.863	Oct 2017 508.032	338,648	100,344	4,807,909	4,607,90
8	Residential	444,420	407,303	370,367	1,919,123	536,701	1,492,662	1,218,448	1,012,571	810,297	1,770,270	1.000,100	533,000	15,225,040	18,228,04
	CM	1,497,367	1,790,077	1,172,779	2.628.162	2.244,530		1,568,270	1,332,725	1,098,180	2.104.302	1,402,636	701,434	20,032,968	20,032,95
7	Total	1,851,756	1,667,470	1,543,158	2,525,182	2,244,004	1,000,010	1,000,270	1,336,743	1,000,100	2,104,308	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	101,7-5	20,020,000	
														2018	Cummulative
Ine	Speter	Jan 2019	Feb 2018	Mar 2018	Apr 2018	May 2019	Juna 2018		Aug 2618	Sep 2018	Out 2018	Nov 2018	Dec 2018	Armuel Bartres	Savings
	Residental	598,058	570,000	398,058	1,083,143	1,083,743	1,083,743	1,028,855	1,029,558	1,029,565	2,709,186	2,709,256	2,709,350	18,256,138	28,370.01
	CAL	1,587,518	1,857,818	1,887,519	3A31,881	2431,861	3,431,981	3200.20	3,260,260	3,260,259	8,579,629	0,070,020	8,579,628	51,477,771	61,860,23
10	Total	2,483,577	2,463,677	2,443,577	4,816,594	4,515,594	4,515,584	4,289,914	4,289,814	4,269,614	11,260,006	11,298,985	11,288,985	67.735,600	110,237,18
11	Months in Service	12	11	10			7	•		4		2	1	2018	Communicative
						M		Jul 2018	Aug 2018	O- 2016	Oct 2018	Nev 2018	Dec 2018	LER Sevines	LBR Bevings
	Sector	Jen 2018	Peb 2018	Mar 2018	Apr 2018 812,607	722,488	June 2018	814,776	428.001	343,185	877.330	461,669	225,780	0.449.200	18,589.0
	Residential	690,058	1,730,228	1,672,932	2,573,009	2,287,901	2,001,913	1,430,128	1,368,441	1,000,783	2,144,907	1,429,939	714,966	20,419,518	59,501,61
	CAI Telef	2.463.677	2.278.612	2,049,847	1,388,695	1010.300	2,634,098	2,164,907	1,787,423	1,479,630	2,522,248	1,861,487	940,749	28,867,784	77,371,03
			Peb 2018	Mar 2019	Apr 2018	M- 7010	June 2019	Jul 2916	Aug 2010	Sop 2019	Qui 2019	Nev 2019	Dec 2019	2019 Annual Savings	Cummulutes Serings
Une	Sentar _	Jan 2019 742,868	742.460	742.868	1.360,678	1,360,670	1,340,670	1,283,138	1,283,138	1,283,136	3,378,678	3,379,478	3,379,678	20.280.048	48,834,98
	Residential	2.382,417	2,352,417	2,362,417	.,			4.063.286	4.043.244	4,083,268	10,692,504	10,043,604	10,492,004	84,166,673	184,017,08
18	Total	3 093,288	3,098,288	3,098.285		3,827,781			8.348,402	8.346,402	14,000,470	14.069,478	14,000,479	84.419.872	202,854,02
18	Months in Service	12	11	10			7			4	3		1	2010	Cummulativ
										Sep 2019	Cat 2019	Nov 2019	Dee 2019	LBR Savings	LBA Baring
	Sector _	Jan 2010	Feb 3019	May 2019	1,013,002	900,447	June 2019	14 2919 641,683	Aug 2010	427,712	A44.160	542,779	281,300	8,038,486	38,413,44
	Residential	742,668	2,154,382	1,989,347	1,207,841	2,851,414	2,494,896	2,031,633	1,683,027	1,394,422	2,073,201	1,752,134	691,057	25,448,873	115,308,1
	C&I Total	2,382,417 3,088,288	2,637,348	2,579,404		1751,801			2,227,867	1,782,136	3.517,370	2,344,613	1,172,487	33,460,359	161,722,8
				N- 2000				Jul 2029	Ave 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2028	2220 Annual Serings	Currentiative Savings
Line	Sector	Jan 2026	Feb 2020	Mar 2020	1,749,912		1,749,912	1,682,416	1.862.418		4,374,760	4.374,790	4.374,794	28.248.679	74,885,4
22	Residential		3,047,783	3.647,783	5,541,388	3,841,300		8,284,318	5,284,316		12,853,469	13,653,400	13,683,488	63,120,616	237,137,67
23	CAL	3,047,713					7,291,300	0,520,736			18,229,249	18,228,240	18,228,249	108,368,496	312,023,6
24	Total	4,010,215			7,291,300	-								100000	
15	Months in Service	12	11	10			7			4	3				
														2020	Cummulativ
	Souter .	Jan 2036	Feb 2020	Mar 2030	Apr 2020	Many 2020		Jul 2028	Aug 2020	Bay 2023	Oat 2029	Nov 2020	304.50E	10.411.978	USA Seving 59,048,9
28	Residential	982,462	882,247	802.043		1,188,508		831,208	972,073	564,138 1,764,773	1,093,695	729,130 2,300,912	1,184,488	32,671,287	188,868.3
	CAU	3,047,783	2,783,783	2,579,603	4,155,041	3,094,258	3,232,478	2,432,169	2,183,446	1.//				34,071,407	100,000,0
27		4,010,218		3,341,848		-		1483.367	2.860.130		4.857.012	3,038,042	1 518 021	43,363,233	248,037,20

"LRAM carp of 110% of annual cavings would apply to Column M, Lineo 2, 16, 17, and M. If estant annual cavings onlived are greater than 110% of of the estant planned annual variety values, the avelogs grader than 110% will be embedded from the LRAM extendation.

Se	erings Advisored by	Querter 1	
Q3	Q2	CO2	Q4
11%	20%	19%	90%
Year	Sevinga	Residential	CBI
2017	50,500,248	24%	78%
2016	67,733,900	24%	76%
2019	84,416,872	24%	78%
2020	109,369,485	24%	76%

Liberty Utilities Estimated Monthly Savings and Cummulative Savings (ki/h) (2017 - 2020)

		CaLA	Call	Ort G	Cal. 0	Cal E	Calif	OF 0	Out H	CALI	C4.J	C-A N	Call	IDL M	Cuttomudelities
Uni		Jan 2017	Feb 2017	Mar 2017	Apr 2017		June 2017	Jul 2017	Aug 2017	Sep 2017	Out 2017	Mgv 2017	Dec 2017	Annual Berings	Savingo
1	Residental	42,198	42,198	42,190	84,398	84,388	84,308	84,330	64,398	84,308	210,994	210,994	210,894	1,288,964	1,200,69
5	CN	88,484	PR,464	B3.454	190.82	194,928	198,928	199,928	199,628	190,028	497,319	492,318	492,319	2,953,917	2,983,9T
3	Total	140,863	140,885	140,663	281,329	261,328	261,328	261,326	281,328	281,328	703,313	703,313	703,313	4,219,661	4,219,88
4	Months in Service	12	11	10			7			4	3	1	1		
														2017	Cummulative
_		Jan 2017	Feb 2017	Nor 2017	Apr 2017			Jul 2017	Aug 2017	Sep 2017	Out 2017	Nov 2017	Dec 2217	LER Serlege	LBR Sevings
3	CAL	42,129	33,623	38,166	60,298	50,265	48.232	42,180	34,168	29,133	52,749	38,168	17,583	460,636	496,83
		78,484	90,258	2.053	147.000	131,289	114,675	90,484	42,053	88.643	123,000	62,063	41,027	1,158,941	1,150,94
,	Total	140,663	129.941	117,219	210,984	147,583	164,106	140,663	117,218	93,775	176,828	117,218	68,600	1,652,787	1,062,70
			11									-1-1	No.	2018	Cummulative
Line		Jan 2018	Feb 2018	Mer 2018	Agr 2018		June 2010	الاو الحل	Aug 2018	Sep 2018	Oat 2018	Nov 2018	Dag 2018	Acurael Cavingo	Sentrage
	Residental	16,296	66,366	58,298	112,501	112,591	112,691	112,631	112,691	112,501	281,476	281,476	281,476	1,686,656	2,954,81
	CM	131,340	131,359	131,359	282,711	262,711	282,711	262,711	262,711	262,711	656,778	656,776	858,778	3,940,689	0,894,50
10	Total	187,681	167,851	167,661	378,302	374,300	378,302	378,302	375,302	375,302	238,285	938,255	038,255	1 429,436	9,848,40
17	Months in Service	12	11	10			7			4	3	1	1	***	
	Bucker	Jan 2016	Feb 2012	Wer 2018	Apr 2018	May 2018	June 2016		A 2040	P	G-4 9949			2018	Currentlette
12	Residential	56,218	51.604	40,013	84.443	75,060	05.678	Jul 2016	Aug 2018 (4.913	37.530	70.369	Nov 2018	Dec 2018	LBR Savings	LBR Seving
13	CAI	131,358	120,409	109,463	197,033	178,141	163,248	131,360	109,463	97,579	164,196	109,463	23,450 64,732	581,469	1,927,4
	Total	167,031	172,013	150,376	261,478	250,201	218,626	187,851	180,376	125,101	234,864	150,378	78,188	1,543,429	0,424,77
														2019	Currentiation
Line	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2018	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Deg 2019	Armuel Revision	Levinge
18	Residential	70,800	70.800	70,800	141,600	141,600	141,600	141,400	141,600	141,000	364,000	384,000	354,000	2.124.003	A,CTELE
18	CN	145,200	148,200	148,200	330,400	330,400	330,400	330,400	330,400	330,400	829,001	820,001	829,001	4,950,007	11,860,60
17	Total	238.000	238,000	234,000	472,001	472,001	472,001	472,001	472,001	472,001	1,180,002	1,180,003	1,140,002	7,000,000	18,929,41
18	Months to Service	12	11	10			7				3		1		
														2019	Cummulath
19	Bester	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	1m 5018	Ave avre	Sep 2019	Oct 2019	Nov 2018	One 2019	Libit Serings	LER Seving
20	CAI	70,800 169,200	64,900	59,000	100,200	94,400	62,806	70,600	59,000	47,200	68,600	59,000	29,600	831,901	3,780,77
	Total	236,000	181,434 218,334	198,667	354,000	220,267	275.334	234,000	198,687	187,334	208,600	190,667	68,633	2,773,004	12,622,4
_										14122~				2173,004	12,002,0
Line	Seeter	Jan 2020	Fab 2020	May 2020	Apr 2029	May 2000	June 2020	Jul 2020	Aug 2028	Sep 2020	Out 2020	Nev 8028	Dec 2029	2028 Armuni Savingo	Cummulative Savings
22	Residential	92 839	65 400	97.600	184308	186,388	194.368	188.304	184 JOH	185.300	463.436	463.496	463,486	2.780.978	7 A54 8
23	CAU	216,288	210,298	218,288	432,500	432,606	432,536	432,500	432,596	432,598	1,021,491	1,081,491	1,081,491	0.496,943	19,339,43
24	Total	308.997	308.887	300,007	817,985	617,906	617.904	817,998	Control of the last of the las	017,003	1,544,986				
-									817,996			1,544,986	1,844,650	0,200,510	28,190,33
25	Months in Service	12	11	10	9		7	•		4	3	2	1	198	
										_				2020	Currentelle
	Sector _	Jan 2020	Feb 2020	77.249	Apr 2020	May 1810	June 2029	T/1 3030	Aug 2000	Sep 2028	Oct 2020	Nov 2020	Ose 2020	LBR Savings	LESS Savings
20					138,049	123,599	102149	62,698	77.248	61,749	118,874	77.249	38.825	1.089.216	6,168,0
26	Residential	12,599													
27	Residential C&I Total	216,298 308,997	189.273	160,246	324,447	284,397	252,348	219,298	180,244	144,198	270,373	180,248	128,749	2,541,503	14,382,01

"LRAM cap of 119% of annual cavings would apply to Column M, Lines 3, 10, 17, and 36. If asked around varings unbiaved are productiven 110% of all the extent planned cavings unbiaved, the servings greater than 110% will be concluded from the LRAM extendation.

Inputs			
	Savings Achieved b		
Q1	02	Q3	Qt
10%	20%	20%	50%
Yes	Savinge	Residental	CM
2017	4,219,685	30%	70%
2018	5.829,628	30%	70%
2019	7,080,009	30%	70%
2020	0.759.010	3/7%	70%

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Uniti Energy Systems Estimeted Monthly Savings and Cummulative Savings (kWh) (2817 - 2020)

Une 1		CHL A													
1			Cal.B	246	Cat. D	C4 6	CAF	Cal. G	CAL III	Call I	DITI	Cat ft	Call	2017	Cummulative
	South	Jan 2017	Feb 2017	May 2017	Apr 2017		June 2017	Jul 2017	Aug 2017		Oct 2017	Nov 2017	Dec 2017	Armust Savings	Sevings
-	Residental	93,770	93,770	03,770	101,074	181,074	161,074	118,818	119,818	119,616	150,284	150,284	169,284	1,502,839	1,562,638
2	CAU	281,311	201,311	281,311	453,223	457.221	453,223	300,453	359,453	3445	488,882	458.032	480,452	4,659,616	
3	Total	375,061	376,081	376,081	004,218	604,298	604,298	479,271	479,271	479,271	625,138	625,136	625,135	4,261,300	8,281,348
4	Months in Service	12	11	10	•		7			4	3	2	1		Commutative
														2017	LER Sections
		Jan 2017	Feb 2817	Mar 2217	Ap 2017	May 2017	1152 etc.	उस्र अगुर	Aug 2017		Oct 2017	Nev 2017	Que 2017	LER Serings	767.93
6	Residential	93,770	86,058	76,142	113,308	100,718	88,127	50,000	40,924	39,939	39,071	10,007	13,024	2,363,780	2,363,796
	CAL	281,311	257,869	234,476	335,819	302,149	214.340	179,727	149,772	110.010	117.213	78,142		2.181,720	3,181,72
7	Total	376,081	343,825	312,560	463,223	402,885	352,507	238,636	199,698	159,757	158,284	104,160	62,098	2,191,729	3,101,72
														2018	Cummulative
Jan	Brelat	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2010	June 2018	Ad 2018	Aug 2518	Sep 2018	Oct 2018	New 2018	Day 2318	Annual Servings	Serings.
A	Residential	123,609	123,608	123,609	199,147	189,147	199,147	167,946	157,948	157,946	204,015	208,018	206,016	2,080,148	3,622,68
	CAU	370,828	370,828	379,629	697,442	567,442	597,442	473,854	473,834	473,834	610,044	618,044	816,044	8,180,439	10,868,96
10	Total	494,435	494,438	494,438	796,590	794,590	788,890	631,778	831,778	631,778	524,050	824,058	824,058	6 240,488	14,491,84
11	Months in Service	12	11	10			7			4	3	2	1	2018	Cummutathe
											0.0000	N 0000	Den 2018	LEX Bevings	LBR Berings
	Seetes	Jan 2018	Feb 2018	Mar 2018	Apr 2010		June 2010	Jul 2014	Aug 2018	Sup 2018	Out 2018 81,504	Nov 2018	17,168	1,034,647	2,801,49
	Residental	123,809	113,308	103,007	149,361	132,785	110,100	78,972	45,810	157,948	156,411	103,007	51,504	3,115,977	7,804,48
13	CAI .	370,428	139,224	200,022	449,082	300,298	349,508	236,917	283.241	210,593	208,018	137.343	68,672	4,154,628	10,400,58
14	Total	494,438	463,232	412,029	507,442	631,060	464,677	310,003		210.000		101,010			
														2019	Cummulation
Line	Sector	Jan 2019	Feb 2019	May 2018	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov ROTO	Dec 2018	Annual Seyings 2,817,951	8-gvinga 8-740-64
15	Residental	157,072	157,072	157,072	253,080	253,060	253,080	200,703	200,703	200,703	261,766	251,788	261,788 788,369	7,053,663	19,723,64
16	CAI	471,218	471,218	471.218	758.180	769,180	759,180	502,108	002,100	802,108	744.360	788.360		19,471,444	24,963,36
17	Tetal	828,287	128,287	629,287	1,012,240	1,012,240	1,012,249	802,811	602,811	002,811	1,047,144	1,047,144	1,947,144	td'd\ s'ees	24,963,30
18	Months in Service	12	11	16			7			4	3	2	1		
														2018	Gummulativ
	Sector	Jan 2018	Feb 2510	Mar 2019	Apr 2010	May 2010	June 2019	Jul 2018	Aug 2010	2op 1019	Oat 2019	Nov 2010	Can 2019	LBR Sevings	LER Severe
18	Residential	157,072	143,982	130,865	189,795	168,707	147,618	100,361	63,626	68,901	05,447	43,631	21,610	1,310,830	14,028,47
20	CAU	471,218	431,047	32,77	589,385	508,129	442,425	301,064	150,878	200,703	198,340	130,593	67.282	6.279.363	19.771.21
21	Total	626,387	875,020	573,672	780,160	674,829	500,473	401,408	334,604	267,604	281,786	174,624	67,202	0,2/0,363	10,771.21
								7 14						2020	Cummidative
Line	Sector	Jan 2020	Feb 2020	May 2020	Apr 2030	May 2038	June 2029	Jul 2010	Aug 2028	Sep 2020	Oct 2020	Nev 2020	Des 2020	Acessal Savings	Savinge
22	Residential	204,391	204,301	204,391	329,267	329,297	329,207	261,166	281,166	201,100	340,452	340,682	340,662	3,408,018	0,647,54
73	CN	612,173	813,173	813,173	987,680	987,590		783,486	783,468	783,499	1,021,054	1,021,968	1,021,965	10,219,549	28,942,04
24	Tatal	817,864	817,864	617,584	1,317,186	1,317,188	1,317,100	1,044,686	1,044,006	1,044,685	1,362.607	1,382,507	1,362,607	13,628,000	38,669,41
	Months in Service	12	11	10			7			4	3	2	1		
26	THE PERSON OF THE PERSON	**	••											2020	Cummulativ
28							June 2020	Jul 2020	Aug 2028	Sep 2020	Oat 2029	New 2020	Dee 2023	LBR Savings	LBR Sevings
28	Sector	Jan 2020	Feb 1020	Mar 2020	Apr 2010	May 2020	9 Mulia when	4 dis trace a	Leading orders	Contract of the last					
	Sector _	Jan 2020 204,391	Feb 2020	Mar 2020 170,326	248,972	219,631	192,090	130,643	106,618	87,056	14,163	56,775	28,368	1,717,462	7,950,20
26 26 27															7,050,28 23,674,69 31,033,10

"LRAM cap of 118% of annual serings would apply to Column M, Lines 3, 10, 17, and 34. If octasis annual serings whileved are greater than 110% of diffus extent planned serings values, the serings greater then 110% will be excluded from the LRAM extended.

Inputs				
Service 1	Savings Additioned to	Querter		Installed
OT.	02	QS	Qe	Nates
18%	29%	23%	10%	(4)
Year	Savtrys	Residential	CN	
2017	0,231,350	25%	78%	(2)
2018	6,240,588	25%	75%	(2)
2018	10,471,444	2574	78%	(2)
2020	13,629,000	22%	75%	(2)

National Archimed for Counter. The sections assessed by counter was estimated based on the abscalan of budgets program code through out a year (budget eracials).

(2) Sector Savings Albumban was entimeted from the weighted average of 5 years of school arroad sevings results, 2011 through 2015.

Bill Impacts of Changes in System Benefits Charge - PSNH d/b/a Eversource Energy

							Line				umulative
	01/01/2016		2017		2018		2019		2020		Change
System Benefits Charge (\$/kWh)	\$ 0.00330	\$	0.00383	\$	0.00488	\$	0.00631	\$	0.00850		
Bill per month, including PSNH default energy service											
Residential Rate R (625 kWh/month)	\$ 115.79	S	116.12	S	116.77	S	117.67	S	119.04		
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)	\$ 1,702.62	\$	1,707.96	\$	1,718.37	\$		\$			
Change from previous rate level - \$ per month											
Residential Rate R (625 kWh/month)		\$	0.33	S	0.65	S	0.90	S	1.37	5	3.25
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		\$	5.34	\$	10.41	\$		-	21.88	\$	51.97
Change from previous rate level - %											
Residential Rate R (625 kWh/month)			0.3%		0.6%		0.8%		1.2%		2.8%
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)			0.3%		0.6%		0.8%		1.3%		3.1%

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Bill Impacts of Changes In System Benefits Charge - Liberty

	01/01/2016	2017	2018	2019	2020	Cumulative Change
System Benefits Charge (\$/kWh)	\$ 0.00330	\$ 0.00381	\$ 0.00480	\$ 0.00815	\$ 0.00825	
Bill per month, including PSNH default energy service						
Residential Rate D (625 kWh/month)	\$ 119.17	\$ 119.84	\$ 120.19	\$ 121.02	\$ 122.24	
General Service Rate G-2, three-phase service (40 kW, 10,000 kWh/month)	\$ 1,917.55	\$ 1,922.68	\$ 1,932.51	\$ 1,948.09	\$1,967.03	
Change from previous rate level - \$ per month						
Residential Rate D (625 kWh/month)		\$ 0.67	\$ 0.35	\$ 0.83	\$ 1.22	\$ 3.07
General Service Rate G-2, three-phase service (40 kW, 10,000 kWh/month)		\$ 5.13	\$ 9.83	\$ 13.58	\$ 20.94	\$ 49.48
Change from previous rate level - %						
Residential Rate D (625 kWh/month)		0.6%	0.3%	0.7%	1.0%	2.6%
General Service Rate G-2, three-phase service (40 kW, 10,000 kWh/month)		0.3%	0.5%	0.7%	1.1%	2.6%

Bill Impacts of Changes in System Benefits Charge - Unitil Energy Systems, Inc. ("UES")

								C	umulative
	01	/01/2016	2017	2018	2019		2020		Change
System Benefits Charge (\$/kWh)	\$	0.00330	\$ 0.00384	\$ 0.00486	\$ 0.00626	\$	0.00841		
Bill per month, Including Unitil default energy service									
Residential Rate D (625 kWh/month)	\$	109.10	\$ 109.44	\$ 110.07	\$ 110.95	\$	112.29		
General Service Rate G2 (40 kW, 10,000 kWh/month)	- \$	1,614.11	\$ 1,619.52	\$ 1,629.69	\$ 1,643.71	\$	1,665.22		
Change from previous rate level - \$ per month									
Residential Rate D (625 kWh/month)			\$ 0.34	\$ 0.64	\$ 0.88	S	1.34	\$	3.19
General Service Rate G2 (40 kW, 10,000 kWh/month)			\$ 5.41	\$ 10.17	\$ 14.01	\$	21.51	\$	51.11
Change from previous rate level - %									
Residential Rate D (625 kWIVmonth)			0.3%	0.6%	0.8%		1.2%		2.9%
General Service Rate G2 (40 kW, 10,000 kWh/month)			0.3%	0.8%	0.9%		1.3%		3.2%

Bill Impacts of Changes in System Benefits Charge - NHEC

									Cu	mulative
	01/01/2016		2017		2018	2019		2020	(Change
System Benefits Charge (\$/kWh)	\$ 0.00330	\$	0.00376	\$	0.00459	\$ 0.00575	\$	0.00759		
Bill per month, including NHEC default energy service										
Residential Rate Basic (625 kWh/month)	\$ 101.49	\$	101.78	\$	102.30	\$ 103.02	5	104.17		
Commercial 83, three-phase service (<50 kW, 10,000 kWh/month)	\$ 1,809.50	\$ 1	1,814.10	\$	1,822.40	\$ 1,834.00	\$	1,852.40		
Change from previous rate level - S per month										
Residential Rate Basic (625 kWh/month)		\$	0.29	\$	0.52	\$ 0.72	\$	1.15	\$	2.88
Commercial B3, three-phase service (<50 kW, 10,000 kWh/month)		\$	4.60	5	8.30	\$ 11.60	5	18.40	5	42.90
Change from previous rate level - %										
Residential Rate Basic (625 kWh/month)			0.3%		0.5%	0.7%		1.1%		2.6%
Commercial 83, three-phase service (<50 kW, 10,000 kWh/month)			0.3%		0.5%	0.6%		1.0%		2.4%

LIKEUTE ANNUT PRINTE

2016 Plan Budget 2016 Plansed MWH Serings 2016 Cincl To Achdess - No F		17,480 A 40,662.6 80,43	\$ 2,817,6 5,665.1 \$0.52	2,130 7 2,715.6 80.57	8	1,646.5 2,643.3 69.57				
Gam, To Arthiove	10.5	P 8304	NED	Liberty		MEC	PI	(reflatters	EBC Rate	Randings Torgette
	BILL	\$5,46	\$0.57	\$0.03		\$C.EZ	8.88%	2.50%	0.3386	BETT
	201A	\$6.47	10.53	\$4.04		\$0.53	9.50%	2.90%	0.300	B.EFE.
	2019	\$C.49	\$0.00	\$4.65		\$2.85	6.50%	2.50%	8.436	1,00%
	3020	8C.50	60,61	62.67		80.87	6.50%	2.50%	6.600	1,30%

			8317				2010				3016				8020			
	Bakes	Bales.	Company	2017	2017	no removided	COMPANY	2218	2018	S. AT WHEN PARTY	Campany	2010	2218	later order	Company	****	2026	Laboration
Campany	2014 (NIWIN)	Percent	Bertige	Bordoup &	Senings (MWh)	Francing	Bercheun	Bertrun %	Berrings, Billion	Funding	Bertosa	Berther X	Bendona (0000)	Bendon.	Bertran	Berlegs 3	Bornfage (MMh)	Funding
PERMI	7,688,054	73 1%	0.44%	3.47%	69,623	143	C.RET-	E. HOPE	67,734	8 10 17	1 07%	a.res	84419	18,32	1.38%	1.01%	156,300	32.43
UEII	1,225,254	11.4%	0.51%	0.00%	0,251	0.53	GATTS	0.00%	8,341	1.58	0.47%	8.10%	10,471	3.00	1.18%	0.12%	13,626	1.20
Liberty	810,825	Ark	D. OFF	6.04%	4,220	8.42	0.02%	0.00%	5,630	1.17	8.70%	2.57%	7,004	2.23	1.87%	0.0074	0,270	2.91
HO-EDC	760,643	7 116	0.42%	460.0	3,223	0.95	CEPL	8.64%	4,225	6.64	0.72%_	0.05%	5,471	1.86	0.47%	0.57%	7,400	1.20
Total	10,710,873	100.0%		8.00%	04,187	4.00		CAD'S	45,820	13.61		1.00%	167,438	1 244		1.30%	134,665	44.38

PERM	2017	2018	2019	2,030
RCG	1,914,374	1,618,373	1,018,375	14(4.37)
SRC - Current	14,164,807	14,194,897	14,104,867	14,194,897
SSC - Non	2.527.665	10.173.815	10,330,633	25,631,173
FCM	8.817.101	6,824,108	5,545,600	4,529,817
Total PERUI	23,357,868	32,119,368	41,018,795	04,473,361
US.3	2017	3018	2019	2030
RGGI	208,657	250.007	204.007	284,067
SEC - Current	2,205,457	2,205,457	2,305,457	2,205,457
SINC - Name	SEL 617	1,500,576	3,001,873	B,224,240
FCM	47h, 81/	7(00,000)	(15,157)	500,443
Total LIEB	1,642,943	4,767,860	0,230,119	4,514,246
Liberty	2017	3016	2010	20.20
MGGI	221 655	221,66D	221,593	221,500
SBC - Current	1,420,445	1,430,445	1,836,465	1,630,445
SSC - New	414.863	1.174.064	2.231,621	8,007,438
FOM	204 644	641,885	516,704	91,377
Total Liberty	2.616.301	1,577,213	4,812,270	4114,679
MES	2017	3014	3818	2020
ROG	195,053	185,082	165,000	185,003
SBC - Current	1,380,512	1,300,512	1,366,512	1,368,612
S&C - Name	340,046	484,188	1,884,058	1,364,004
FCM	E1 854	143.070	137,313	111,251
TOTAL NUMEC	1,981,617	SEPT.TOL	3.665,000	4,838,689

Docket No. DE 15-137 Gas Attachment B

						Gas	Itilities F	unding &		npacts			. 7			
	Year	Funding	LDAC Hale	EBR Rels	Total LDAC Rate	LDAC Angual Ball	Annual Intoact	Average Monthly Impact	Year	Funding	LDAC Rate	<u>ren</u> Raje	Total LDAC Rate	LDAC Amual Bill	Annual Impact	Average Monthly Impact
Liberty	2016 2017 2018 2019 2020	\$ 268,713 \$ 294,837 \$ 351,441 \$ 321,670	\$ 0.0586 \$ 0.0628 \$ 0.0678 \$ 0.0738 \$ 0.0790	\$ 0.0014 \$ 0.0046 \$ 0.0080 \$ 0.0117	\$ 0.0888 \$ 0.0643 \$ 0.0724 \$ 0,0817 \$ 0,0807	\$ 45.81 \$ 50.36 \$ 55.49 \$ 63.94 \$ 70.88	\$ 4.65 \$ 8.34 \$ 7.25 \$ 7.04	\$ 0.38 \$ 0.63 \$ 0.63 \$ 0.60 \$ 0.58	2016 2017 2018 2019 2020	8 - 8248.844 8272,851 8325,455 8287.886	\$0.0256 \$0.0280 \$0.0307 \$0.0339 \$0.0346	\$ 0.0008 \$ 0.0020 \$ 0.0035 \$ 0.0051	\$ 0.0256 \$ 0.0256 \$ 0.0327 \$ 0.0374 \$ 0.0418	\$224.59 \$251.18 \$286.89 \$327.88 \$367.58	\$ 26,58 \$ 35.72 \$ 41,09 \$ 39,59	\$ 2.22 \$ 2.98 \$ 3.42
Northe m	2016 2017 2018 2019 2020	\$ - 8 73,417 \$ 61,848 \$ 64,409 \$ 162,312	\$ 0.0297 \$ 0,0336 \$ 0.0369 \$ 0.0464 \$ 0.0485	\$ - \$ 0,0011 \$ 0,0036 \$ 0,0062 \$ 0,0091	\$ 0.0297 \$ 0.0347 \$ 0.0405 \$ 0.0466 \$ 0.0578	\$ 23.28 \$ 27.18 \$ 31.74 \$ 36.50 \$ 45.11	\$ 3.92 \$ 4.56 \$ 4.76 \$ 8.61	\$ -0.33 \$ 0.38 \$ 0.40 \$ 0.72	2016 2017 2018 2018 2020	\$ 53,818 \$ 45,338 \$ 47,215 \$111,852	\$0.0148 \$0.0156 \$0.0165 \$0.0174 \$0.0195	\$ 0.0003 \$ 0.0010 \$ 0.0017 \$ 0.0024	\$ 0.0146 \$ 0.0158 \$ 0.0175 \$ 0.0181 \$ 0.0220	\$129.09 \$139.65 \$153.16 \$167.26 \$182.68	\$ 11.56 \$ 13.52 \$ 14.10 \$ 25.42	\$ 0.96 \$ 1.13 \$ 1.14

¹Based on Average Liberty Annual Residence Usage 783 Tharms

*LDAC rate is poly the anarov afficiency portion

*Based on Average Liberty Assust C&I Usage 8773 Therms

Funding Summary Gas Utilities

		Sector	- ATTORNOON AND AND ADDRESS OF	Residential			CAI			Tot	व्य	
				医性性性	Expense	Man Harris Ay	10 CM	Expense	400 A 201 A 10	Service State	Expense	VS.
	Actual vs.	因及这种情		Savings	per Unit of	在地面在中心	Savings	per Unit of	1 2 2 4 Th	Savings	per Unit of	CY2014
Utility	Plan	Period	Program	MMETUS	Savings	Program	MMBTUS	Savinos	Total	MMETUS	Savings	Sales
THE CONT	Actual	2013	\$2,413,874	40,509	\$ 59.58	\$2,175,389	74,831	\$ 29.07	\$4,589,063	115,340	\$ 39.79	0.71%
	Actual	2014	\$2,768.568	34,401	\$ 80.48	\$ 2,545,412	82,545	\$ 30.84	\$5,313,980	118,946	\$ 45.44	0.72%
Liberty [Actual	2015	\$2,822,937	63,585	\$ 44.33	\$ 2,354,308	80,069	\$ 29.40	85,177,245	143,754	\$ 36.01	0.88%
S. Marine	Plan	2016	\$2.918.815	57,226	\$ 51.01	\$2,703,000	65,118	\$ 41.51	\$5,621,815	122,344	\$ 45.95	0.75%
	Average	13-'16	\$2,730.999	48,955	\$ 55.79	\$ 2 444.527	75.641	\$ 32 32	\$5 175 528	124,598	\$ 41.54	0.77%
	Actual	2013	\$ 669,087	5,876	\$ 113,86	\$ 454,617	20,338	\$ 22.36	\$1,123,684	26,212	8 42.87	0.37%
	Actual	2014	8 697,314	8,207	3 84.97	3 489,495	23,205	3 20.23	\$1,166,809	31,412	\$ 37.15	0.44%
Nathern	Actual	2015	\$ 612,898	7,479	\$ 108.89	\$ 528,570	25,230	\$ 20.95	\$1,341,468	32,709	\$ 41.01	0.48%
	Plan	2016	3 777,617	8,225	\$ 94.54	\$ 570,030	21,923	\$ 26.00	\$1,347,847	30,148	\$ 44.70	0.42%
	Average	13-'16	\$ 739,224	7,447	\$ 99.27	\$ 505.678	22 674	\$ 22.30	\$1,244 902	30.120	\$ 41,33	0.42%

CY2014 Utilley	Sales		
Liberty	16,256,975	69.52%	MMBW
Northern Total	7,095,897	30.38%	MMBL
Total	29 952 872	100 00%	MURh

Res MMBW 6,045,954	C&I MMBtu	10,211,021
Rus MMBtu 1,868,315	C&I MMBb	5,227,383

		Sector		Residential			CAI	CASH STATE OF		Total	
		% Sales		Savings	Expense per Unit of		Savings	Expense per Unit of		Savinos	Expense per Unit of
Utility	Year		Program	MMBTUS	Savings	Program	MMETUS	Savings	Program		Savings
THE PARTY.	2017	0.76%	\$3,187,528	57,791	\$55.18	\$2,951,844	85,762	\$44.89	\$6,139,372	123,553	\$49.89
SALIE I	2018	0.81%	\$3,482,164	61,594	\$58.53	\$3,224,898	70.088	\$46.01	\$8,708,860	131,661	\$50.93
Liberty	2019	0.87%	\$3,833,605	66,156	\$57.95	\$3,550,151	75,280	\$47.18	\$7,383,756	141.436	\$52.21
CIPICS	2020	0.92%	\$4,155,275	69,058	\$59,40	\$3,848,037	79,608	\$48,34	\$8,003,313	149,584	\$53.51
	2017	0.43%	\$ 851,034	8,324	\$102.24	\$ 623,849	22,187	\$28.12	\$1,474,883	30,511	\$48,34
Nachani	2018	0.45%	3 912,883	8.711	\$104.79	\$ 669,187	23,219	\$28.82	\$1,582,070	31,831	\$56.53
Northern	2019	0.47%	\$ 977,292	8.099	\$107.41	\$ 718,401	24,251	\$29.54	\$1,693,893	33,350	\$57.95
	2020	0.53%	\$1,129,604	10,280	\$110.10	\$ 828,053	27,347	\$30.28	\$1,957,857	37,607	\$69.40

at the	Year	Funding	\$/therm	% Increase	410	4550 21,77 04	S/therin	20.5
	160		Rate		Year	Funding	Rate	% increase
	2016	5 -	0.0585	0%	2016	\$ -	0.0258	0%
A Maria	2017	\$ 288,713	0.0629	8%	2017	\$ 248,844	0.0280	10%
Liberty	2018	\$ 284,637	0.0678	8%	2018	\$ 272,851	0.0307	10%
#182 Sira.	2019	\$ 351,441	0.0738	9%	2019	\$ 325,455	0.0339	10%
	2020	\$ 321,670	0.0790	7%	2020	3 297,886	0.0368	9%
	2016	\$ -	0.0297	0%	2016	-	0.0148	0%
Г	2017	\$ 73,417	0.0338	13%	2017	\$ 53,818	0.0158	7%
Northern	2018	\$ 61,848	0.0389	10%	2018	\$ 45,338	0.0165	8%
	2019	\$ 64,409	0.0404	8%	2019	\$ 47,215	0.0174	5%
	2020	\$ 152,312	0.0485	20%	2020	\$ 111.652	0.0195	12%

Savings Summary Gas Utilities

	Salos 2014 MMBIU	AND DESCRIPTION OF THE PERSON	or owner, state of the little of	2017 Savings %		Contraction of the Contraction o	2018 Savings %	2018 Savings (MMBtu)	2019 Company Savings	2019 Savings %	2019 Savions (MMBtu)	2020 Company Savings	2020 Savings	2020 Savings (MMBtu)
Liberty	18,256,975	69.82%		0.53%	123,553	0.81%	0.58%	131,881	1000	0.81%	141,438	0.82%	0.64%	149,584
Northern	7,095,697	30.38%		0.13%	30,511	0.45%	0.14%	31,931	0.47%	0.14%	33,350	0.53%	0,16%	37,807
Total	23 352 672	100%		0.66%	154 065		C 7G**	183 612		0.75%	174 785		0.80%	187.171

Liberty Utilities
Calculation of Lost Base Revenue (LBR)
Estimated Lost Base Revenues for 2017

		2017	LBR	2017	
Line	Company	(therm) Savings	(Sithern)	Total LBR	Comment
	Col. A	Col. 8	Col. C	Col. D	CoL E
1	Residential	252,356	0.32746	\$ 82,837	Page x, Line 5 Col. N
2	C&I	287,159	0.21116	60,837	Page x, Line & Col. N
3	Total	539,516		\$ 143,274	

Northern

Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2017

		2017	LBR	2017	
Line	Company	(therm) Savings	(\$/hem)	Total LBR	Comment
	Cal. A	Cal 8	Cal. C	Cot. D	CaLE
1	Residential	36,349	0.5538	\$ 20,123	Page x, Line 5 Col. N
2	C&I	96,885	0.1555	15,066	Page x, Line & Col. N
3	Total	133,234		\$ 35,188	

Liberty Utilities
Calculation of Lost Base Revenue (LBR)
Estimated Lost Base Revenues for 2018

Page Same	AND DESCRIPTION OF THE PARTY.	2018	LBR	-	2018	
Line	Sector	(therm) Savings	(\$/therm)		LBR	Comment
	Col. A	Cal. B	Col C		Col D	Col E
4	Residential	846,873	0.32746	\$	277,319	Page x, Line 12 Col. N
5	C&I	953,667	0.21116		203,490	Page x. Line 13 Col. N
6	Total	1,810,838		\$	480,808	Charles State of Section 112

Northern

Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revonues for 2018

	or Server	2018	LBR	2018	
Line	Sector	(therm) Savings	(\$/ihem)	LER	Comment
30	Col A	Col 8	Col C	Cel O	CoLE
4	Residential	121,281	0.6536	\$ 67,141	Page x Line 12 Col N
5	CAI	323,264	0.1555	50,268	Page x, Line 13 Cal N
6	Total	444,545		\$117,409	

Liberty Utilities

Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2019

					Assessment of the second
		2019	LBR	 2018	
Line	Sector	(therm) Savings	(\$Aherm)	LBR	Comment
	Col. A	Col B	Cal C	Cal D	Cal. E
7	Residential	1,482,731	0.32748	\$ 485,538	Pega x, Line 19 Col. N
8	Cāi	1,687,217	0.21116	356,276	Pege x, Line 20 CcL N
8	Total	3,169,948		\$ 841,813	

Northern

Calculation of Lost Base Revenue (LBR)
Estimated Lost Base Revenues for 2019

		2019	LBR	2019	
Line	Sector	(therm) Savings	(\$/therm)	LBR	Commant
	Cal A	Cal B	Col. C	Cal. D	Cal E
7	Residential	210,085	0.5538	\$116,303	Page x, Line 19 Cal N
8	CAI	559,963	0.1555	87,074	Page x, Line 20 Cal N
9	Total	770,045	127 -1-	\$203,378	

Liberty Utilities
Calculation of Lost Base Revenue (LBR)
Estimated Lost Base Revenues for 2020

denie, d	and the second second second	2020	LBR	P.OVARU	2020	The second second second
Une	Sector	(therm) Savings	(\$/therm)		LBR	Comment
	Col. A	Col B	Cel C		Cat D	Cal.E
10	Residental	2,160,893	0.32746	S	707.610	Page X Line 26 Col N
11	CAI	2,488,906	0.21116		519,227	Page x, Line 27 CoL N
12	Total	4,819,788	34	\$1	,226,837	Charles and the Control of

Northern

Calculation of Lost Base Revenue (LBR)
Estimated Lost Base Revenues for 2020

2000000	BARRIOTER VALUE OF SET	A THE STATE OF THE	Les Properties	COLUMN TO SER	
		2020	LBR	2020	
Line	Sector	(therm) Savings	(\$/therm)	1 BR	Comman
	Cal A	Col B	Cot C	Cal D	Cel E
10	Residential	306,142	0.5536	\$169,480	Page x, Line 26 Col. N
11	C&I	815,995	0.1555	125,887	Page x, Line 27 Col. N
12	Total	1,122,137		\$ 296,348	

Docket No. DE 15-137 Gas Attachment B

Liberty Litilities Monthly Savings and Cummutative Savings (therms) (2017 - 2020)

		CLA	CAB	Cal.C	C4 D	Cal E	Cd.F	CALO	Cal. H	Call	Call	CEK	Call	Col. M	Del N
Uni	Bactor	Jan 2017	Feb 2017	May 2017	Apr 2017	May 3017	June 2017	2017 ليد	Aug 2017	\$4p 2017	Oct 2017	Nev 2017	Dec 2017	2017 Total Sevings	Garrenshilv
1	Residential	28,898	26,896	28,898	34,526	34,528	38,528	44.307	44,307	44,307	80,906	80 BC8	80,908	577.814	577,81
2	CN	32,881	22,681	32,861	43,841	43,841	43,841	50.417	50,417	60,417	92,068	92,066	92,066	657,016	657.61
3	Total	61,777	81,777	81,777	82,338	82,369	82,369	94,724	94,724	84,724	172,974	172,974	172,974	1 235 630	1,234,63
4	Morthe in Service	12	11	10			7	•		4	3	2	1		
		Jan 2017	Feb 2017	May 2017	Apr 2017	Mey 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	1.ER Savings	LBR Beving
5	Residential	23,636	25,400	24,0BC	28,696	25.BB5	22,674	72.153	14.461	14,765	20.227	13,465	6,742	252.358	252.35
6	CTI	32,881	30,141	27,401	32,681	29,227	25,574	25,209	21,007	16,806	23,017	15,344	7,672	287,158	287,18
7	Total	61.777	54.628	51,480	01,777	54,912	48,048	47.382	38,448	31,575	43.244	28.629	14,415	539,515	538.51
		- (14 V 20 H) 12												2016	Guranulativ
Une		Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2016		Jul 2018	Aug 2018	Sug 2018	Oct 2018	Nov 2018	Dec 2018	Total Benings	Storings
-	Residential CAI	30,797	30,797	30,797	41,062	41,062	41,082	47,222	47,222	47.222	85,231	66,231	44,231	613,035	1,165,86
10		35.044	36,044	35,044	46,726	49,725	48,725	53 734	59,734	53,734	96,123	98,123	96,123	700,680	1,368,46
19	Tatel	85,841	85,841	65,641	97,780	\$7,788	87,780	100,956	100,956	100,956	184,354	184,354	184,354	1,318,015	2,652.34
11	Months in Service	12	11	10	•		7	•		•	3	3	- 1	201a	Curacialy
	Sector	Jan 2018	Fab 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	\$40 2018	Oct 2018	Nev 2016	Dec 2018	LEER Bevings	LBR Burton
12	Receivation	30,797	28,230	25,654	30,797	27,375	21,853	23,611	18,575	15,741	21,659	14,372	7,186	200,000	646,87
13	C&I Total	35,044	32,124	29,203	35,044	31,150	27,258	24,847	22,389	17,911	24,531	16,364	8,177	308,051	962,86
14	10.4	85,841	60,354	54,867	85,841	50,525	51,200	50,476	42,065	23,652	48,000	30,726	16,363	575,000	1,610,63
														2019	Currenulative
Une 15	Residential	Jan 2019	Feb 3019	Mer 2018	Apr 2019		June 2018	Jul 2010	Aug 2010	8 cp 2019	Oct 2010	Nov 2019	Day 2019	Total Bavings	8.evings
18	CAI	33,078 37,640	33,078 37,640	37,840	44,104 50,188	44,104	44,104	50,720	50,720	50,720	02,618	92,618	82,816	861,660	1,855,41
17	Total	70.718	70,718	79,718	94.290	60,186 94,290	50.186 94.290	108.434	108.434	108 404	198,010	105,392	105,352	762,797	2,111,29
18	Months in Service	12													of months in
188	INSTITUTE IN COLUMN	14	11	10	•		7	•	•	4	3	1		2019	Cummulatha
	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2018	Jul 2019	Aug 2019	\$ep 2018	Oct 2018	Nov 2019	Dec 2019	LER Seringa	LBR Sevings
19	Residental	33,078	30,321	27,585	33,078	29,403	25,727	26,360	21,133	16,907	23,156	15.436	7,718	200,001	1,482,73
20	CAL	37,840	34,503	31,367	37,640	33,458	29,275	28,857	24,046	19,234	28,348	17,665	8,763	328.721	1,687,21
21	Total	70,718	64,625	54,812	70,718	62,560	65,003	64,217	45,181	38,146	48,502	38,002	18,501	617,602	8,168,94
									1	13				2020	Cummulativ
Ume 22	Sector Flanicartual	Jan 2026	Feb 2020	Mar 2020	Apr 2020	May 2020	Jume 2020	العلا العل	Aug 2020	Sep 2025	Oct 2020	Nov 2020	Dec 2020	Total Sevings	Berrings
73	CAL	34,579	34,979	34,878	44,639 \$3,071	48,839	45,636	53,635	53,636	53,633	97,941	87,941	97,841	629,531	2,554,99
24	Total	74,782	74.792	74,782	90 700	53,071 99,700	53,071 98,709	114,864	114,666	114,568	209.300	209,340	200,390	1 495 642	2,007,36 5,462,34
25	Maniba in Service	12	11	10			7	8	4	4	GE END		Y W. L. Y.	1 483 642	3,412,34
_		146		14			,	•	•	•	1	2	1	2020	Currenulative
	ancter	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2025	Jul 2020	Aug 2020	Sep 2026	Oct 2020	Nov 2020	Dec 2020	LBR Sevires	LBR Savings
26	Resistant and	34,978	\$2,084	29,149	34,979	31,092	27,206	26,817	22,348	17,878	24,485	18,324	8,162	305,484	2,160,80
27	CAI Total	39,803	36,488	33,169	39,800	35,340	30,950	30,516	25,430	20,344	27,962	18,575	9,267	347,813	2,458,00
		74,742	EN.550	62,318	74.782	64,473	58.184	57,333	47.777	38,222	52,347	34,808	17,449	653,087	4,618,78

Docket No. DE 15-137 Gas Attachment B

Northern Utilities Monthly Savings and Cummulative Savings (therms) (2017 - 2020)

Um	Sector	CALA	Col. 8 Feb 2017	Out 0 Mar 2017	Cal. D	Col E	Col. F	Cal O	Cal H	CAI	Calif	CALK	Call	26 M 2617	Out H Currentative
1	Henderbel	Jen 2017 4,162	4,162	4,162	Apr 2017 5,549	8.549	June 2017 5,549	8,362	Aug 2017	8-sp 2017	Oct 2017	New 2017	Des 2017	Total Sevings	Sevings
2	CAL	11,094	11,094	11,094	14.792	14,792	14,792	17,010	17 010	17,010	11,854 31,062	11,854	11,854	63,242	63.24
3	Total	15.256	15,256	15,256	20,341	20,341	20,341	23,392	-			31,062	31,082	221,873	221,87
3	FOCES		13,236	19,230	20,041	20,341	42,241	23,342	Z3, 392	23,192	42,716	42,715	42,718	305 115	305,11
4	Months in Service	12	11	10	•		7			4	3	1	1		
		****	f. b. 2007											2017	Cummidelive
6	Residented	Jan 2017	Fab 2017 3,815	May 2017	Apr 2017	May 2017	Acres 2017	Ad 2017	Aug 2017 2.859	Sep 2017	Oct 2017	Nov 2017	Dec 2017	LISH Sevings	LBS Saving
6	CAI	11,094	10,165	8,245	11,094	8,861	8,628	8,191	7.000	2,127 5,870	2,913 7,796	1,842 5,177	971	34,349	36,34
7	Total	15.256	13,884	12,713	15,250	13,561	11,866	11,005	8,747	7,767	10,679	7,119	3,500	133,234	133,23
									4, 4				4		
Una														2018	Commitsion
B	Residential	Jan 2018 4 354	Feb 2018	Mer 2018	Apr 2018 5,808	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2016	Total Serings	Bevings
	CAL	11,810	11,010	11,010	15,463	5,600	5,806	6,679	6,678	6,679	12,198	12,106	12,106	87,113	175,35
10	Tetal	15,010	15,010	15.965	21,267	21,287	15,460	17,801	17,601	17,601	32,507	32,507	22,507	232,160	454,00
10	I GOLD	12,863	19,365	10,400	21,28/	21,287	21,287	24,480	24,460	24,480	44,703	44,703	44,703	318 306	624,42
11	Months in Service	12	11	10		8	7		5	4	1	2	1	. S. O. S.	
	Sector	Jan 2018	E-1 2018	Mars State	4		h	1.10010						2918	Currenul div
12		4356	Feb 2018	May 2018 1630	Apr 2018	May 2018 3,872	June 2016 3,366	2 330	Aug 2018	Sep 3018 2.226	Oct 2618	Nev 2018	Dec 2018	LER Savinga	LBR Severy
13	CAL	11,6:0	10,642	8,675	11,610	10,320	9,030	8,901				2,033	1,018	36,040	121,28
-	Yout	13.965	14.635	13.304	16.955	14,191	12,417	12,240	10.200	8.160	11,178	7,450	2,709	139,430	323 26 444,84
															Currentestes
	Sector													2018	
		Jan 2019	Feb 2019	Mar 2010	Apr 2018	May 2019	June 2019	Jul 2019	Aug 2019	Sup 2019	Oct 2019	Nev 2019	Dec 2018	Total Savis on	
15	Resciented	4,549	4,549	4,540	Apr 2018 6,086	May 2019 6,066	June 2019 6,096	Jul 2018 8,976	Aug 2019 6,976	Bap 2019 6,678	Oct 2010 12,738	Nev 2019 12,738	Dec 2018 12,738		Sevings
15	Reteiertest C&I	4,549 12,128	4,549 12,126											Total Savings	Sevings 281,34
15	Resciented	4,549	4,549	4,540	8,086	6,066	8,006	8,976	6,476	6,678	12,738	12,738	12,738	Total Sevings 90,985	Sevings 281,34 660,57
15	Reteiertest C&I	4,549 12,128	4,549 12,126	4,540 12,125	6,066 16,168	6,066 16,166	6,096 16,166	18,560	6,976 18,563	6,678 18,683	12,738 33,852	12,734 33.952	12,738	Total Savings 90,985 242,513 333,498	8evings 281,34 996,57 857,81
15 16 17	Reactorists C&I Total	4,549 12,128 16,576	4,549 12,126 16,675	4,540 12,126 16,675	6,086 16,168 22,233	6,066 16,166 22,231	8,006 18,168 22,233 7	8,978 18,589 26,568	6,676 18,663 25,664	6,678 18,683 25,586	12,738 33,852 46,690	12,738 33,952 48,690 2	12,738 20,452 48,690	Total Savings 90,985 242,513 333,498	8evings 281,34 690,57 857,81
15 16 17	Readeries C&I Total Months in Service	4,549 12,128 16,676	4,549 12,126 16,675 11 Feb 2019	4,540 12,126 14,675 10 Mar 2019	6,066 16,168 22,233 1 Apr 2018	6,086 16,188 22,233 8 May 2015	6,006 16,168 22,233 7 Juna 2019	8,976 18,560 26,564 6	6,476 18,663 25,558 8 Aug 2018	6,678 18,683 25,586 4 8ep 2018	12,738 33,852 46,890 3 Qct 2018	12,738 33,952 48,690 2 Nov 2018	12,738 20,453 48,690 1 Dec 2019	Total Savings 80,965 242,513 333 498 2019 LBR Savings	Sevings 281,34 600,57 957,61 Currenatelive LBH Sevings
15 16 17 18	Readering CAI Total Months in Service Sector	4,549 12,126 16,676 12 Jan 2018	4,549 12,126 16,675	4,540 12,126 16,675	6,086 16,168 22,233	6,066 16,166 22,231	8,006 18,168 22,233 7	8,976 18,560 25,564 6 Jul 2019 3,486	6,676 16,663 25,666 8 Aug 2018 2,608	6,678 18,663 25,566 4 8ep 2018 2,325	12,738 33,852 46,890 3 Qct 2918 3,184	12,736 33,952 48,660 2 Nov 2018	12,738 20,852 48,890 1 Dec 2019	Total Savings 90,965 242,513 333,490 2019 LBR Savings 36,730	84vings 281,34 600,57 857,81 Currentative LBR Savings 210,08
15 16 17 18 19 20	Reactorist C&I Total Months in Service Sector Reactorical	4,549 12,128 16,676 12 Jan 2018 4,549	4,549 12,126 16,675 11 Feb 2019	4,540 12,126 14,675 10 Mar 2019 3,791	6,006 16,168 22,233 8 Apr 2018 4,549	6,086 16,166 22,233 8 May 2015 4,044	8,086 16,168 22,238 7 Juna 2019 3,536	8,976 18,560 26,564 6	6,476 18,663 25,558 8 Aug 2018	6,678 18,683 25,586 4 8ep 2018	12,738 33,852 46,890 3 Qct 2018	12,738 33,952 48,690 2 Nov 2018	12,738 20,453 48,690 1 Dec 2019	Total Savings 80,965 242,513 333 498 2019 LBR Savings	84vings 281,34 600,577 857,811 Currentative LBR Senings 210,086 554,98
15 16 17 18 18 20	Reactionist CAI Total Monstra in Service Becter Reactionical CAI	4,549 12,128 16,576 12 Jan 2018 4,549 12,128	4,549 12,126 16,675 11 Feb 2019 4,170 11,115	4,540 12,126 14,675 10 Mar 2019 3,791 10,105	8,086 16,168 23,233 8 Aur 2018 4,549 12,128	6,086 16,166 22,233 8 May 2015 4,044 10,778	8,000 16,165 22,233 7 Juna 2019 3,536 9,431	8,978 18,560 25,964 6 Jul 2019 3,486 8,786	6,476 16,563 25,568 6 Aug 2018 2,908 7,747	6,678 18,683 25,588 4 8-ep 2019 2,325 6,188	12,738 33,852 46,890 3 Qct 2918 3,184 8,488	12,738 33,952 48,660 2 Nov 2018 1,123 5,658	12,738 25,852 48,690 1 Dec 2019 1,081 2,829	Total Savings 80,985 242,513 333,498 2018 LBR Savings 38,720 105,697	Sevings 281,34 685,37 857,91 Currentiable LBR Sening 210,06 554,98 770,04
15 16 17 18 19 20 21	Reactoriest C&I Total Months in Service Sector Residential C&I Total	4,549 12,128 16,576 12 Jan 2019 4,549 12,125 16,676	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 15,285	4,540 12,126 14,675 10 Mar 2019 3,791 10,105	8,086 16,168 23,233 8 Aur 2018 4,549 12,128	6,086 16,166 22,233 8 May 2015 4,044 10,778	8,000 16,165 22,233 7 Juna 2019 3,536 9,431	8,978 18,560 25,964 6 Jul 2019 3,486 8,786	6,876 16,563 25,568 6 Aug 2018 2,906 7,747 10,653	6,678 18,683 25,588 4 8-ep 2019 2,325 6,188	12,738 33,852 46,890 3 Qct 2918 3,184 8,488	12,738 33,952 48,660 2 Nov 2018 1,123 5,658	12,738 25,852 48,690 1 Dec 2019 1,081 2,829	Total Savings 90,965 242,513 333,490 2018 LBR Savings 39,730 105,897 145,627	Sevings 281,34 606,57 857,61 Currendativ LBR Bendage 210,06 554,98 779,04
15 16 17 18 19 20 21	Reactoriest C&I Total (Months in Service Sector Reactorical C&I Tota) Sector Reactorist	4,549 12,126 16,576 12 Jan 2019 4,549 12,126 16,575	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 15,285 Feb 2020 5,130	4,548 12,126 18,675 10 Mar 2019 2,781 10,105 12,896 Mar 2028 5,130	8,086 16,166 22,233 8 Apr 2018 4,549 12,128 18,675	6,086 19,166 22,233 8 May 2015 4,044 10,778 14,822 May 2020 6,640	0,000 16,168 22,223 7 Juna 2010 3,536 9,631 12,000	8,978 18,589 25,566 6 Jul 2019 8,486 9,786 12,784	6,476 16,563 25,568 6 Aug 2018 2,908 7,747	6,678 18,663 25,586 4 8ep 2018 2,325 6,188 8,523	12,738 \$3,652 44,890 3 Oct 2018 3,184 8,688 11,672	12,736 33,952 46,660 2 Nov 2018 2,123 5,659 7,782	12,738 53,652 48,680 1 Dec 2019 1,081 2,429 3,891	Total Servic ge 80, 985 242, 513 333, 499 2018 LBR Servings 105, 697 145, 627	Sevings 281,34 680,57 857,91 Communicative LBR Sevings 210,06 554,98 770,04
15 16 17 18 19 20 21	Reactoriest C&I Total Months in Service Sector Residential C&I Total	4,549 12,128 16,576 12 Jan 2019 4,549 12,125 16,676	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 15,285	4,540 12,126 18,675 10 Mar 2019 3,791 10,105 12,896	8,086 16,166 22,233 8 Apr 2018 4,549 12,128 18,675	6,086 16,166 22,233 8 May 2015 4,044 10,778 14,822	8,000 16,165 22,233 7 Juna 2019 3,536 9,431 12,000	8,975 18,599 26,598 6 Jul 2019 8,498 9,796 12,784	6,876 16,463 25,566 6 Aug 2011 2,906 7,747 10,653	6,978 19,663 25,566 4 8-22 2019 2,325 6,188 8,523	12,738 33,652 46,690 3 Qct 2018 3,184 8,488 11,872	12,736 33,952 46,660 2 Nov 2018 1,123 5,639 7,782	12 736 33,852 48,690 1 Dec 2019 1,081 2,629 3,801	Total Servings 80,985 242,513 333,490 2018 LBR Servings 38,730 105,697 145,627 2020 Total Serings	Sevings 281,34 etc. 281,34 etc
15 16 17 18 19 20 21	Reactoriest C&I Total (Months in Service Sector Reactorical C&I Tota) Sector Reactorist	4,549 12,126 16,576 12 Jan 2019 4,549 12,126 16,575	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 15,285 Feb 2020 5,130	4,548 12,126 18,675 10 Mar 2019 2,781 10,105 12,896 Mar 2028 5,130	8,086 16,166 22,233 8 Apr 2018 4,549 12,128 18,675	6,086 19,166 22,233 8 May 2015 4,044 10,778 14,822 May 2020 6,640	8,000 19,168 22,233 7 June 2019 3,536 9,431 12,009	8,975 18,599 26,966 6 Jul 2019 8,496 9,795 12,794	6,876 16,563 25,868 6 Aug 2018 2,906 7,747 10,653	6,978 19,683 25,566 4 8ep 2018 2,325 6,188 8,523	12,738 \$3,652 44,890 8 Qct 2019 3,184 8,488 11,872 Cct 2020	12,736 33,952 48,680 2 Nov 2018 2,123 5,639 7,782 Nov 2010 14,384	12,736 53,659 48,680 1 Dec 2018 1,081 2,429 3,801	Total Servings 80,985 242,513 333,498 2018 LBR Servings 38,730 105,897 145,627 2020 Total Servings	Sevings 281,34 eec. 27
15 16 17 18 19 20 21 22 23 24	Reactorist CAI Total Months in Service Sector Reactorical CAI Total Sector Reactorist CAI CAI	4,549 12,126 16,576 12 Jan 2018 4,549 12,126 16,576 Jan 2020 5,130 19,574	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 15,285 Feb 2020 5,130 13,674	4,548 12,126 18,675 10 Mar 2019 3,791 10,105 12,896 May 2020 5,130 12,674	6,086 16,166 22,233 8 Apr 2018 4,540 12,126 18,675 Apr 2030 6,640 18,231	6,086 19,166 22,233 8 Mey 2019 4,044 10,778 14,622 Mey 2010 6,640 18,231	8,000 19,165 22,233 7 June 2019 3,536 9,431 12,000 4,000 6,640 18,231	8,976 18,590 26,968 6 Jul 2019 3,498 9,796 12,784 Jul 2020 7,668 20,966	6,876 16,563 25,568 6 Aug 2018 2,008 7,747 10,653 Aug 2020 7,668 20,868	6,978 19,585 25,566 4 8ep 2019 2,325 6,198 8,523 5 pp 2029 7,656 20,868	12,738 33,652 46,990 8 Qet 2918 3,184 8,488 11,672 Oct 2020 14,564 30,286	12,736 33,952 48,680 2 Nov 2018 1,123 5,639 7,782 Nov 2020 14,364 38,285	12,738 53,659 48,660 1 Dec 2018 1,061 2,429 3,801 Dec 2028	Total Savings 80,985 242,513 333,490 2018 LBR Savings 36,730 105,697 145,627 2020 Total Savings 102,600 2773,472 376,072	Sevings 281,34 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37 600,37
15 16 17 18 19 20 21 22 23 24	Reactorist C&I Total Months in Service Sector Residential C&I Total Sector Randerise C&I Total Months in Service	4,549 12,128 16,576 12 Jan 2019 4,540 12,126 16,576 5,130 3,574 18,504	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 16,285 5,130 5,130 13,674 18,804	4,548 12,126 14,675 10 Mar 2019 3,791 10,105 13,896 Mar 2020 5,130 13,674 18,804	6,086 16,168 22,233 8 4,846 12,128 18,675 Apr 2030 6,840 18,231 25,071 8	6,086 19,166 22,233 8 May 2015 4,044 10,778 14,822 May 2020 6,540 18,231 25,071	8,000 16,168 22,223 7 June 2019 3,536 9,531 12,068 5,640 18,231 26,071 7	8,976 18,569 25,566 6 Jul 2019 8,496 9,296 12,784 Jul 2030 7,658 20,966 25,652 6	6,976 16,463 25,568 8 Aug 2018 2,906 7,747 10,653 Aug 2020 7,666 20,966 20,632	6,978 10,565 25,566 4 8-p 2019 2,325 6,180 8,523 5-sp 2019 7,666 20,666 20,666 25,662	12,738 33,652 46,990 8 Qet 2018 2,184 8,438 11,672 Cet 2020 14,564 38,286 52,650	12,736 33,952 48,690 2 Nov 2018 1,123 5,659 7,782 Nov 2010 14,384 38,285 52,850 2	12,736 53,659 48,690 1 Dec 2019 1,081 2,429 3,891 Dec 2020 14,364 28,286 52,850	Total Savings 90,985 242,513 333,490 2018 LBR Savings 195,897 145,627 2030 Total Savings 102,800 273,472 376,072	Sevings 281,34 etc.; 281,34 etc.; 287,61 etc.; 287,61 etc.; 287,61 etc.; 287,61 etc.; 287,04 etc.; 287,05 etc
15 16 17 18 19 20 21 22 23 24 25	Reactorist CAI Total Months in Service Sector Reactorial CAI Total Sector Randerlant CAI Total Months in Service Sector	4,549 12,126 16,576 12 Jan 2019 4,540 12,125 16,676 Jan 2020 5,130 13,574 16,604 12 Jan 2020	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 16,285 5,130 13,674 18,804	4,548 12,126 10,675 10 May 2019 3,791 10,105 13,896 May 2020 5,130 13,674 10,804	8,086 16,168 22,233 9 4,849 12,128 18,675 4,2020 6,840 18,231 25,071 8	6,086 19,166 22,233 8 May 2015 4,044 10,778 14,622 May 2020 6,840 18,231 25,071	8,000 16,168 22,233 7 June 2019 8,536 9,431 12,968 6,940 18,231 25,071 7	8,976 18,560 25,566 6 -Ad 2019 8,466 9,786 12,784 -Jul 2020 7,666 20,966 20,966 26,632 6	6,976 16,463 25,568 8 Aug 2018 2,908 7,747 10,653 Aug 2020 7,666 20,632 6 Aug 2020	6,978 10,683 25,586 4 8-9 2019 2,325 6,188 8,523 7,686 20,888 24,632 4	12,738 33,652 46,890 8 Qct 2018 3,184 8,698 11,672 Cct 2020 14,564 30,286 52,650 3	12,736 33,952 46,680 2 Nov 2018 1,123 5,639 7,782 Nov 2018 14,364 38,265 52,650 2	12,736 53,652 48,680 1 Dec 2019 1,081 2,829 3,891 Dec 2020 14,364 24,265 52,650	Total Savings 80,985 242,513 333,490 2018 LBR Savings 105,697 145,627 2029 Total Savings 102,800 273,472 376,072	Sevings 281,34 etc.; 281,34 etc.; 281,34 etc.; 287,91 Communicative LBR Sevings 210,06 554,98 770,04 Economicative Sevings 363,94 g70,05 1,233,99 Communicative LBR Sevings
15 16 17 18 18 20 21 22 23 24 26	Reactoriest CAI Total Months in Service Sector Residented CAI Total Sector Read enter CAI Total Months in Service Sector Readented Sector Readented	4,549 12,128 16,576 12 Jan 2019 4,549 12,125 16,575 Jan 2020 5,130 13,574 18,604 12 Jan 2020 5,130	4,549 12,126 16,675 11 Fels 2019 4,170 11,115 15,285 Fels 2020 5,130 13,674 18,804 11 Fels 2020 4,703	4,546 12,126 18,675 10 May 2019 2,791 10,105 12,896 May 2020 5,130 13,674 10,804 10 May 2020 4,275	8,086 16,166 22,233 9 4,840 12,128 16,675 Apr 2830 6,640 16,231 25,071 9 Apr 2820 5,130	6,086 19,166 22,233 8 May 2015 4,044 10,778 14,822 May 2020 6,540 18,231 25,071 0	8,000 19,165 22,233 7 June 2019 3,536 9,431 12,000 6,840 18,231 26,071 7 June 2030 3,000	8,976 18,560 26,566 6 -Ad 2019 3,466 3,764 12,764 12,764 20,966 20,966 25,832 6 Jud 2030 3,553	6,976 16,563 25,566 8 Aug 2018 2,606 7,747 10,653 Aug 2020 7,666 20,600 20,632 6 Aug 2020 3,278	6,978 10,683 25,586 4 8-p 2019 2,325 6,198 8,523 7,666 20,888 28,832 4 8-p 2019	12,738 33,652 46,990 8 Qet 2018 3,184 8,488 11,672 Cct 2020 14,564 30,286 52,660 3	12,736 33,952 48,660 2 New 2018 1,123 5,639 7,782 New 2018 14,364 38,265 52,650 2 New 2018 2,364	12,736 53,659 48,680 1 Dec 2018 1,081 2,629 3,681 14,364 28,286 52,650 1 Dec 2028 1,197	Total Savings 80,985 242,513 333,499 2018 2018 2018 2018 2020 105,897 145,627 2020 2020 273,472 376,072 2020 LBR Savings	Sevings 281,34 eec.27 es57,91 Currendative LBR Senings 210,06 556,98 770,00 Currendative Sevings 363,94 970,05 1,233,99 Currendative LBR Sevings 308,14
16 17 18 19 20 21 22 23 24 26	Reactorist CAI Total Months in Service Sector Reactorial CAI Total Sector Randerlant CAI Total Months in Service Sector	4,549 12,126 16,576 12 Jan 2019 4,540 12,125 16,676 Jan 2020 5,130 13,574 16,604 12 Jan 2020	4,549 12,126 16,675 11 Feb 2019 4,170 11,115 16,285 5,130 13,674 18,804	4,548 12,126 10,675 10 May 2019 3,791 10,105 13,896 May 2020 5,130 13,674 10,804	8,086 16,168 22,233 9 4,849 12,128 18,675 4,2020 6,840 18,231 25,071 8	6,086 19,166 22,233 8 May 2015 4,044 10,778 14,622 May 2020 6,840 18,231 25,071	8,000 16,168 22,233 7 June 2019 8,536 9,431 12,968 6,940 18,231 25,071 7	8,976 18,560 25,566 6 -Ad 2019 8,466 9,786 12,784 -Jul 2020 7,666 20,966 20,966 26,632 6	6,976 16,463 25,568 8 Aug 2018 2,908 7,747 10,653 Aug 2020 7,666 20,632 6 Aug 2020	6,978 10,683 25,586 4 8-9 2019 2,325 6,188 8,523 7,686 20,888 24,632 4	12,738 33,652 46,890 8 Qct 2018 3,184 8,698 11,672 Cct 2020 14,564 30,286 52,650 3	12,736 33,952 46,680 2 Nov 2018 1,123 5,639 7,782 Nov 2018 14,364 38,265 52,650 2	12,736 53,652 48,680 1 Dec 2019 1,081 2,829 3,891 Dec 2020 14,364 24,265 52,650	Total Savings 80,985 242,513 333,490 2018 LBR Savings 105,697 145,627 2029 Total Savings 102,800 273,472 376,072	Sevings 281,344 680,377 857,010 Communicative LBR Sendings 210,000 554,96: 770,000

Calculations - Cost to Achieve

	Res		C&I			Res		C&I	
2016 Plan Budget	\$777,617	\$	570,030	\$1,347,647	\$2	2,918,815	\$2,	703,000	\$ 5,821,815
2016 Planned MWH Savings	8,225		21,923	30,148		57,228		65,118	122,344
2016 Cost To Achieve - No Pl	\$ 94.54	\$	28.00	\$ 44.70	\$	51.01	\$	41.51	\$ 45.95
Cost To Achieve	Nor	the	m	Overall		Lib	erty		Overall
2017	\$102.24		\$28.12	\$48.34		\$55.16		\$44.89	\$49.69
2018	\$104.79		\$28.82	\$49.55		\$56.53		\$48.01	\$50.93
2019	\$107.41		\$29.54	\$50.79		\$57.95		\$47.18	\$52.21
2020	\$110.10		\$30.28	\$52.08		\$59.40		\$48.34	\$53.51
	PI	1	nflation	Savings	Ta	rgets			
	5.50%		2.50%	2017		0.66%			
	5.50%		2.50%	2018		0.70%			
	5.50%		2.50%	2019		0.75%			
	5.50%		2.50%	2020		0.80%			

SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED

Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.

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