

BEFORE THE  
STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION

**DOCKET DE 20-092**

IN THE MATTER OF:      Electric and Gas Utilities

2022-2023 New Hampshire Statewide Energy Efficiency  
Plan

DIRECT TESTIMONY

OF

Scott T. Balise, Jay E. Dudley, Stephen R. Eckberg, and Elizabeth R. Nixon  
New Hampshire Department of Energy

April 19, 2022

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1

2 **Introduction of Witnesses**

3 **Q. Please state your names.**

4 A. Scott T. Balise, Jay E. Dudley, Stephen R. Eckberg, and Elizabeth R. Nixon.

5 **Q. By whom are you employed, and what is your business address?**

6 A. We are employed by the New Hampshire Department of Energy (DOE) in the Regulatory  
7 Support Division. Our business address is 21 S. Fruit Street, Suite 10, Concord, NH 03301.

8 **Q. Mr. Balise, please summarize your education and professional work experience.**

9 A. I have been employed as a Utility Analyst with the DOE since January 2022. Prior to the  
10 DOE, I was employed at the NH Department of Safety, Division of Administration, from  
11 2021 until 2022 as a Business Administrator. Prior to joining the State, I worked for a non-  
12 profit business and a government contractor in Massachusetts. My tasks at the non-profit  
13 included reconciliations of sub-ledger accounts, and coordination and review of monthly  
14 balance sheet and income statement account trend analysis. At the government contractor, I  
15 authorized and calculated costs of work order transfers. I also prepared month-end reporting  
16 entries which included labor, cost of sales and sales revenues. I have a B.S. in Business  
17 Administration from the Massachusetts College of Liberal Arts and a Master's in Business  
18 Administration from Southern New Hampshire University.

19 **Q. Mr. Dudley, please summarize your education and professional work experience.**

20 A. I started at the New Hampshire Public Utilities Commission ("Commission" or "PUC") in  
21 June of 2015 as a Utility Analyst in the Electric Division. Effective July 1, 2021, the Electric  
22 Division was transferred to, and became part of, the newly created DOE, and I am presently  
23 employed by that agency. Before joining the Commission, I was employed at the Vermont

1 Public Service Board (now known as the Vermont Public Utilities Commission, “VT-PUC”)  
2 for seven years as a Utility Analyst and Hearing Officer. In that position I was primarily  
3 responsible for the analysis of financing and accounting order requests filed by all Vermont  
4 utilities, including review of auditor’s reports, financial projections, and securities analysis.  
5 As Hearing Officer, I managed and adjudicated cases involving a broad range of utility-  
6 related issues including rate investigations, construction projects, energy efficiency,  
7 consumer complaints, utility finance, condemnations, and telecommunications. Prior to  
8 working for the VT-PUC, I worked in the commercial banking sector in Vermont for twenty  
9 years where I held various management and administrative positions. My most recent role  
10 was as Vice President and Chief Credit Officer for Lyndon Bank in Lyndonville, Vermont.  
11 In that position I was responsible for directing and administering the analysis and credit risk  
12 management of the bank’s loan portfolio, including internal loan review, regulatory  
13 compliance, audit, and coordinating periodic bank examinations by state and federal  
14 regulators. In performing those responsibilities, I also provided oversight for the commercial  
15 and retail lending functions with detailed financial analysis of large corporate relationships,  
16 critique of loan proposals and loan structuring, consultation on business development efforts,  
17 and advised the Board of Directors on loan approvals and loan portfolio quality. Prior to my  
18 role as Chief Credit Officer, I held the position of Vice President of Loan Administration. In  
19 this position, I was responsible for directing and administering the underwriting, processing,  
20 and funding of all commercial, consumer, and residential mortgage loans. My  
21 responsibilities also included the management of loan processing and loan origination staff  
22 and partnering with the Compliance Officer to monitor and ensure compliance with all  
23 banking laws, regulations, and the bank’s lending policy. I received my Bachelor of Arts



1 degree in Political Science from St. Michael's College. Throughout my career in banking, I  
2 took advantage of numerous Continuing Professional Education (CPE) opportunities  
3 involving college level coursework in the areas of accounting, financial analysis, real estate  
4 and banking law, economics, and regulatory compliance. Also, during my tenure with the  
5 VT-PUC I took advantage of various CPE opportunities including the Regulatory Studies  
6 Program at Michigan State University (sponsored by the National Association of Regulatory  
7 Utility Commissioners "NARUC"), Utility Finance & Accounting for Financial Professionals  
8 at the Financial Accounting Institute, Standard & Poor's seminars on credit ratings for public  
9 utilities, and Scott Hempling seminars on Electric Utility Law and Public Utility Regulation.

10 **Q. Mr. Eckberg, please summarize your education and professional work experience.**

11 A. I was employed as a Utility Analyst with the New Hampshire Office of Consumer Advocate  
12 (OCA) from 2007 to 2014. In 2014, I joined the Sustainable Energy Division of the PUC. In  
13 2019, I joined the PUC's Electric Division. In July, 2021, with the passage of HB2, the New  
14 Hampshire Legislature created DOE, and I became an employee of the Regulatory Support  
15 Division of DOE. I have a B.S. in Meteorology from the State University of New York at  
16 Oswego and an M.S. in Statistics from the University of Southern Maine. I have worked in a  
17 variety of energy related analytic and administrative roles for over 25 years. Attachment  
18 DOE-JT-1 provides more complete details of my education and professional work  
19 experience.

20 **Q. Ms. Nixon, please summarize your education and professional work experience.**

21 A. I joined the PUC in August 2012 in the Sustainable Energy Division working on renewable  
22 energy issues. In August 2016, I became a Utility Analyst in the PUC's Electric Division,  
23 which is now DOE. In January 2022, I became the Electric Director, in the Regulatory

1 Support Division of the DOE. Prior to the PUC, I was employed at the NH Department of  
2 Environmental Services, Air Quality Division, from 1999 until 2012, in various positions.  
3 Prior to joining the State, I worked as a consultant at ICF and AER\*X, Inc. Throughout my  
4 career, I have focused on energy, environmental, and economic issues and analysis. I earned  
5 a B.S. in Mathematics from the University of Vermont. More details on my educational and  
6 professional background are provided in Attachment DOE-JT-2.

7 **Q. What is the purpose of your testimony in this proceeding?**

8 A. Our testimony provides comments and recommendations of the Department of Energy  
9 regarding the 2022-2023 New Hampshire Statewide Energy Efficiency Plan (“Plan” or  
10 “plan”) dated March 1, 2022 filed jointly by the New Hampshire electric and gas utilities  
11 (“Utilities”). The Utilities are Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty  
12 Utilities (“Liberty Utilities Electric”), New Hampshire Electric Cooperative, Inc. (“NHEC”),  
13 Public Service Company of New Hampshire d/b/a Eversource Energy (“Eversource”), and  
14 Utility Energy Systems, Inc. (“UES”), and EnergyNorth Natural Gas, Inc. d/b/a Liberty  
15 Utilities (“Liberty Utilities Gas”), and Northern Utilities, Inc. (“Northern”).

16 **Summary**

17 **Q. Please summarize your testimony.**

18 A. In our testimony, DOE provides support for the plan filed by the Utilities, explains whether  
19 and how the plan meets the requirements of HB 549 (2022), and provides further explanation  
20 of several items included in the plan and HB 549 (2022), such as the purpose and application  
21 of a primary and secondary cost-effectiveness test. DOE supports the continuation of the PI  
22 approved by the Commission starting in 2020 as described in the plan; however, DOE

1 questions whether a separate PI for Smart Start for Eversource is warranted. DOE

2 specifically addresses the following topics in our testimony:

- 3 • System Benefit Charge (SBC)/Local Delivery Adjustment Charge (LDAC) rates<sup>1</sup>,  
4 including lost base revenue calculations and the requirement for \$400,000 for  
5 education and outreach programs from SBC funds that are separate from the  
6 utilities' program budgets;
- 7 • Cost-Effectiveness, including Granite State Test (GST) and Total Resource Cost  
8 Test (TRC), Avoided Energy Supply Cost Study, net savings calculations  
9 documented in the Technical Resource Manual (TRM), and the requirement for  
10 planned electric savings to be at least 65 percent of overall planned energy  
11 savings;
- 12 • Evaluation, Measurement and Verification (EM&V) budget requirement of no  
13 more than 5% of total budget;
- 14 • Home Energy Assistance Program (HEA) including budget requirements of no  
15 less than 20 percent of funds collected and HEA incentive cap; and
- 16 • Performance Incentive.

17  
18 **SBC/LDAC Rates**

19 **Q. Please provide a summary of the system benefit charge (SBC) rates and local delivery**  
20 **adjustment charge (LDAC) rates proposed in the March 1, 2022 filing.**

<sup>1</sup> Throughout our testimony we will refer to "SBC" and "LDAC" to mean the energy efficiency charge or rate components of these larger rate elements unless otherwise specified. The SBC and LDAC are comprised of other rate components as well. See, for example, Northern Utilities tariff Second Revised Page 44 for a complete listing of rate elements in their LDAC. See, Liberty Utilities (EnergyNorth) Tariff Second Revised Page 32 – First Revised Page 33 for a complete listing of rate elements in their LDAC. The SBC is comprised of an energy efficiency (EE) rate, a lost base revenue (LBR) rate (for some), and the energy assistance program (EAP) rate.

A. Table 1 summarizes the SBC rates for each electric utility, and Table 2 summarizes the LDAC rates for each gas utility. The rates in Tables 1 and 2 show the energy efficiency portion of the rates required by HB 549 (2022). Prior to the approval of HB 549 (2022), the utilities implemented other approved rates until the time in which they could implement the statutorily required rates. Refer to Attachment DOE-JT-3 for a summary of the EE component of the rate by month as implemented/proposed by each utility. Note that the 2023 rates are estimated and may need to be updated when the consumer price index information is available.

**Table 1. Summary of SBC rates**

	<b>Energy Efficiency Portion*</b> (cents/kWh)	<b>Lost Base Revenue Portion</b> (cents/kWh)	<b>Energy Assistance Program Portion</b> (cents/kWh)	<b>Total SBC Rate</b> (cents/kWh)
<b>Eversource</b>				
<b>2022</b>	0.528	0.185	0.150	0.863
<b>2023</b>	0.543	0.205	0.150	0.898
<b>Liberty Utilities</b>				
<b>2022</b>	0.528	0.114**	0.150	0.792
<b>2023</b>	0.543	--	0.150	0.693
<b>NHEC</b>				
<b>2022</b>	0.528	--	0.150	0.678
<b>2023</b>	0.543	--	0.150	0.693
<b>UES***</b>				
<b>2022</b>	0.528	0.003	0.150	0.681
<b>2023</b>	0.543	--	0.150	0.693

\*Energy Efficiency (EE) portion of SBC rate in accordance with HB 549 (2022). The EE portion of the rate was effective for each utility as soon as feasible, which was March 1, 2022 for each electric utility except for UES, which implemented it on February 14, 2022. For each utility, the rate was implemented on a service rendered basis, except for NHEC, which implemented the change on a bill rendered basis.

\*\* Liberty Electric has only proposed an LBR rate associated with LBR for 2019 and 2020 and has not included LBR for 2021.

\*\*\*UES assumed that revenue decoupling would become effective on April 1, 2022. UES's LBR portion may need to be recalculated when the Commission rules on UES's decoupling proposal in DE 21-030.

**Table 2. Summary of LDAC Rates**

	Residential		C&I	
	EEC* (\$/therm)	LRR** (\$/therm)	EEC* (\$/therm)	LRR** (\$/therm)
<b>Liberty Utilities (Gas)</b>				
<b>2022</b>	0.0640	--	0.0426	--
<b>2023</b>	0.0658	--	0.0438	--
<b>Northern</b>				
<b>2022</b>	0.0499	0.0066	0.0247	0.0006
<b>2023</b>	0.0513	--	0.0254	--

\*Energy Efficiency Cost (EEC) rate in accordance with HB 549 (2022). The EEC portion of the rate was effective for each utility as soon as feasible, which was March 1, 2022 for Liberty (Gas) and February 14, 2022 for Northern. For each utility, the rate was implemented on a service rendered basis.

\*\*Lost Revenue Rate (LRR) effective November 1, 2021 for Northern.

**Q. Please provide more of an explanation of the Lost Base Revenue (LBR) rates presented above.**

A. Utilities that have not yet begun revenue decoupling are permitted to recover lost base revenues, defined as the lost revenue associated with energy not sold due to savings from installed energy efficiency measures, either through a LBR portion of the SBC for the electric utilities or a lost revenue adjustment mechanism (LRAM) or lost revenue rate (LRR) for gas utilities in the LDAC. The utilities reconcile the forecasted LBR with actual LBR after each program year is completed. NHEC does not collect LBR. Liberty Gas has had revenue decoupling in place for several years, and therefore, no longer collects LBR.

UES proposed revenue decoupling in DE 21-030 that was to begin on April 1, 2022, and its LBR rate in this docket assumes that the revenue decoupling would start as proposed, but UES's decoupling proposal has not yet been approved. UES's LBR includes a preliminary reconciliation for 2021 and a forecasted LBR for 2022.

1

2 Liberty Electric was approved to begin revenue decoupling as of July 1, 2021, so it will cease  
3 to accrue LBR as of that date. Note though that Liberty Electric was allowed to collect LBR  
4 previously for 2019, 2020, and 2021, but has not yet been approved the associated rate to  
5 collect the LBR, and has only included the 2019 and 2020 LBR in this filing.

6

7 Northern has proposed revenue decoupling in DG 21-131 that they propose to begin on  
8 August 1, 2022. Northern's LRR (which it implemented effective November 1, 2021)  
9 assumes that the revenue decoupling would start as proposed.

10 **Q. Please explain the calculation methodology that the Commission proposed in Order No.**  
11 **26,553 (dated November 12, 2021) concerning LBR calculation following a rate case**  
12 **where decoupling is not implemented.**

13 A. The Commission Order No. 26,553 (p. 40) states that the LBR calculation following a rate  
14 case where revenue decoupling is not implemented should not include installations prior to or  
15 during the test year. The only utility that has not been approved for revenue decoupling or  
16 has not proposed revenue decoupling yet is Eversource. However, per the approved  
17 settlement in DE 15-137, Eversource is to propose a new decoupling mechanism or an  
18 alternative to the LRAM in its next rate case. UES and Northern have not been approved for  
19 revenue decoupling yet, but they both have pending rate cases, where they have proposed  
20 revenue decoupling.

21 **Q. Does DOE have concerns about the Commission approving this Plan which contain the**  
22 **LBR calculations?**

1 A. For the most part, no. However, given the shortened review timeframe for this filing, DOE  
2 has not had adequate time to thoroughly review each LBR rate calculation. The LBR  
3 calculations included in the filing are primarily forecasts for the purpose of calculating an  
4 LBR rate to be included in the energy efficiency portion of the SBC rate and the LDAC rates.  
5 Each utility that includes an LBR rate in its Plan will eventually file a post facto calculation  
6 of the actual LBR amount based on actual installed energy efficiency measures and  
7 corresponding energy (kWh) and demand (kW) savings. Those calculations for the 2022  
8 Program Year are required to be filed on or before May 31, 2023. In effect, the LBR rate is a  
9 reconciling rate mechanism, and there will inevitably be a difference between the forecast  
10 and actual amounts. As such, the proposed LBR rates also include a reconciliation for  
11 previous years. DOE recommends that the Commission accept the utility calculations for the  
12 purpose of establishing the LBR rate to be included in each utility's energy efficiency SBC  
13 and LDAC rate, while recognizing that these calculations may need to be adjusted during the  
14 reconciliation process and possibly the audit process, especially to account for the results of  
15 the UES and Northern rate cases, the actual versus forecasted rates as well as the appropriate  
16 reconciliation for previous periods.

17 **Q. HB 549 (2022) provided that “up to \$400,000 from system benefits charge funds**  
18 **collected annually shall be used to promulgate the benefits of energy efficiency**  
19 **according to guidelines developed as specified in RSA 125-O:5-a, I(c) as determined by**  
20 **the department of energy.” Have the Utilities included such an amount and indicated**  
21 **how such funds will be used?**

22 A. Yes. We have verified that the Utilities will collect \$400,000 through the SBC for marketing  
23 and education efforts that will be developed in conjunction with DOE and other stakeholders.

1 As explained on Bates 17 of the plan, this amount is not included in EE program budgets and  
2 therefore not included in the Performance Incentive (PI) calculations. Each electric utility's  
3 sales forecast was used to determine the portion of funding to be collected by each electric  
4 utility. See the attached data response DOE 1-016 included as Attachment DOE-JT-4 and  
5 Attachment DOE-JT-5.

6  
7 **Cost-Effectiveness**

8 **Q. What does HB 549 require regarding cost-effectiveness of the energy efficiency**  
9 **programs?**

10 A. The statute requires that "the latest completed and available Avoided Energy Supply Cost  
11 Study for New England, the results of any Evaluation, Measurement and Valuation studies  
12 contracted for by the department of energy or joint utilities, incorporate savings impacts  
13 associated with free-ridership for those programs and measures where such free-ridership  
14 may have a material impact on savings figures, and use the Granite State Test as the primary  
15 test, with the addition of the Total Resource Cost test as the secondary test."

16 **Q. Does the March 1, 2022 plan filing meet the statutory requirements regarding cost-**  
17 **effectiveness?**

18 A. Yes. The plan uses the Granite State Test (GST) as the primary test and the Total Resource  
19 Cost Test (TRC) as the secondary test. These tests use the latest Avoided Energy Supply  
20 Cost Study<sup>2</sup> for New England as the basis as well as Evaluation, Measurement, and  
21 Verification (EM&V) Studies, which are summarized in the Technical Resource Manual

<sup>2</sup> See Attachment L in the March 1, 2022 filing starting on Bates p. 738,  
[https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092/LETTERS-MEMOS-TARIFFS/20-092\\_2022-03-01\\_NH\\_UTILITIES\\_ATT-NHSAVES-PLAN.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092/LETTERS-MEMOS-TARIFFS/20-092_2022-03-01_NH_UTILITIES_ATT-NHSAVES-PLAN.PDF)



(TRM)<sup>3</sup> prepared by the utilities with assistance from the EM&V Working Group (consisting of the utilities, DOE, a stakeholder representative, and the DOE consultant). As shown in the TRM, the savings impacts associated with free ridership are taken into account.

**Q. Please provide more explanation regarding the Granite State Test and the Total Resource Cost Test.**

A. In December 2018, the benefit/cost working group reviewed cost-effectiveness tests using a framework established in the National Standards Practice Manual. With the help of a consultant, the benefit/cost working group recommended the use of the GST as the primary test<sup>4</sup>. The Commission approved the use of the GST as the primary test in Order No. 26,322, dated December 31, 2019<sup>5</sup>. HB 549 (2022) approved on February 24, 2022 requires the use of the Granite State Test as the primary test. The March 1, 2022 filing includes the same benefit and cost categories for GST as was approved initially, except for the inclusion of reliability, which was later excluded since we (as PUC Staff) did not support the avoided cost calculation methodology for reliability for New Hampshire. For the TRC test, the filing uses the same benefit and cost categories as was used prior to the switch to the GST as the primary test. Please see Attachment DOE-JT-6 for a detailed list of the benefit/cost categories for each of the tests, but as noted in the data response, reliability is not included.

**Q. Please explain the purpose of a primary cost-effectiveness test.**

<sup>3</sup> See Attachment A in the March 1, 2022 filing starting on Bates p. 109, [https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092/LETTERS-MEMOS-TARIFFS/20-092\\_2022-03-01\\_NH\\_UTILITIES\\_ATT-NHSAVES-PLAN.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092/LETTERS-MEMOS-TARIFFS/20-092_2022-03-01_NH_UTILITIES_ATT-NHSAVES-PLAN.PDF)

<sup>4</sup> See the Staff recommendation memo dated October 31, 2019 [https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136\\_2019-10-31\\_STAFF\\_FILING\\_WORKING\\_GROUP\\_REC.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_FILING_WORKING_GROUP_REC.PDF) and *New Hampshire Cost-Effectiveness Review* conducted by Synapse Energy Economics, Inc., dated October 24, 2019. [https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136\\_2019-10-31\\_STAFF\\_NH\\_COST\\_EFFECTIVENESS\\_REVIEW.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_NH_COST_EFFECTIVENESS_REVIEW.PDF)

<sup>5</sup> See Order No. 26,322. [https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/ORDERS/17-136\\_2019-12-30\\_ORDER\\_26322.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/ORDERS/17-136_2019-12-30_ORDER_26322.PDF)

1 A. The benefit/cost working group discussed the purpose of the primary cost-effectiveness test.

2 The *New Hampshire Cost-Effectiveness Review*<sup>6</sup> summarizes the purpose of the primary test  
3 as follows:

4 The purpose of a *primary* cost-effectiveness test is to answer the threshold question of:  
5 what is the universe of resources whose benefits exceed their costs and therefore merit  
6 acquisition (in lieu of acquiring other supply or demand-side resources)? The primary test  
7 should not necessarily be considered in a vacuum. In some instances, regulators may  
8 wish to weigh the primary test results alongside other factors, including but not limited  
9 to: the results of secondary tests; least-cost planning imperatives; rate, bill, and  
10 participation impacts; jobs and economic development impacts; customer equity; and any  
11 other important policy goals.

12 **Q. Please explain the purpose of a secondary cost-effectiveness test.**

13 A. The benefit/cost working group also discussed the purpose of the secondary cost-  
14 effectiveness test. The *New Hampshire Cost-Effectiveness Review*<sup>7</sup> states the following  
15 regarding the secondary test: “*Secondary* tests can help enhance regulators’ and  
16 stakeholders’ overall understanding of efficiency resource impacts by answering other  
17 questions that address how best to use ratepayer funding on energy resources...By looking at  
18 cost-effectiveness through the different perspectives provided by secondary tests  
19 (perspectives that may be favored by different stakeholders), stakeholders can assess the  
20 merits of different levels or types of efficiency resource acquisition.”

<sup>6</sup> See *New Hampshire Cost-Effectiveness Review* conducted by Synapse Energy Economics, Inc., dated October 24, 2019, p 53. [https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136\\_2019-10-31\\_STAFF\\_NH\\_COST\\_EFFECTIVENESS\\_REVIEW.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_NH_COST_EFFECTIVENESS_REVIEW.PDF)

<sup>7</sup> See *New Hampshire Cost-Effectiveness Review* conducted by Synapse Energy Economics, Inc., dated October 24, 2019, p 53. [https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136\\_2019-10-31\\_STAFF\\_NH\\_COST\\_EFFECTIVENESS\\_REVIEW.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_NH_COST_EFFECTIVENESS_REVIEW.PDF)

1 **Q. How should the primary cost-effectiveness test be applied?**

2 A. The application of the primary and secondary cost-effectiveness tests was also discussed in  
3 the benefit/cost working group. The working group determined that the primary test should  
4 be the “go-no go test,” meaning that the primary test determines whether a program should  
5 be implemented. If a program has a benefit/cost ratio greater than one using the primary test  
6 (except for a few situations), then the program is cost-effective and can be implemented.  
7 Previously, the PUC determined that low-income programs, educational programs, and pilot  
8 programs could proceed if the programs are well designed and feasible, even if they do not  
9 have a benefit/cost ratio greater than one. Sometimes benefits unique to low-income  
10 programs may not be fully captured in the cost-effectiveness test. For educational programs,  
11 the benefits are often realized in the future and are difficult to estimate, and for pilot  
12 programs, the purpose often is to determine the feasibility of the program and to try to  
13 quantify the actual costs and benefits of the programs.

14 **Q. How should the secondary cost-effectiveness test be applied?**

15 A. The benefit/cost working group discussed the application of the secondary cost-effectiveness  
16 test. If a program fails the primary test or is marginally cost-effective, then the secondary  
17 test’s primary purpose is to help inform the decision of whether the program should proceed.  
18 The secondary test can also provide other information even if a program passes the primary  
19 test, such as to provide information that might help inform which programs to prioritize, if  
20 funding is limited.

21 **Q. Do all of the programs have a benefit/cost test ratio in the GST primary test greater**  
22 **than one?**

1 A. Yes. In a few instances, the benefit/cost ratio in the GST is barely greater than one (e.g.,  
2 Northern's HEA program and residential behavior program, NHEC's municipal program,  
3 and Liberty Electric's residential behavior program). Given that these programs do have a  
4 benefit/cost ratio greater than one, we recommend approval of these programs. As  
5 mentioned above, the benefits of the HEA programs may not be fully captured with the  
6 benefit/cost test. The municipal program is required per statute so it should continue. For  
7 the residential behavior programs, they are projected to have a higher benefit/cost ratio in  
8 2023; however, these programs could be monitored to ensure that they continue to provide  
9 benefits greater than the costs.

10 **Q. How would you consider the secondary test for this plan?**

11 A. Given that all of the programs have a benefit/cost ratio greater than 1.00, the secondary test  
12 does not need to be considered.

13 **Q. Please provide more explanation regarding the Technical Resource Manual (TRM).**

14 A. The utilities and the EM&V working group have developed and continue to update the TRM  
15 to document the savings calculations for each program and the associated measures. The  
16 TRM considers EM&V studies conducted in New Hampshire, and also uses EM&V studies  
17 conducted in other states to inform the assumptions for New Hampshire. The TRM is the  
18 foundation for New Hampshire's energy efficiency programs. The TRM includes such  
19 factors as peak coincidence factors, realization rates, free ridership<sup>8</sup>, and other assumptions to  
20 consider when determining the net savings. The net savings calculation takes these factors  
21 into account. The TRM (and the underlying assumptions from EM&V studies) are a  
22 fundamental part of the energy efficiency programs, because it not only provides consistent

<sup>8</sup> Free riders are individuals who would be willing to adopt an idea or measure with minimal or no incentive to do so. These consumers would most likely have adopted the energy efficiency product/service on their own.

1 calculation methodologies across the utilities' programs and individual projects and  
2 measures, but through the use of the EM&V studies, the actual savings are verified and then  
3 incorporated into future program plans.

4 **Q. Please provide example measures or programs where free ridership was taken into**  
5 **consideration?**

6 A. The LED lighting program for residential and C&I takes into account free ridership. Free  
7 ridership for residential LED lamps ranges from 57-77% resulting in a net to gross savings of  
8 23 - 43%. Free ridership for C&I LED lamps ranges from 16-60% plus spill over is  
9 considered resulting in a net to gross savings of 63 - 89%.

10 **Q. HB 549 (2022) includes a requirement that at least 65 percent of an electric utility's**  
11 **total planned energy savings shall be from electric savings. Does the plan meet this**  
12 **requirement?**

13 A. Yes. We have verified that the planned electric savings are at least 65 percent of the total  
14 planned energy savings for each electric utility, except in one scenario for both 2022 and  
15 2023. The electric utilities calculated the percent electric savings as a percent of overall  
16 energy savings on an annual basis and on a lifetime basis. NHEC's lifetime basis planned  
17 electric savings as a percent of overall energy savings is less than 65 percent for 2022 and  
18 2023 installations, but on annual basis is over 65 percent. NHEC projects that this  
19 requirement on a lifetime basis cannot be met, because the lifetime of the measures that save  
20 electricity is lower resulting in higher savings on a lifetime basis for non-electric measures.  
21 Since the residential programs tend to save more non-electric savings on a lifetime basis than  
22 the C&I sector, NHEC cannot offset lifetime residential non-electric savings with more  
23 electric C&I savings.

**Evaluation, Measurement, and Verification (EM&V)**

**Q. Please verify if the proposed budget for EM&V is no more than five percent of the total budget.**

A. Yes, the total proposed budget for EM&V is no more than 5 percent of the total program budgets. See Table 3. Note that because the EM&V working group was paused during the state of flux with the energy efficiency programs, the EM&V working group had to pause EM&V studies. Ramping these studies back up will take time. Therefore, the EM&V budget for 2022 and 2023 reflects the delay in restarting the studies and also in issuing requests for proposals for additional studies to be conducted in 2023 and awarding those contracts.

**Table 3. Summary of EM&V Budget as Percent of Total Program Budget**

	<b>2022</b>	<b>2023</b>
<b>EM&amp;V Budget</b>	\$2,143,632	\$3,149,013
<b>Total Program Budgets</b>	\$70,457,819	\$72,192,539
<b>EM&amp;V Budget as % of Total Program Budget</b>	3.0%	4.4%

**Q. Please provide more explanation of what the EM&V budget will be used for.**

A. EM&V is essential to providing cost effective energy efficiency programs. The working group associated with EM&V periodically meets to discuss impact and process evaluations to verify savings and improve program implementation. EM&V functions also include comparative studies with what other states have done, testing, impact evaluations and other incremental cost studies.

1 The studies that the working group and consultants<sup>9</sup> participate in will help to show that  
2 these savings to consumers are substantial over the length of the program. This is  
3 documented in the TRM, which provides valuable information when estimating the energy  
4 and demand savings.

5 EM&V also allows for participation in the ISO-NE Forward Capacity Market (FCM) which  
6 provides oversight and quality control of energy efficiency resources that are bid into the  
7 market. By having a dedicated budget which examines and quantifies these savings, utilities  
8 are able to verify and accurately report out on the specific EE programs that are exceeding  
9 expectations and areas where more resources may need to be allocated.

10 Evaluations determine energy efficiency program-specific effects, which could include  
11 reductions in energy use, demand and non-energy benefits. Verification of energy efficiency  
12 measures validates the savings expected using data collected from measurement activities  
13 documented for the program.

#### 14 15 **Home Energy Assistance Program**

16 **Q. What specific issues related to the Home Energy Assistance (HEA) program will you**  
17 **address in your testimony?**

18 A. There are several issues that we would like to address in more detail regarding the HEA  
19 program. These include: 1) the program budgets and whether they meet statutory  
20 requirements, and; 2) the proposed HEA project cap for the 2022-2023 program years.

21 **Q. HB549 (2022) requires that “[n]o less than 20 percent of the portion of the funds**  
22 **collected for energy efficiency shall be expended on low-income energy efficiency**

<sup>9</sup> The EM&V budget also includes the expenses from DOE’s expert EM&V consultants, who are extremely valuable since they have knowledge across the region and the country.

1       **programs.” The Home Energy Assistance program is the low-income energy efficiency**  
2       **program is that correct?**

3       A. Yes, that is correct.

4       **Q. Do the proposed HEA budgets meet the 20 percent requirement specified in HB549**  
5       **(2022)?**

6       A. Yes, they do. In response to discovery, the utilities provided a schedule demonstrating that  
7       the proposed HEA budgets for both 2022 and 2023 meet this requirement. This schedule is  
8       provided as an attachment to this joint testimony as Attachment DOE-JT-7.

9       **Q. Does the 20 percent requirement apply similarly to the HEA programs operated by the**  
10       **two regulated natural gas utilities?**

11       A. Yes, that is our interpretation of the provisions in HB 549 (2022). The 20 percent threshold  
12       specified in HB 549 (2022) is presented initially in the context of the “system benefits  
13       charge.” However, Section 5:2 of the bill’s language amends RSA 374 by inserting after  
14       Section 62 a new section titled “374:63 Ratepayer-Funded Energy Efficiency Programs for  
15       Gas Utilities.” DOE’s interpretation of that new language is it extends the requirements of  
16       the electric utility system benefits charge funded programs to gas utility programs.  
17       Therefore, the 20 percent funding requirement that applies to the HEA program for electric  
18       utilities also applies to the gas utilities’ HEA program.

19       **Q. Do the proposed HEA budgets for the gas utility program meet the 20% funding**  
20       **requirement?**

21       A. Yes, they do. The supporting details were provided in response to discovery which is  
22       included as Attachment DOE-JT-8.



**Q. Are there any other funding or budget requirements that the HEA programs must meet?**

A. There is one other statutory requirement that we are aware of. RSA 125-O:23, which is part of the Regional Greenhouse Gas Initiative (RGGI) statute, establishes the Energy Efficiency Fund which receives a portion of the proceeds of each quarterly RGGI Auction. Specifically, RSA 125-O:23.III.(a) allocates “[a]t least 15 percent of the [Energy Efficiency Fund] to the low income core energy efficiency program.”

**Q. Have the electric utilities, which receive a portion of the proceeds of RGGI auctions for the Energy Efficiency Fund (EEF), allocated the required 15 percent minimum amount of RGGI funds to the HEA program?**

A. Yes. We have calculated the percentages of estimated 2022 and 2023 RGGI auction proceeds that the electric utilities have budgeted to the HEA Program. That information is presented in Table 4 below. For both 2022 and 2023, the estimated budget percentage of RGGI funds is greater than 17 percent so the proposed HEA budgets clearly meet this requirement also.

Table 4. RGGI Funding Allocation to HEA Programs

Allocation of RGGI Energy Efficiency Funds (EEF) to HEA	2022 EE Plan	2023 EE Plan
<b>RGGI Funds to HEA</b> (Bates 514 and 519 of plan)	\$469,706	\$450,487
<b>Total Estimated RGGI Funds to EEF</b> (Bates 18 of plan)	\$2,487,460	\$2,585,262
<b>Percentage of RGGI Funds to HEA</b>	18.9%	17.4%

**Q. You mentioned the HEA project cap as another area of discussion regarding this program. What have the utilities proposed as the maximum rebate per HEA project?**

1 A. As seen on Bates 65 of the Plan, the utilities propose a maximum rebate per project of  
2 \$15,000, which would cover the costs associated with remediating barriers to weatherization  
3 as well as air sealing, insulation, lighting measures, and appliance and heating system repairs  
4 and replacements, where recommended as part of an overall cost-effective package of  
5 measures.

6 **Q. Is this maximum rebate per project in line with the maximum in recent years?**

7 A. Yes, it is. On the face of it, this maximum project rebate appears larger than in recent  
8 program years. However, this larger project maximum rebate level combines “regular”  
9 weatherization measure work and will also include, when applicable, heating system repairs  
10 and replacements, which can significantly increase project cost. Not all projects will include  
11 these more costly project elements. In addition, combining all the project elements under a  
12 single rebate maximum will facilitate modeling all these project elements together.

13 **Q. Do you have any concern that an increased maximum project rebate will increase**  
14 **spending per project?**

15 A. No. The information provided by the Company strongly suggests that the proposed \$15,000  
16 maximum project rebate is very much in line with per project spending in recent years when  
17 we consider the combined average weatherization spending with the average heating system  
18 spending – when that occurs. Also, it’s important to understand that the federally-funded  
19 Weatherization Assistance Program, which works in conjunction with the HEA program,  
20 especially in single family homes and smaller multi-family buildings takes a “whole house  
21 weatherization” approach – as does the plan’s HEA program. This means an energy auditor  
22 will evaluate the mechanical systems, building shell measures, electric baseload measures, as

1 well as health and safety measures in order to maximize the cost-effective investments  
2 available for each project.

3 **Q. What were the actual results of average HEA project rebates in recent program years?**

4 A. The utilities were asked to provide that information in discovery. Included as Attachment  
5 DOE-JT-9 is a table of information provided which shows average project costs with heating  
6 system costs separated in years 2018 and 2019 and then transitioning to those costs being  
7 included in the average project cost in 2020 and 2021. It's most useful to review the amounts  
8 shown in the upper table titled "HEA Program Project Cost Averages" *combined* with the  
9 amounts shown in the lower table titled "HEA Program Heating System Cost Averages."  
10 Doing so, one can see, for example, in 2018 for single family homes, a combined average of  
11 these amounts is \$13,466 (\$4,718 + \$8,748) and in 2020, the same combined amount for a  
12 single-family home was \$17,737 (\$9,537 + \$8,200). This indicates that the plan's proposed  
13 \$15,000 maximum project rebate, which would include weatherization measures and heating  
14 system repair and replacement costs when necessary, is comparable to actual HEA average  
15 expenditures in recent years.

16 **Q. To summarize, do you support the proposed plan to have a maximum rebate per**  
17 **project of \$15,000 which would cover costs associated with remediating barriers to**  
18 **weatherization, the actual weatherization measures, and appliance and heating system**  
19 **replacements where recommended.**

20 A. Yes, we support this element of the 2022 - 2023 plan proposal at presented on Bates 65 of the  
21 plan.  
22

1 **Performance Incentive**

2 **Q. Have the utilities proposed any modifications to the PI framework approved in DE 17-**  
3 **136 as part of the proposed Plan?**

4 A. No. In the last iteration of the Plan filed on September 1, 2020, the utilities proposed to  
5 reduce the minimum threshold percentage requirement for the Lifetime Savings component,  
6 Annual Savings component, and the Value Savings component for both electric and gas from  
7 75 percent to 65 percent, and add a sixth PI component for electric, Active Demand Savings,  
8 to the existing framework of five PI categories. At the time, Staff was opposed to the revised  
9 framework,<sup>10</sup> but with the submission of the new revised Plan, the utilities have now restored  
10 the PI framework to its original format, and category weightings which was implemented in  
11 the 2020 Plan Year, and have removed the Active Demand component.

12 **Q. Is DOE satisfied with this change of direction by the utilities?**

13 A. Yes. The DOE continues to believe that the existing framework is the fairest and most  
14 transparent method of calculating PI for the utilities. As a result, DOE recommends that the  
15 Commission approve the PI framework as proposed in the updated Plan.

16 **Q. Does the DOE have any other observations related to the Performance Incentive as**  
17 **discussed in the updated Plan?**

18 A. Yes. As stated in Mr. Dudley's previous testimony to the Commission,<sup>11</sup> both Eversource  
19 and the New Hampshire Electric Cooperative (NHEC) offer an on-bill financing program for  
20 municipalities that provides municipal customers with the opportunity to install energy  
21 saving measures with no upfront costs and the ability to pay for the measures over time on

<sup>10</sup> See Docket DE 20-092, Exhibit 6, Testimony of Jay E. Dudley dated October 29, 2020, at Bates 5-7.

<sup>11</sup> *Id.* at Bates 12-13.

1        their electric bill. The program is known as SmartSTART.<sup>12</sup> The SmartSTART program  
2        was initiated in the early 2000's and has been renewed and approved by the Commission as  
3        part of the annual CORE programs every year since that time, and then as part of the EERS  
4        programs in recent years. SmartSTART earns a separate annual PI payment, i.e. separate  
5        from and in addition to the overall PI calculation referenced above, based on 6 percent of the  
6        amount of total loan repayments received. Eversource is the only recipient of this PI since  
7        NHEC does not collect PI on its offerings under the SmartSTART program. Based on its  
8        history, the program has been successful and well-received within its target market of  
9        municipal customers for more than a decade. Eversource proposes to continue with the  
10       program in its present form, however, given the success and the maturity of the program,  
11       DOE continues to question whether or not the separate PI for this program is still warranted.  
12       In addition, DOE remains concerned that the separate PI for SmartSTART essentially  
13       amounts to a double-count of PI for Eversource since Eversource already benefits from  
14       earning an annual PI on the savings realized from the energy efficiency improvements  
15       funded by the program. For example, in 2020 Eversource earned \$67,802 in separate  
16       SmartSTART PI and claimed total Lifetime Savings under this program of 3.3 million  
17       kWh.<sup>13</sup> Likewise, in 2021 Eversource earned \$54,691 in separate SmartSTART PI and  
18       claimed total Lifetime Savings of 10.5 million kWh.<sup>14</sup> Although the amounts of the  
19       SmartSTART PI are small when compared with the overall energy efficiency budget, the

<sup>12</sup> Plan at Bates 30-31.

<sup>13</sup> See New Hampshire Statewide Energy Efficiency Programs, 4<sup>th</sup> Quarter Report January 2020 – December 2020, dated March 1, 2021, filed in Docket No. DE 17-136 at 25.

<sup>14</sup> See New Hampshire Statewide Energy Efficiency Programs, 4<sup>th</sup> Quarter Report January 2021 – December 2021, dated March 1, 2022, filed in Docket No. DE 17-136 at 25. Also see Attachment DOE-JT-10, DOE Data Request No. TS 1-004. In response to part a. of the request, Eversource explains that the SmartSTART PI amount of \$48,239 reported in the 2021 report was adjusted upward to \$54,691 due to an error in not applying the 6% PI to a loan repayment received in early 2021.

1       annual Lifetime Savings claimed under this program are also imbedded in the Lifetime  
2       Savings amounts reported under the “Commercial, Industrial, Municipal” portion of the  
3       Program Cost-Effectiveness report submitted as part of Eversource’s annual PI calculation  
4       (Eversource’s administrative costs for the program are not included in the overall PI  
5       calculation).<sup>15</sup> Consequently, given that the SmartSTART program is fully established,  
6       popular, and successful, and given that Eversource earns a portion of its overall PI from the  
7       savings contributed by this program, DOE still questions the necessity and practicality of  
8       continuing with the separate 6% PI under the program.

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

10      A. Yes.

<sup>15</sup> See Docket No. DE 17-136, Eversource’s Performance Incentive Calculation for 2020, dated June 1, 2021, at 2. Also see Attachment DOE-JT-11, DOE Data Request No. TS 1-004. In response to part c. of the request, Eversource did not provide the requested supporting calculations demonstrating that the Lifetime Savings contributed by the SmartSTART program were not included with the overall Lifetime Savings totals used for the calculation of PI.

Qualifications of Stephen R. Eckberg

My name is Stephen R. Eckberg. I am employed as a Utility Analyst with the Regulatory Support Division of the New Hampshire Department of Energy. My business address is 21 S. Fruit Street, Suite 10, Concord, New Hampshire 03301.

I earned a B.S. in Meteorology from the State University of New York at Oswego and an M.S. in Statistics from the University of Southern Maine.

After receiving my M.S. degree, I was employed as an analyst in the Boston office of Hagler Bailly, Inc, a consulting firm working with regulated utilities to perform evaluations of energy efficiency and demand-side management programs. From 2000 through 2003, I was employed at the NH Governor's Office of Energy and Community Services as the Director of the Weatherization Assistance Program. Following that, I was employed at Belknap Merrimack Community Action Agency as the Statewide Program Administrator of the NH Electric Assistance Program (EAP). In that capacity, I developed the statewide EAP budget, presented testimony before the NH Public Utilities Commission (PUC) in dockets related to the design, implementation and management of the EAP, and worked closely with the software vendor to implement improvements. I have testified before Committees of the New Hampshire General Court on issues related to energy efficiency and low income electric bill assistance. From 2007 – 2014 I was employed as a Utility Analyst with the New Hampshire Office of the Consumer Advocate (OCA). During my tenure with the OCA, I attended rate making and regulatory training at New Mexico State University's Center for Public Utilities.

In my position with the OCA, I entered pre-filed testimony in the following dockets:

- DG 08-048 Unitol Corporation and Northern Utilities, Inc. Joint Petition for Approval of Stock Acquisition. Joint testimony with Kenneth Traum.
- DW 08-070 Lakes Region Water Company Financing & Step Increase. Joint testimony with Kenneth Traum.
- DW 08-098 Aquarion Water Company of New Hampshire. Joint testimony with Kenneth Traum.

- DE 09-035 Public Service of New Hampshire Distribution Service Rate Case. Joint testimony with Kenneth Traum.
- DT 07-027 Kearsarge Telephone Company, Wilton Telephone Company, Hollis Telephone Company & Merrimack County Telephone Company Petition for Alternative Form of Regulation. Phase II & Phase III.
- DW 08-073 Pennichuck Water Works, Inc. Petition for Rate Increase
- DW 08-070 Lakes Region Water Company Third Step Increase.
- DW 08-065 Hampstead Area Water Company Petition for Rate Increase.
- DE 09-170 2010 CORE Energy Efficiency Programs.
- DW 10-090 Pittsfield Aqueduct Company Petition for Rate Increase.
- DW 10-091 Pennichuck Water Works Petition for Rate Increase.
- DW 10-141 Lakes Region Water Petition for Rate Increase.
- DE 10-188 2011-2012 CORE and Natural Gas Energy Efficiency Programs.
- DE 11-250 PSNH Installation of a Wet Flue-Gas Desulphurization Scrubber.
- DE 12-262 2013-2014 CORE and Natural Gas Energy Efficiency Programs.
- DE 12-292 PSNH 2013 Default Energy Service Rate.
- DE 12-262 2014 CORE Energy Efficiency Programs Update Filing.
- DE 13-108 PSNH 2012 Energy Service Reconciliation.
- DG 14-091 Liberty Utilities Special Contract and Lease Agreement with Innovative Natural Gas, LLC dba iNATGAS.

In August 2014, I joined the Sustainable Energy Division (SED) of the New Hampshire Public Utilities Commission (PUC). My responsibilities included grant review and administration, and compliance oversight of New Hampshire's Renewable Portfolio Standard requirements. While employed with SED, I filed testimony in the following dockets:

- DE 18-140 Liberty Utilities Petition for Approval of a Renewable Natural Gas Supply and Transportation Contract

In October 2019, I joined the PUC's Electric Division. I have filed testimony in:

- DE 17-136 2018-2020 New Hampshire Statewide Energy Efficiency Plan - 2020 Third Year Programs.
- DE 19-197 Development of a Statewide, Multi-Use Online Energy Data Platform. Joint testimony with Jason Morse.
- DE 20-092 2021 – 2023 Triennial Energy Efficiency Plan.

In July 2021, with the passage of HB2, the New Hampshire Legislature created the Department of Energy, I became an employee of the Regulatory Support Division of the Department of Energy. Since joining the Department of Energy I have filed testimony in the following dockets:

- DE 21-030 Unitil Energy Systems, Inc. Request for Change in Rates.
- DE 21-020 Eversource Energy and Consolidated Communications, Joint Petition to Approve Pole Asset Transfer.
- DG 21-104 Northern Utilities, Inc., Request for Change in Rates.



Attachment DOE-JT-2

Education and Professional Background

Elizabeth R. Nixon

My name is Elizabeth R. Nixon. I am employed as the Electric Director in the Regulatory Support Division at the New Hampshire Department of Energy (DOE). My business address is 21 S. Fruit St., Suite 10, Concord, NH 03301.

I earned a B.S. in Mathematics from the University of Vermont in 1985. I worked for ICF, a consulting firm, where we estimated, modeled, and analyzed the energy, environmental and economic impacts of various emission reduction strategies at electric utilities. At ICF and AER\*X, Inc., I assisted companies in implementing market-based emissions trading programs. I provided comments on various air quality programs affecting the electric utilities and other industries in the Northeast and other states. I also worked for the Center for Clean Air Policy where we coordinated a dialogue of states and electric utilities to discuss energy efficiency and other emission control strategies to reduce acid rain and greenhouse gases at electric utilities.

At the New Hampshire Department of Environmental Services, I wrote the air quality permits for Eversource's electric generating facilities as well as other electric generating facilities and manufacturing facilities in NH. I testified before the NH Air Resources Council regarding the determination of the baseline mercury emissions for Eversource's coal-fired electric generating facilities.

I joined the New Hampshire Public Utilities Commission, which is now DOE, in August 2012. I started in the Sustainable Energy Division where I managed renewable energy incentive programs, determined compliance with the renewable portfolio standard (RPS) program, and

1 conducted analysis of and provided testimony and presentations on the RPS program and rebate  
2 programs. In August 2016, I joined the Electric Division. I completed electric utility rate  
3 training at New Mexico State University's Center for Public Utilities. As of July 1, 2021, I was  
4 a Utility Analyst in the Regulatory Support Division at DOE. In January 2022, I became the  
5 Electric Director in the Regulatory Support Division at DOE.

6 I have testified in the energy efficiency program dockets (DE 17-136 and DE 20-092),  
7 Liberty Utility's battery storage pilot docket (DE 17-189), and Unitil Energy System's  
8 distribution rate case (DE 21-030). In addition, I have provided Staff recommendations in the  
9 grid modernization docket (IR 15-296) and electric vehicle rate design docket (IR 20-004).

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: March 11, 2022**

**Date of Response: March 25, 2022**

**Data Request No. DOE 1-002**

**Page 1 of 1**

**Request from: Department of Energy**

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**Request:**

Please provide a chart or table showing EE rates in effect for each month for each utility for the full plan period 2022 – 2023. If the shown rate was not effective for a full month, please provide the dates the rate was effective.

**Response:**

Please refer to Attachment DOE 1-002.

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Attachment DOE 1-002  
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Unitil Energy Services	Jan 2022 <sup>(1)</sup>	Feb 2022 <sup>(2)</sup>	Mar 2022	Apr 2022	May 2022	June 2022	July 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022
	SBC (EE Portion) \$/kWh	0.00373 & 0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528
(1) Per Order No. 26,553 issued November 12, 2021												
(2) Rate change effective February 14, 2022 per Order No. 26,579 issued February 10, 2022 & Passage of HB 549												
Unitil Energy Services	Jan 2023 <sup>(3)</sup>	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023
	SBC (EE Portion) \$/kWh	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543
(3) Estimated to incorporate the inflation calculation in accordance with HB 549 (does not reflect adjustment for carry-over/carry-under)												
Northern Utilities	Jan 2022 <sup>(1)</sup>	Feb 2022	Mar 2022	Apr 2022	May 2022	June 2022	July 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022
	Residential EEC \$/therm	0.0476	0.0476	0.0499	0.0499	0.0499	0.0499	0.0499	0.0499	0.0499	0.0499	0.0499
Commercial & Industrial EEC \$/therm	0.0326	0.0326	0.0247	0.0247	0.0247	0.0247	0.0247	0.0247	0.0247	0.0247	0.0247	0.0247
(1) Per Order No. 26,553 issued November 12, 2021												
(2) Per Order No. 26,303 issued October 29, 2019 & Passage of HB 549												
Northern Utilities	Jan 2023 <sup>(3)</sup>	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023
	Residential EEC \$/therm	0.0513	0.0513	0.0513	0.0513	0.0513	0.0513	0.0513	0.0513	0.0513	0.0513	0.0513
Commercial & Industrial EEC \$/therm	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254	0.0254
(3) Estimated to incorporate the inflation calculation in accordance with HB 549 (does not reflect adjustment for carry-over/carry-under)												

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Eversource Energy SBC (EE Portion) \$/kWh	Jan 2022 <sup>(1)</sup>	Feb 2022	Mar 2022 <sup>(2)</sup>	Apr 2022	May 2022	June 2022	July 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022
	0.00373	0.00373	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528
(1) Per Order No. 26,553 issued November 12, 2021												
(2) Rate change effective March 1, 2022 per Order No. 26,579 issued February 10, 2022 & Passage of HB 549												
Eversource Energy SBC (EE Portion) \$/kWh	Jan 2023 <sup>(3)</sup>	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023
	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543
(3) Estimated to incorporate the inflation calculation in accordance with HB 549 (does not reflect adjustment for carry-over/carry-under)												

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Granite State Electric SBC (EE Portion) \$/kWh	Jan 2022 <sup>(1)</sup>	Feb 2022	Mar 2022	Apr 2022	May 2022	June 2022	July 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022
	0.00373	0.00373	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528
(1) Per Order No. 26,553 issued November 12, 2021												
Granite State Electric SBC (EE Portion) \$/kWh	Jan 2023 <sup>(3)</sup>	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023
	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543
(3) Estimated to incorporate the inflation calculation in accordance with HB 549 (does not reflect adjustment for carry-over/carry-under)												
EnergyNorth Natural Gas Residential EEC \$/therm Commercial & Industrial EEC \$/therm	Jan 2022 <sup>(1)</sup>	Feb 2022	Mar 2022	Apr 2022	May 2022	June 2022	July 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022
	0.00475	0.00475	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
(1) Per Order No. 26,553 issued November 12, 2021												
EnergyNorth Natural Gas Residential EEC \$/therm Commercial & Industrial EEC \$/therm	Jan 2023 <sup>(3)</sup>	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023
	0.0658	0.0658	0.0658	0.0658	0.0658	0.0658	0.0658	0.0658	0.0658	0.0658	0.0658	0.0658
(3) Estimated to incorporate the inflation calculation in accordance with HB 549 (does not reflect adjustment for carry-over/carry-under)												

Docket No. DE 20-092  
Attachment DOE 1-002  
Page 4 of 4

New Hampshire Electric Cooperative, Inc. SBC (EE Portion) \$/kWh	Jan 2022 <sup>(1)</sup>	Feb 2022	Mar 2022 <sup>(2)</sup>	Apr 2022	May 2022	June 2022	July 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022
	0.00373	0.00373	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528
(1) Per Order No. 26,553 issued November 12, 2021												
(2) Rate change effective March 1, 2022 per Order No. 26,579 issued February 10, 2022 & Passage of HB 549												
New Hampshire Electric Cooperative, Inc. SBC (EE Portion) \$/kWh	Jan 2023 <sup>(3)</sup>	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023
	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	0.00543
(3) Estimated to incorporate the inflation calculation in accordance with HB 549 (does not reflect adjustment for carry-over/carry-under)												

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: March 11, 2022**  
**Data Request No. DOE 1-016**

**Date of Response: March 25, 2022**  
**Page 1 of 1**

**Request from: Department of Energy**

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**Request:**

All: Refer to Bates pp. 554 and 555, line 6, RSA 125-O:5-a Funding. Please explain the total funding for all of the utilities combined for this funding and where all the utilities have accounted for this funding. Please show how the revenues for this funding will be collected including the SBC rate or other funding source and any applicable calculations, including the live spreadsheets.

**Response:**

As specified in HB 549, "Up to \$400,000 of system benefits charge funds collected annually shall be used to promulgate the benefits of energy efficiency according to guidelines developed as specified in RSA 125-O:5-a, I(c) as determined by the department of energy." \$400,000 was set aside in both 2022 and 2023 from the SBC revenue forecast for this purpose. Each Electric Utility's sales forecast was used to determine the allocations. Please refer to Attachment DOE 1-016 for an Excel calculation of the annual amount.



Utility	Share of Forecast Statewide Sales		Utility Allocation	
	2022	2023	2022	2023
Eversource Electric	72.6%	72.7%	\$ 290,311.93	\$ 290,745.70
Liberty Electric	8.7%	8.8%	\$ 34,978.18	\$ 35,398.83
NH Electric Cooperative	7.5%	7.4%	\$ 29,995.79	\$ 29,522.22
Unitil Energy Systems	11.2%	11.1%	\$ 44,714.10	\$ 44,333.25
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>\$ 400,000.00</b>	<b>\$ 400,000.00</b>

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: April 07, 2022**  
**Data Request No. TS 1-002**

**Date of Response: April 12, 2022**  
**Page 1 of 1**

**Request from: Department of Energy**

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**Request:**

Please refer to data response to DOE 1-016. Please explain how each electric utility accounted for its share of the \$400,000, of systems benefit charges identified in HB-549 to “promulgate the benefits of energy efficiency” including an explanation of whether the funding was included in the total program budgets, whether the funding was included in the performance incentive calculation, and how it is accounted for in the SBC calculations. If helpful, please provide updated tables or spreadsheets that explicitly show how each utility’s share of the \$400,000 was accounted for.

**Response:**

The Electric Utilities accounted for their share of the \$400,000 of systems benefit charges identified in HB-549 to “promulgate the benefits of energy efficiency” by reducing the amount of funding available for their total program budgets. Since this share of the \$400,000 is excluded from the total program budgets, it is not included in the performance incentive calculation.

For a demonstration of how this accounted for in the SBC calculations, please refer to the following for each Electric Utility.

- Eversource: Please refer to Attachment E3 in the March 1, 2022 Plan Filing. In the Energy Efficiency Expense & SBC Revenue Reconciliation attachments, the company’s share of the \$400,000 (\$290,311.93 for 2022 and \$290,745.70 for 2023) is delineated in line 6 as RSA 125-O:5-a Funding. The amount for Program Expenses in line 7 is the remainder of what is used in the planned program budgets.
- Liberty: Please refer to Page 3 in Attachment DOE 1-007.
- NHEC: Please refer to Line 7 on Pages 2 and 3 in NHEC Attachment TS 1-002. The amounts shown on Line 7 represent the amounts NHEC set aside from the 2022 and 2023 funding for the Company’s allocation of the \$400,000. The actual amounts NHEC anticipates allocating are \$29,995.79 in 2022 and \$29,522.22 in 2023, as depicted in Attachment DOE 1-016.
- Unitil: Please refer to DOE 1-012 Attachment 1-UES. In UES’ Energy Efficiency Expense & SBC Revenue Reconciliation attachments, its share of the \$400,000 is delineated in line 2 as RSA 125-O:5-a Funding. The amount for Program Expenses in line 3 is the remainder of what is used in the planned program budgets. Line 3 includes program costs as well as projected performance incentives.

New Hampshire Electric Cooperative, Inc.  
NHSaves Energy Efficiency Programs  
NHPUC Docket No. DE 20-092  
Attachment G3 (2022-2023)  
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TS1-002

New Hampshire Electric Cooperative, Inc.  
2022-2023 System Benefits Charge ("SBC") Calculation  
(\$ in 000's)

Year	Col. A	EE Total Budget	Col. B	RGGI Revenues	Col. C	FCM Revenues	Col. D	Carryforward with Interest	Col. E	SBC Requirement	Col. F	Forecasted Distribution (MWh)	Col. G	2022		2023		2022 Jan-Feb Total SBC Rate (cents/kWh)	Col. L	2022 Mar-Dec Total SBC Rate (cents/kWh)	Col. M	2023 Jan-Dec Total SBC Rate (cents/kWh)	Col. N	
														Jan-Feb SBC Rate EE Portion (cents/kWh)	Col. H	Jan-Dec SBC Rate EE Portion (cents/kWh)	Col. I							Jan-Dec SBC Rate EAP Portion (cents/kWh)
2022		\$ 5,713	\$	207	\$	100	\$	1,532	\$	3,873	\$	786,599	\$	0.373	\$	0.528	\$	0.150	\$	0.523	\$	0.678	\$	0.693
2023		\$ 4,507	\$	207	\$	100	\$	-	\$	4,199	\$	777,382	\$					0.150						
Col. A: Effective year																								
Col. B: Budget Projections																								
Col. C: Budget Projections																								
Col. D: Budget Projections																								
Col. E: Budget Projections																								
Col. F: Col. B - Col. C - Col. D - Col. E																								
Col. G: Company Forecast																								
Col. H: (Col. H / Col. I) x 100																								
Col. K: EAP Portion of SBC Rate																								
Col. M: Col. J + Col. K																								

New Hampshire Electric Cooperative, Inc.  
NHSaves Energy Efficiency Programs  
NHPUC Docket No. DE 20-092  
Attachment G3 (2022-2023)  
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TS1-002

**New Hampshire Electric Cooperative, Inc.**  
**Energy Efficiency Expense & SBC Revenue Reconciliation**  
**January 1, 2022 to December 31, 2022**  
(\$ in 000's)

Line	Description	Carryover 12/31/21	Forecast Jan 2022	Forecast Feb 2022	Forecast Mar 2022	Forecast Apr 2022	Forecast May 2022	Forecast June 2022	Forecast Jul 2022	Forecast Aug 2022	Forecast Sep 2022	Forecast Oct 2022	Forecast Nov 2022	Forecast Dec 2022	2022 Total
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	KWh Sales	1,532	324	295	357	345	272	282	358	352	363	287	285	378	3,896
2	RGGI Revenues		17	17	17	17	17	17	17	17	17	17	17	17	207
3	FCM Revenues		8	8	8	8	8	8	8	8	8	8	8	8	100
4	<b>Total Revenues</b>		<b>349</b>	<b>320</b>	<b>383</b>	<b>370</b>	<b>297</b>	<b>308</b>	<b>383</b>	<b>377</b>	<b>388</b>	<b>312</b>	<b>311</b>	<b>403</b>	<b>4,203</b>
5	Program Expenses		476	476	476	476	476	476	476	476	476	476	476	476	5,713
6	<b>Total Program Expenses</b>		<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>476</b>	<b>5,713</b>
7	HB 549 EE Education Allocation		2	2	2	2	2	2	2	2	2	2	2	2	23
8	Current Month Over/(Under) Recovery		(128)	(157)	(95)	(108)	(181)	(170)	(94)	(101)	(90)	(166)	(167)	(75)	
9	Cummulative Over/(Under) Recovery	1,532	1,404	1,246	1,151	1,043	863	692	598	497	407	242	75	(0)	
12	Interest @ Prime Rate		0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	
13	<b>Interest</b>		<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>24</b>
14	<b>Monthly Sales (MWh)</b>		86,829	79,055	67,616	65,290	51,453	53,394	67,784	66,601	68,721	54,318	54,018	71,520	786,599
15	<b>EE SBC Rate</b>		0.373	0.373	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	

Line 1: (Line 14 x Line 15) / 100  
Line 2: Page 1, Col. C  
Line 3: Page 1, Col. D  
Line 4: Sum of Lines 1 through Lines 3  
Line 5: Page 1, Col. B  
Line 6: Sum of Line 5  
Line 7: HB 549 EE Education Allocation  
Line 8: Line 4 - Line 6 - Line 7  
Line 9: Prior month Line 8 + Current month Line 9  
Line 12: Prime Rate / 12  
Line 13: (Prior Month Line 8 + Current Month Line 8) / 2 x Line 11  
Line 14: Company Forecast  
Line 15: Page 1, Col. J/K

New Hampshire Electric Cooperative, Inc.  
NHSaves Energy Efficiency Programs  
NHPUC Docket No. DE 20-092  
Attachment G3 (2022-2023)  
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TS1-002

**New Hampshire Electric Cooperative, Inc.**  
**Energy Efficiency Expense & SBC Revenue Reconciliation**  
**January 1, 2023 to December 31, 2023**  
**(\$ in 000's)**

Line	Description	Carryover 12/31/22	Forecast Jan 2023	Forecast Feb 2023	Forecast Mar 2023	Forecast Apr 2023	Forecast May 2023	Forecast June 2023	Forecast Jul 2023	Forecast Aug 2023	Forecast Sep 2023	Forecast Oct 2023	Forecast Nov 2023	Forecast Dec 2023	2023 Total
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	WWh Sales	-	466	424	363	350	276	287	364	357	369	291	290	384	4,221
2	RGGI Revenues	-	17	17	17	17	17	17	17	17	17	17	17	17	207
3	FCM Revenues	-	8	8	8	8	8	8	8	8	8	8	8	8	100
4	<b>Total Revenues</b>		<b>492</b>	<b>450</b>	<b>388</b>	<b>376</b>	<b>302</b>	<b>312</b>	<b>389</b>	<b>383</b>	<b>394</b>	<b>317</b>	<b>316</b>	<b>409</b>	<b>4,529</b>
5	Program Expenses		376	376	376	376	376	376	376	376	376	376	376	376	4,507
6	<b>Total Program Expenses</b>		<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>376</b>	<b>4,507</b>
7	HB 549 EE Education Allocation		2	2	2	2	2	2	2	2	2	2	2	2	22
8	Current Month Over/(Under) Recovery		114	72	11	(1)	(76)	(65)	12	6	17	(60)	(62)	32	
9	Cummulative Over/(Under) Recovery		114	187	198	196	121	55	67	73	90	30	(32)	(0)	
12	Interest @ Prime Rate		0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	
13	<b>Interest</b>		<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(0)</b>	<b>3</b>
14	<b>Monthly Sales (MWh)</b>		85,812	78,129	66,824	64,525	50,851	52,768	66,990	65,820	67,916	53,682	53,385	70,682	777,382
15	<b>EE SBC Rate</b>		0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	

Line 1: (Line 14 x Line 15) / 100  
Line 2: Page 1, Col. C  
Line 3: Page 1, Col. D  
Line 4: Sum of Lines 1 through Lines 3  
Line 5: Page 1, Col. B  
Line 6: Sum of Line 6  
Line 7: HB 549 EE Education Allocation  
Line 8: Line 4 - Line 6 - Line 7  
Line 11: Line 9 - Line 10  
Line 12: Prime Rate / 12  
Line 13: (Prior Month Line 8 + Current Month Line 8) / 2 x Line 11  
Line 14: Company Forecast  
Line 15: Page 1, Col. JK

New Hampshire Electric Cooperative, Inc.  
 NHSaves Energy Efficiency Programs  
 NHPUC Docket No. DE 20-092  
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**Bill Impacts of Changes in System Benefits Charge - New Hampshire Electric Cooperative, Inc.**

	<b>2021</b>	<b>Jan-Feb 2022</b>	<b>Mar-Dec 2022</b>	<b>2023</b>
System Benefits Charge (\$/kWh)	\$ 0.00678	\$ 0.00523	0.00678	0.00693
<u>Bill per month, including NHEC default energy service</u>				
Residential Rate B (625 kWh/month)	\$ 124.33	\$ 123.36	\$ 124.33	\$ 124.42
Commercial B3, three-phase service ( <50 kW, 10,000 kWh/month)	\$ 1,766.24	\$ 1,750.74	\$ 1,766.24	\$ 1,767.74
<u>Change from previous rate level - \$ per month</u>				
Residential Rate B (625 kWh/month)		\$ (0.97)	\$ 0.97	\$ 0.09
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		\$ (15.50)	\$ 15.50	\$ 1.50
<u>Change from previous rate level - %</u>				
Residential Rate B (625 kWh/month)		-0.8%	0.8%	0.1%
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		-0.9%	0.9%	0.1%

PSNH d/b/a Eversource Energy  
Energy Efficiency Expense & SBC Revenue Reconciliation  
January 1, 2022 to December 31, 2022  
(\$ in 000's)

Line	Description	Col. A	Forecast Jan 2022	Forecast Feb 2022	Forecast Mar 2022	Forecast Apr 2022	Forecast May 2022	Forecast June 2022	Forecast Jul 2022	Forecast Aug 2022	Forecast Sep 2022	Forecast Oct 2022	Forecast Nov 2022	Forecast Dec 2022	2022 Total
1	SBC Revenues	Col. B	2,574	2,309	3,308	2,964	2,999	3,329	3,841	3,754	3,190	3,147	3,146	3,607	38,168
2	RGCI Revenues		-	-	453	-	453	453	453	453	453	453	453	453	1,810
3	FCM Revenues		398	398	398	398	398	398	398	398	398	398	398	398	4,777
4	Other Revenues		-	-	-	-	-	-	-	-	-	-	-	-	-
5	Total Revenues		2,972	2,707	4,159	3,362	3,397	4,180	4,239	4,152	4,041	3,545	3,544	4,458	44,756
6	RSA 125-O-5-a Funding		24	24	24	24	24	24	24	24	24	24	24	24	290
7	Program Expenses		3,705	3,705	3,705	3,705	3,705	3,705	3,705	3,705	3,705	3,705	3,705	3,705	44,465
8	Total Program Expenses		3,730	3,730	3,730	3,730	3,730	3,730	3,730	3,730	3,730	3,730	3,730	3,730	44,756
9	Current Month (Over)/Under Recovery		758	1,023	(429)	368	333	(450)	(509)	(423)	(311)	184	185	(728)	
10	Cumulative (Over)/Under Recovery	(2,748)	(1,990)	(968)	(1,397)	(1,029)	(696)	(1,146)	(1,656)	(2,078)	(2,389)	(2,205)	(2,020)	(2,748)	
11	Interest @ Prime Rate		0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	
12	Interest on Deferral Balance		(6)	(4)	(3)	(3)	(2)	(2)	(4)	(5)	(6)	(6)	(6)	(6)	(55)
13	Monthly Res Sales (MWh)		335,815	279,723	269,456	229,469	214,165	244,836	326,345	307,220	238,881	235,024	253,485	320,855	3,255,273
14	Monthly C&I Sales (MWh)		354,152	339,318	357,136	331,808	353,759	385,630	401,094	403,794	365,301	361,067	342,389	362,316	4,357,763
15	Total Sales (MWh)		689,967	619,041	626,592	561,277	567,924	630,466	727,439	711,014	604,181	596,091	595,874	683,171	7,613,036
16	EE SBC Rate		0.373	0.373	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	
Line 1: (Line 15 x Line 16) / 100															
Line 2: Page 1, Col. D															
Line 3: Page 1, Col. E															
Line 4: Page 1, Col. F															
Line 5: Sum of Line 1 through Line 4															
Line 6: RSA 125-O-5-a Funding															
Line 7: Page 1, Col. B															
Line 8: Line 6 + Line 7															
Line 9: (Line 5 - Line 8) * -1															
Line 10: Prior month Line 10 + Current month Line 9															
Line 11: Prime Rate / 12															
Line 12: (Prior Month Line 10 + Current Month Line 10) / 2 x Line 11															
Line 13: Company Forecast															
Line 14: Company Forecast															
Line 15: Line 13 + Line 14															
Line 16: Set per HB 549.															

Line 1: (Line 15 x Line 16) / 100  
Line 2: Page 1, Col. D  
Line 3: Page 1, Col. E  
Line 4: Page 1, Col. F  
Line 5: Sum of Line 1 through Line 4  
Line 6: RSA 125-O-5-a Funding  
Line 7: Page 1, Col. B  
Line 8: (Line 5 - Line 8) \* -1  
Line 9: (Prior month Line 10 + Current month Line 9  
Line 10: Prior month Line 10 + Current month Line 10  
Line 11: Prime Rate / 12  
Line 12: (Prior month Line 10 + Current month Line 10  
Line 13: Company Forecast  
Line 14: Company Forecast  
Line 15: Line 13 + Line 14  
Line 16: Set per HB 549

PSNH d/b/a Eversource Energy  
Energy Efficiency Expense & SBC Revenue Reconciliation  
January 1, 2023 to December 31, 2023  
(\$ in 000's)

Line	Description	Col. A	Col. B	Forecast Jan 2023	Col. C	Forecast Feb 2023	Col. D	Forecast Mar 2023	Col. E	Forecast Apr 2023	Col. F	Forecast May 2023	Col. G	Forecast June 2023	Col. H	Forecast Jul 2023	Col. I	Forecast Aug 2023	Col. J	Forecast Sep 2023	Col. K	Forecast Oct 2023	Col. L	Forecast Nov 2023	Col. M	Forecast Dec 2023	Col. N	2023 Total	Col. O
1	SBC Revenues	3,734	3,734	3,353	3,353	3,393	3,393	3,119	3,119	3,440	3,440	3,970	3,970	3,881	3,881	3,303	3,303	3,261	3,261	3,262	3,262	3,738	3,738	41,572	41,572	1,879	1,879	3,994	3,994
2	RG&I Revenues	-	-	-	-	470	470	-	-	470	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	FCM Revenues	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333
4	Other Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Total Revenues	4,066	4,066	3,686	3,686	4,195	4,195	3,452	3,452	4,243	4,243	4,303	4,303	4,214	4,214	4,105	4,105	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	47,445	47,445
6	RSA 125-O-5-a Funding	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
7	Program Expenses	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930	3,930
8	Total Program Expenses	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954	3,954
9	Current Month (Over)/Under Recovery	(113)	(113)	268	(241)	502	(289)	(1,884)	(2,173)	(2,523)	(2,783)	(2,935)	(2,575)	(2,217)	(2,803)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)
10	Cumulative (Over)/Under Recovery	(2,803)	(2,803)	(2,648)	(2,889)	(2,387)	(1,884)	(1,884)	(1,884)	(2,173)	(2,173)	(2,523)	(2,523)	(2,783)	(2,783)	(2,935)	(2,935)	(2,575)	(2,575)	(2,217)	(2,217)	(2,803)	(2,803)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)	(2,708%)
11	Interest @ Prime Rate	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%	0.2708%
12	Interest on Deferral Balance	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)
13	Monthly Res Sales (MWh)	336,225	279,663	269,215	235,510	218,026	248,780	330,653	311,872	242,674	239,414	258,026	325,470	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729	328,729
14	Monthly C&I Sales (MWh)	351,360	337,822	355,558	340,847	355,203	384,784	400,351	402,933	365,536	361,213	342,747	362,867	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219	4,362,219
15	Total Sales (MWh)	687,585	617,484	624,773	574,357	574,228	633,565	731,204	714,805	608,210	600,627	600,773	688,338	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946	7,655,946
16	EE SBC Rate (inflation applied a 2.77%)	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543

Line 1: (Line 15 x Line 16) / 100  
Line 2: Page 1, Col. D  
Line 3: Page 1, Col. E  
Line 4: Page 1, Col. F  
Line 5: Sum of Line 1 through Line 4  
Line 6: RSA 125-O-5-a Funding  
Line 7: Page 1, Col. B  
Line 8: (Line 5 - Line 8) \* -1  
Line 9: (Line 5 - Line 8) \* -1  
Line 10: Prior month Line 10 + Current month Line 9  
Line 11: Prime Rate / 12  
Line 12: (Prior month Line 10 + Current month Line 10) / 2 x Line 11  
Line 13: Company Forecast  
Line 14: Company Forecast  
Line 15: Line 13 + Line 14  
Line 16: Set per HB 549



Liberty Utilities (Granite State Electric) d/b/a Liberty  
 NHPUC Docket No. DE 20-092  
 March 1, 2022 Plan Filing (2022-2023)  
 Attachment F3 (2022)  
 Page 3 of 9

**Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities**  
**Energy Efficiency Expense & SBC Revenue Reconciliation**  
**January 1, 2022 to December 31, 2022**

Line	Description	2021 Carryover	Actual Jan-22	Forecast Feb-22	Forecast Mar-22	Forecast Apr-22	Forecast May-22	Forecast Jun-22	Forecast Jul-22	Forecast Aug-22	Forecast Sep-22	Forecast Oct-22	Forecast Nov-22	Forecast Dec-22	2022 Total
	Col. A		Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. M	Col. N	Col. O
1	SBC Revenues		\$297	\$265	\$399	\$364	\$379	\$413	\$462	\$463	\$392	\$383	\$380	\$413	\$4,610
2	RGGI Revenues		\$0	\$0	\$52	\$0	\$0	\$52	\$0	\$0	\$52	\$0	\$0	\$52	\$207
3	FCM Revenues		\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$550
4	Carryover	\$562	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$562
5	<b>Total Revenues</b>		<b>\$390</b>	<b>\$358</b>	<b>\$543</b>	<b>\$457</b>	<b>\$472</b>	<b>\$557</b>	<b>\$555</b>	<b>\$555</b>	<b>\$537</b>	<b>\$476</b>	<b>\$473</b>	<b>\$557</b>	<b>\$5,929</b>
6	EE Marketing Expenses		\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$35
7	Program Expenses		\$491	\$491	\$491	\$491	\$491	\$491	\$491	\$491	\$491	\$491	\$491	\$491	\$5,894
8	<b>Total Program Expenses</b>		<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$494</b>	<b>\$5,929</b>
9	Current Month (Over)/Under Recovery		\$105	\$136	(\$49)	\$38	\$22	(\$63)	(\$61)	(\$61)	(\$43)	\$18	\$21	(\$63)	
10	Cumulative (Over)/Under Recovery		\$105	\$241	\$192	\$229	\$251	\$188	\$127	\$66	\$23	\$42	\$63	\$0	
11	Interest @ Prime		0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	
12	<b>Interest on Deferral Balance</b>		<b>\$0</b>	<b>\$0</b>	<b>\$1</b>	<b>\$1</b>	<b>\$1</b>	<b>\$1</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4</b>
13	<b>Monthly Sales (MWh)</b>		79,594	71,077	75,532	68,916	71,833	78,205	87,509	87,595	74,311	72,522	72,037	78,125	917,256
14	<b>EE SBC Rate</b>		0.373	0.373	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	

Line 1: Forecast data

Line 2: Forecast data

Line 3: Forecast data

Line 4: Forecast data

Line 5: Sum of Lines 1 through Lines 4

Line 6: Company data

Line 7: Sum of Line 6

Line 8: Line 5 - Line 7

Line 9: Prior month Line 9 + Current month Line 8

Line 10 : Prime Rate / 12

Line 11 : (Prior Month Line 9 + Current Month Line 9) / 2 x Line 10

Line 12 : Company Forecast

Line 13 : Page 1, Col. I

Docket No. DE 20-092  
 Joint Testimony of Scott T. Balise, Jay E. Dudley,  
 Stephen R. Eckberg, and Elizabeth R. Nixon  
 Attachment DOE-JT-5  
 Page 9 of 12

Liberty Utilities (Granite State Electric) d/b/a Liberty  
 NHPUC Docket No. DE 20-092  
 March 1, 2022 Plan Filing (2022-2023)  
 Attachment F3 (2023)  
 Page 3a of 9

**Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities**  
**Energy Efficiency Expense & SBC Revenue Reconciliation**  
**January 1, 2023 to December 31, 2023**

Line	Description	Actual Jan-23	Forecast Feb-23	Forecast Mar-23	Forecast Apr-23	Forecast May-23	Forecast Jun-23	Forecast Jul-23	Forecast Aug-23	Forecast Sep-23	Forecast Oct-23	Forecast Nov-23	Forecast Dec-23	2023 Total
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. M	Col. N	Col. O
1	SBC Revenues	\$440	\$392	\$415	\$378	\$394	\$429	\$485	\$485	\$411	\$401	\$397	\$430	\$5,058
2	RGGI Revenues	\$0	\$0	\$55	\$0	\$0	\$55	\$0	\$0	\$55	\$0	\$0	\$55	\$218
3	FCM Revenues	\$29	\$29	\$29	\$29	\$29	\$29	\$29	\$29	\$29	\$29	\$29	\$29	\$351
4	Carryover	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	<b>Total Revenues</b>	<b>\$469</b>	<b>\$421</b>	<b>\$499</b>	<b>\$407</b>	<b>\$423</b>	<b>\$513</b>	<b>\$514</b>	<b>\$514</b>	<b>\$495</b>	<b>\$430</b>	<b>\$427</b>	<b>\$514</b>	<b>\$5,627</b>
6	EE Marketing Expenses	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$35
7	Program Expenses	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$5,592
8	<b>Total Program Expenses</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$469</b>	<b>\$5,627</b>
9	Current Month (Over)/Under Recovery	(\$0)	\$48	(\$30)	\$62	\$46	(\$44)	(\$45)	(\$45)	(\$26)	\$39	\$42	(\$45)	
10	Cumulative (Over)/Under Recovery	(\$0)	\$47	\$18	\$79	\$125	\$81	\$36	(\$9)	(\$36)	\$3	\$45	(\$0)	
11	Interest @ Prime	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	
12	<b>Interest on Deferral Balance</b>	<b>(\$0)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$0)</b>	<b>(\$0)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1</b>
13	<b>Monthly Sales (MWh)</b>	81,073	72,235	76,453	69,684	72,596	79,072	89,327	89,414	75,808	73,884	73,245	79,334	932,125
14	<b>EE SBC Rate</b>	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	0.543	

Line 1: Forecast data  
 Line 2: Forecast data  
 Line 3: Forecast data  
 Line 4: Forecast data  
 Line 5: Sum of Lines 1 through Lines 4  
 Line 6: Company data  
 Line 7: Sum of Line 6  
 Line 8: Line 5 - Line 7  
 Line 9: Prior month Line 9 + Current month Line 8  
 Line 10 : Prime Rate / 12  
 Line 11 : (Prior Month Line 9 + Current Month Line 9) / 2 x Line 10  
 Line 12 : Company Forecast  
 Line 13 : Page 1, Col. I

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: March 11, 2022**  
**Data Request No. DOE 1-012**

**Date of Response: March 25, 2022**  
**Page 1 of 1**

**Request from: Department of Energy**

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**Request:**

Unitil: Please provide an estimate of the total funding levels by month and summed for the year, similar to Eversource as shown on Bates pp 554 and 555.

**Response:**

Please see Attachment DOE 1-012 A for the Unitil Energy Systems, Inc. monthly reconciliation and Attachment DOE 1-012 B for the Northern Utilities, Inc. monthly reconciliation.

Docket No. DE 20-092

Joint Testimony of Scott T. Balise, Jay E. Dudley,  
Stephen R. Eckberg, and Elizabeth R. Nixon  
Attachment DOE-JT-5  
Page 11 of 12Unitil Energy Systems, Inc.  
NHPUC Docket No. DE 20-092  
Attachment DOE 1-012 A  
Page 1 of 2Unitil Energy Systems, Inc.  
Energy Efficiency Expense & SBC Revenue Reconciliation  
January 1, 2022 to December 31, 2022

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Total
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
1 Beginning Balance -- (Over)/Under Recovery	\$ 253,416	\$ 120,836	\$ 24,976	\$ (451,678)	\$ (361,972)	\$ (442,643)	\$ (327,448)	\$ (187,142)	\$ (335,894)	\$ (291,896)	\$ (290,992)	\$ (443,032)	
2 RSA 125-O-5-a Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,710	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,710
3 Program Expenses	\$ 269,578	\$ 294,481	\$ 404,525	\$ 605,950	\$ 410,525	\$ 639,898	\$ 725,279	\$ 495,093	\$ 661,515	\$ 476,762	\$ 413,811	\$ 963,126	\$ 6,360,543
4 Total Program Expenses	\$ 269,578	\$ 294,481	\$ 404,525	\$ 605,950	\$ 410,525	\$ 684,608	\$ 725,279	\$ 495,093	\$ 661,515	\$ 476,762	\$ 413,811	\$ 963,126	\$ 6,405,254
<b>Revenues</b>													
5 Total Class Sales - kWh	\$ 102,718,442	\$ 99,460,809	\$ 94,174,092	\$ 93,868,248	\$ 89,119,921	\$ 91,210,123	\$ 108,227,429	\$ 119,375,481	\$ 100,356,817	\$ 87,543,907	\$ 90,544,601	\$ 95,966,630	\$ 1,172,566,502
6 Charge -- \$/kWh	\$ 0.00373	\$ 0.00373	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528	\$ 0.00528
7 Energy Efficiency Revenues	\$ 383,140	\$ 370,989	\$ 497,239	\$ 495,624	\$ 470,353	\$ 481,589	\$ 571,441	\$ 630,303	\$ 529,884	\$ 462,232	\$ 478,075	\$ 506,704	\$ 5,877,773
8 Forward Capacity Market Revenue	\$ 19,534	\$ 19,534	\$ 309,378	\$ 19,534	\$ 19,534	\$ 12,822	\$ 12,822	\$ 12,822	\$ 12,822	\$ 12,822	\$ 12,822	\$ 12,822	\$ 477,271
9 RGGI Funding	\$ -	\$ -	\$ 73,974	\$ -	\$ -	\$ 73,974	\$ -	\$ -	\$ 73,974	\$ -	\$ 73,974	\$ -	\$ 295,896
10 Other Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 Total Revenues	\$ 402,674	\$ 390,523	\$ 880,591	\$ 515,158	\$ 490,087	\$ 568,386	\$ 584,263	\$ 643,125	\$ 616,680	\$ 475,054	\$ 564,872	\$ 519,526	\$ 6,650,940
12 (Over)/Under Recovery (excluding interest)	\$ 120,320	\$ 24,795	\$ (451,090)	\$ (360,887)	\$ (441,534)	\$ (326,421)	\$ (186,432)	\$ (335,173)	\$ (291,059)	\$ (290,189)	\$ (442,053)	\$ (568)	
<b>Interest Calculation</b>													
13 Average Monthly Balance	\$ 186,868	\$ 72,815	\$ (213,057)	\$ (406,283)	\$ (401,753)	\$ (384,532)	\$ (256,940)	\$ (261,157)	\$ (313,476)	\$ (291,042)	\$ (366,522)	\$ (221,232)	
14 Interest Rate	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
15 Days per Month	31	28	31	30	31	30	31	31	30	31	30	31	365
16 Computed Interest	\$ 516	\$ 182	\$ (588)	\$ (1,085)	\$ (1,109)	\$ (1,027)	\$ (709)	\$ (721)	\$ (837)	\$ (803)	\$ (979)	\$ (611)	\$ (7,773)
17 Ending Balance	\$ 120,836	\$ 24,976	\$ (451,678)	\$ (361,972)	\$ (442,643)	\$ (327,448)	\$ (187,142)	\$ (335,894)	\$ (291,896)	\$ (290,992)	\$ (443,032)	\$ (43)	

Line 1: Prior period ending balance.

Line 2: Revised budget, DE 20-092 Compliance Filing dated March 1, 2022

Line 5: Company Forecast

Line 6: Rates in effect. Budget assumes March 1, 2022 rate change.

Line 7: Line 3 \* Line 4

Line 11: Sum of Lines 7 through 10

Line 12: Line 1 + Line 4 - Line 11

Line 13: (Line 1 + Line 12)/2

Line 16: Line 13 \* Prime Rate

Line 17: Line 13 \* (Line 14/# days per year) \* Line 15).

Unitil Energy Systems, Inc.  
NHPUC Docket No. DE 20-092  
Attachment DOE-JT-5  
Page 2 of 2Unitil Energy Systems, Inc.  
Energy Efficiency Expense & SBC Revenue Reconciliation  
January 1, 2023 to December 31, 2023

	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Total
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
1 Beginning Balance -- (Over)/Under Recovery	\$ (43)	\$ (256,571)	\$ (510,147)	\$ (691,349)	\$ (584,496)	\$ (653,670)	\$ (544,302)	\$ (369,803)	\$ (492,604)	\$ (403,848)	\$ (380,291)	\$ (509,640)	
2 RSA 125-O-5-a Funding	\$ 44,333	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,333
3 Program Expenses	\$ 291,312	\$ 321,665	\$ 435,946	\$ 652,153	\$ 450,170	\$ 694,376	\$ 782,077	\$ 545,485	\$ 723,309	\$ 517,971	\$ 451,589	\$ 1,049,540	\$ 6,915,593
4 Total Program Expenses	\$ 335,646	\$ 321,665	\$ 435,946	\$ 652,153	\$ 450,170	\$ 694,376	\$ 782,077	\$ 545,485	\$ 723,309	\$ 517,971	\$ 451,589	\$ 1,049,540	\$ 6,959,926
<b>Revenues</b>													
5 Total Class Sales	\$ 102,295,275	\$ 99,066,270	\$ 93,752,663	\$ 93,414,574	\$ 88,633,855	\$ 90,739,580	\$ 107,860,661	\$ 119,053,829	\$ 99,938,026	\$ 87,053,130	\$ 90,065,807	\$ 95,514,282	\$ 1,167,387,952
6 Charge -- \$/KWh	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	\$ 0.00543	
7 Energy Efficiency Revenues	\$ 555,463	\$ 537,930	\$ 509,077	\$ 507,241	\$ 481,282	\$ 492,716	\$ 585,683	\$ 646,462	\$ 542,663	\$ 472,698	\$ 489,057	\$ 518,643	\$ 6,338,917
8 Forward Capacity Market Revenue	\$ 36,356	\$ 36,356	\$ 36,356	\$ 36,356	\$ 36,356	\$ 20,635	\$ 20,635	\$ 20,635	\$ 20,635	\$ 20,635	\$ 20,635	\$ 20,635	\$ 326,223
9 RGGI Funding	\$ -	\$ -	\$ 70,060	\$ -	\$ -	\$ 70,060	\$ -	\$ -	\$ 70,060	\$ -	\$ 70,060	\$ -	\$ 280,239
10 Other Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 Total Revenues	\$ 591,820	\$ 574,286	\$ 615,493	\$ 543,597	\$ 517,638	\$ 583,410	\$ 606,318	\$ 667,097	\$ 633,358	\$ 493,333	\$ 579,752	\$ 539,277	\$ 6,945,378
12 (Over)/Under Recovery (excluding interest)	\$ (256,217)	\$ (509,192)	\$ (689,693)	\$ (582,794)	\$ (651,964)	\$ (542,704)	\$ (368,543)	\$ (491,415)	\$ (402,652)	\$ (379,210)	\$ (508,453)	\$ 622	
<b>Interest Calculation</b>													
13 Average Monthly Balance	\$ (128,130)	\$ (382,881)	\$ (599,920)	\$ (637,071)	\$ (618,230)	\$ (598,187)	\$ (456,422)	\$ (430,609)	\$ (447,628)	\$ (391,529)	\$ (444,372)	\$ (254,509)	
14 Interest Rate	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
15 Days per Month	31	28	31	30	31	30	31	31	30	31	30	31	365
16 Computed Interest	\$ (354)	\$ (955)	\$ (1,656)	\$ (1,702)	\$ (1,706)	\$ (1,598)	\$ (1,260)	\$ (1,189)	\$ (1,196)	\$ (1,081)	\$ (1,187)	\$ (703)	\$ (14,585)
17 Ending Balance	\$ (256,571)	\$ (510,147)	\$ (691,349)	\$ (584,496)	\$ (653,670)	\$ (544,302)	\$ (369,803)	\$ (492,604)	\$ (403,848)	\$ (380,291)	\$ (509,640)	\$ (80)	

Line 1: Prior period ending balance  
Line 2: Revised budget, DE 20-092 Compliance Filing dated March 1, 2022  
Line 3: Company Forecast  
Line 4: Page 1, Col J  
Line 5: Company forecast  
Line 6: Forecasted rate  
Line 7: Line 3 \* Line 4  
Line 11: Sum of Lines 7 through 10  
Line 12: Line 1 + Line 4 - Line 11  
Line 13: (Line 1 + Line 12)/2  
Line 16: Prime Rate  
Line 17: Line 13 \* ((Line 14/# days per year) \* Line 15))

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: April 07, 2022**  
**Data Request No. TS 1-003**

**Date of Response: April 12, 2022**  
**Page 1 of 1**

**Request from: Department of Energy**

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**Request:**

Please refer to the Attachment TS-3, which is a table from the Benefit/Cost Working Group recommendation filed on October 31, 2019 in DE 17-136. Please confirm whether the elements listed for the “Current NH TRC Test” and the “Granite State Test” are the elements that are included in the benefit/cost test presented in the March 1, 2022. If the elements in the benefit/cost test in the March 1, 2022 plan differ from those shown in Attachment TS-3, please provide an updated table showing the elements included in the TRC and the Granite State Test.

**Response:**

The elements in the “Current NH TRC Test” referenced in Attachment TS-3, which was provided to the Utilities as part of this question, align with the elements used in the model to calculate the Total Resource Cost (TRC) Test benefit-cost ratio in the March 1, 2022 Plan filing. The TRC test used in the March 1, 2022 Plan filing is unchanged from the TRC test used in the 2020 Plan models.

The elements in the “Granite State Test” referenced in Attachment TS-3, and the suggested methodologies to account for their impact outlined in the 2019 New Hampshire Cost Effectiveness Review, align with the elements used in the model to calculate the Granite State Test benefit-cost ratio in the March 1, 2022 Plan filing, with one exception. The March 1, 2022 Plan filing excludes benefits related to increased reliability. The Utilities made the decision to not include these benefits after certain stakeholders expressed opposition during the 2021-23 planning process.

## Attachment TS-3

**Appendix 1- Cost-Effectiveness Screening Summary**

The chart below summarizes the impacts included in the current New Hampshire TRC Test and the proposed Granite State Test, the Utility Cost Test, and Secondary Granite State Test.

Impact	Current NH TRC Test	Granite State Test	Secondary Test: Utility Cost Test	Secondary Test: Secondary Granite State Test
<b>Utility System Costs</b>				
Measure costs (utility portion)	✓	✓	✓	✓
Other financial or technical support costs	✓	✓	✓	✓
Other program and administrative costs	✓	✓	✓	✓
EM&V costs	✓	✓	✓	✓
Performance incentives	✓	✓	✓	✓
<b>Utility System Benefits</b>				
Avoided energy costs	✓	✓	✓	✓
Avoided generating capacity costs	✓	✓	✓	✓
Avoided reserves	✓	✓	✓	✓
Avoided transmission costs	✓	✓	✓	✓
Avoided distribution costs	✓	✓	✓	✓
Avoided T&D line losses	✓	✓	✓	✓
Avoided ancillary services		✓	✓	✓
Intrastate price suppression effects (DRIPE)	✓	✓	✓	✓
Interstate price suppression effects (DRIPE)				
Avoided compliance with RPS requirements	✓	✓	✓	✓
Avoided environmental compliance costs (embedded)	✓	✓	✓	✓
Avoided credit and collection costs		✓	✓	✓
Reduced risk	✓	✓	✓	✓
Increased reliability		✓	✓	✓
Market transformation		✓	✓	✓
<b>Non-Utility System Impacts</b>				
Other fuel	✓	✓		✓
Water resource	✓	✓		✓
Income eligible (participant)	✓	✓		✓
Income eligible (societal)				✓
Participant costs	✓			✓
Participant non-energy benefits	✓			✓
Environmental, NH fossil fuel proxy	✓	✓		✓
Environmental, other externalities				✓
Public health				
Energy security				

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: March 11, 2022**  
**Data Request No. DOE 1-020**

**Date of Response: March 25, 2022**  
**Page 1 of 1**

**Request from: Department of Energy**

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**Request:**

All: Please provide calculations (including live spreadsheets) showing that the low income program funding meets the 20% requirement in RSA 374-F:3, VI-a(c) (20% of funds collected will be expended on low-income efficiency programs) and also the 17% requirement.

**Response:**

Please refer to Attachment DOE 1-020 for the requested information.



2022								
Line	Description	Liberty	NHEC	Eversource	Unitil	Liberty Gas	Northern Utilities	Reference
1	HEA Budget <sup>1</sup>	\$ 1,176,716	\$ 1,008,680	\$ 8,421,306	\$ 1,204,324	\$ 1,698,829	\$ 556,859	Company Records
2	Total Budget <sup>1</sup>	\$ 5,586,900	\$ 5,414,728	\$ 42,148,798	\$ 6,028,951	\$ 8,494,145	\$ 2,784,296	Company Records
3	HEA as % of Total	21.06%	18.63%	19.98%	19.98%	20.00%	20.00%	Line 1 / Line 2
4	HEA SBC Funding <sup>2</sup>	\$ 867,221	\$ 734,288	\$ 7,174,892	\$ 1,175,555	N/A	N/A	Company Records
5	SBC Portion of Budget <sup>2</sup>	\$ 4,336,104	\$ 3,671,438	\$ 35,874,460	\$ 5,877,773	N/A	N/A	Company Records
6	HEA Portion of SBC	20.00%	20.00%	20.00%	20.00%	N/A	N/A	Line 4 / Line 5
2023								
Line	Description	Liberty	NHEC	Eversource	Unitil	Liberty Gas	Northern Utilities	Reference
7	HEA Budget <sup>1</sup>	\$ 1,057,265	\$ 847,867	\$ 8,906,891	\$ 1,311,013	\$ 1,778,574	\$ 494,897	Company Records
8	Total Budget <sup>1</sup>	\$ 5,300,388	\$ 4,271,963	\$ 44,697,764	\$ 6,555,064	\$ 8,892,870	\$ 2,474,490	Company Records
9	HEA as % of Total	19.95%	19.85%	19.93%	20.00%	20.00%	20.00%	Line 7 / Line 8
10	HEA SBC Funding <sup>2</sup>	\$ 952,143	\$ 796,102	\$ 7,820,105	\$ 1,267,783	N/A	N/A	Company Records
11	SBC Portion of Budget <sup>2</sup>	\$ 4,760,716	\$ 3,980,508	\$ 39,100,523	\$ 6,338,917	N/A	N/A	Company Records
12	HEA Portion of SBC	20.00%	20.00%	20.00%	20.00%	N/A	N/A	Line 10 / Line 11

## Footnotes

1 - Amounts shown exclude PI

2 - Amounts shown exclude PI, RGGI, Carryover and FCM

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: March 11, 2022**  
**Data Request No. DOE 1-020**

**Date of Response: March 25, 2022**  
**Page 1 of 1**

**Request from: Department of Energy**

**Request:**

All: Please provide calculations (including live spreadsheets) showing that the low income program funding meets the 20% requirement in RSA 374-F:3, VI-a(c) (20% of funds collected will be expended on low-income efficiency programs) and also the 17% requirement.

**Response:**

~~Please refer to Attachment DOE 1-020 for the requested information.~~

2022								
Line	Description	Liberty	NHEC	Eversource	Unitil	Liberty Gas	Northern Utilities	Reference
1	HEA Budget <sup>1</sup>	\$ 1,176,716	\$ 1,008,680	\$ 8,421,306	\$ 1,204,324	\$ 1,698,829	\$ 556,859	Company Records
2	Total Budget <sup>1</sup>	\$ 5,586,900	\$ 5,414,728	\$ 42,148,798	\$ 6,028,951	\$ 8,494,145	\$ 2,784,296	Company Records
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6	HEA Portion of SBC	20.00%	20.00%	20.00%	20.00%	N/A	N/A	Line 4 / Line 5
2023								
Line	Description	Liberty	NHEC	Eversource	Unitil	Liberty Gas	Northern Utilities	Reference
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8	Total Budget <sup>1</sup>	\$ 5,300,388	\$ 4,271,963	\$ 44,697,764	\$ 6,555,064	\$ 8,892,870	\$ 2,474,490	Company Records
9	HEA as % of Total	19.95%	19.85%	19.93%	20.00%	20.00%	20.00%	Line 7 / Line 8
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12	HEA Portion of SBC	20.00%	20.00%	20.00%	20.00%	N/A	N/A	Line 10 / Line 11

## Footnotes

1 - Amounts shown exclude PI

2 - Amounts shown exclude PI, RGGI, Carryover and FCM

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: April 07, 2022**  
**Data Request No. TS 1-005**

**Date of Response: April 12, 2022**  
**Page 1 of 1**

**Request from: Department of Energy**

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**Request:**

Reference the March 1, 2022 Plan at Bates 51 and 70, and Response DOE 2-002, concerning the HEA program:

- a. Please provide the average cost per project for the HEA program for the 2018-2020. If possible, please indicate which data includes/excludes heating system costs. If heating system costs were covered separately, please provide an estimate of the average heating cost each year.

HEA Program Project Cost Averages	2018	2019	2020
Single Family Homes			
Multi-Family Residences			

**Response:**

Please refer to Attachment TS 1-005 for the requested information for program years 2018-2021. As noted in Attachment TS 1-005, 2018 and 2019 data exclude heating system costs, as those expenditures were calculated separately, while 2020 and 2021 data include the transition of including the heating system costs within the cap.

HEA Program Project Cost Averages	2018	2019	2020	2021
Single Family Homes	\$ 4,718	\$ 4,833	\$ 9,537	\$ 13,538
Multi-Family Residences	\$ 2,541	\$ 2,417	\$ 2,995	\$ 4,169
Overall	\$ 3,574	\$ 3,137	\$ 4,239	\$ 6,811

*Heating system costs were fully covered separately in 2018 & 2019, but were transitioning to being part of the incentive cap in 2020 & 2021.*

	2018	2019	2020	2021
HEA Program Heating System Cost Averages	\$ 8,748	\$ 8,666	\$ 8,200	\$ 7,192

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: April 07, 2022**  
**Data Request No. TS 1-004**

**Date of Response: April 12, 2022**  
**Page 1 of 2**

**Request from: Department of Energy**

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**Request:**

Reference Technical Session held on April 5, 2022, and the 2022-2023 New Hampshire Statewide Energy Efficiency Plan, SmartSTART at Bates 30-31.

- a. Please confirm that Eversource continues to collect a performance incentive (PI) for this program based on 6 percent of the total loan payments received.
- b. Please confirm that the amounts of PI collected for the SmartSTART program for 2020 and 2021 were \$67,802 and \$48,239 respectively.
- c. Please confirm that the savings resulting from the SmartSTART loans are included in the total lifetime savings component of the PI matrix shown on Bates 88 of the March 1, 2022 Plan. If savings from the SmartSTART loans are not included in the PI matrix savings totals, please demonstrate with supporting calculations and references to savings totals for PI purposes.
- d. Please explain how this SmartSTART PI is, or is not, duplicative of the PI obtained through the PI matrix described at Bates 87-88 of the March 1, 2022 Plan.

**Response:**

- a. Eversource continues to collect PI for the SmartSTART program separate from the PI earned for the NHSaves programs. The PI rate for SmartSTART continues to be based on 6% of the loan repayments received, with the exception of 2020's calculation. In Q4 2020, there was a single large early loan repayment of \$703,244 made to close out a loan, which inadvertently did not have the 6% PI applied against it, resulting in a lower than 6 percent SmartSTART PI for that year. 2021's preliminary SmartSTART PI was based on 6% of the loan repayments, however, similar to 2020, there was an early loan repayment that did not have the 6% performance incentive applied against it in the 2021 Q4 Report filed on March 1, 2022. This amount will be revised from \$48,239.09 to \$54,690.90 to accurately reflect the SmartSTART PI earned. To ensure accuracy and clarity of the actual SmartSTART PI amounts moving forward, the Company will monitor for early loan repayments and will ensure 2021 and future years' actual SmartSTART PI will be distinctly reported within the Company's annual PI filings. Please refer to the line titled "Year-to-date Performance Incentive" on page 25 of the 2020 and 2021 Q4 Reports for the 2020 Actual PI and the 2021 preliminary PI. Additionally, please refer to the

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: April 07, 2022**  
**Data Request No. TS 1-004**

**Date of Response: April 12, 2022**  
**Page 2 of 2**

calculation on Line 6 and the associated footnote 2 on Page 5 of the Company's annual PI reports, demonstrating the removal of the SmartSTART administrative dollars from the energy efficiency PI matrix.

- b. Actual PI booked for 2020, as listed on Page 25 in the Company's 2020 Q4 Report filed on March 1, 2021, was \$67,802.26. Preliminary PI for 2021, as listed on Page 25 in the Revised 2021 Q4 Report filed on April 12, 2022, was \$54,690.90. This amount includes the PI on the 2021 proactive repayment mentioned in the response to Part A. The 2021 actual SmartSTART PI will be distinctly reported within the Company's annual PI filing, as noted in the response to Part A of this question.
- c. Since SmartSTART is a financing mechanism and not an energy saving measure or program, there are no savings associated with SmartSTART in and of itself. The savings are attributable to the measures installed and the programs in which those measures occurred. Please refer to Footnote 6 on Page 25 in the Q4 reports and Pages 1 and 2 of the Company's annual PI filings. Additionally, the SmartSTART expenditures and loan repayments are not included in the PI framework for the NHSaves Program PI matrix. Please refer to the response to Part A of this question.
- d. Please refer to the response to Parts A and C of this question.

**Public Service Company of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: April 07, 2022**  
**Data Request No. TS 1-004**

**Date of Response: April 12, 2022**  
**Page 1 of 2**

**Request from: Department of Energy**

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**Request:**

Reference Technical Session held on April 5, 2022, and the 2022-2023 New Hampshire Statewide Energy Efficiency Plan, SmartSTART at Bates 30-31.

- a. Please confirm that Eversource continues to collect a performance incentive (PI) for this program based on 6 percent of the total loan payments received.
- b. Please confirm that the amounts of PI collected for the SmartSTART program for 2020 and 2021 were \$67,802 and \$48,239 respectively.
- c. Please confirm that the savings resulting from the SmartSTART loans are included in the total lifetime savings component of the PI matrix shown on Bates 88 of the March 1, 2022 Plan. If savings from the SmartSTART loans are not included in the PI matrix savings totals, please demonstrate with supporting calculations and references to savings totals for PI purposes.
- d. Please explain how this SmartSTART PI is, or is not, duplicative of the PI obtained through the PI matrix described at Bates 87-88 of the March 1, 2022 Plan.

**Response:**

- a. Eversource continues to collect PI for the SmartSTART program separate from the PI earned for the NHSaves programs. The PI rate for SmartSTART continues to be based on 6% of the loan repayments received, with the exception of 2020's calculation. In Q4 2020, there was a single large early loan repayment of \$703,244 made to close out a loan, which inadvertently did not have the 6% PI applied against it, resulting in a lower than 6 percent SmartSTART PI for that year. 2021's preliminary SmartSTART PI was based on 6% of the loan repayments, however, similar to 2020, there was an early loan repayment that did not have the 6% performance incentive applied against it in the 2021 Q4 Report filed on March 1, 2022. This amount will be revised from \$48,239.09 to \$54,690.90 to accurately reflect the SmartSTART PI earned. To ensure accuracy and clarity of the actual SmartSTART PI amounts moving forward, the Company will monitor for early loan repayments and will ensure 2021 and future years' actual SmartSTART PI will be distinctly reported within the Company's annual PI filings. Please refer to the line titled "Year-to-date Performance Incentive" on page 25 of the 2020 and 2021 Q4 Reports for the 2020 Actual PI and the 2021 preliminary PI. Additionally, please refer to the



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- c. Since SmartSTART is a financing mechanism and not an energy saving measure or program, there are no savings associated with SmartSTART in and of itself. The savings are attributable to the measures installed and the programs in which those measures occurred. Please refer to Footnote 6 on Page 25 in the Q4 reports and Pages 1 and 2 of the Company's annual PI filings. Additionally, the SmartSTART expenditures and loan repayments are not included in the PI framework for the NHSaves Program PI matrix. Please refer to the response to Part A of this question.
- d. Please refer to the response to Parts A and C of this question.