

STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION

**DOCKET DE 23-068**

IN THE MATTER OF:       Electric and Gas Utilities  
  
                                  2024-2026 New Hampshire Statewide Energy Efficiency Plan

DIRECT TESTIMONY

OF

Heidi W. Lemay, Elizabeth R. Nixon, Jay E. Dudley, and  
Mark P. Toscano

New Hampshire Department of Energy

September 12, 2023

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1 **Introduction of Witnesses**

2 **Q. Please state your names.**

3 A. Heidi W. Lemay, Elizabeth R. Nixon, Jay E. Dudley, and Mark P. Toscano.

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

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

7 **Q. Ms. Lemay, please summarize your education and professional work experience.**

8 A. I have been employed as a Utility Analyst with the DOE since October 2022. Prior to the  
9 DOE, I was employed at the NH Department of Transportation from 2018 until 2022 as a  
10 Design Engineer. Prior to joining the State, I worked as a consulting engineer for several  
11 private environmental consulting firms. Working as a consulting engineer, my daily tasks  
12 included field construction supervision of contractors, design calculations in spreadsheets  
13 and budgeting, assistant project management, managing client's needs, developing RFPs,  
14 drafting engineering designs for water, wastewater, and solid waste projects, in addition to  
15 technical report writing. I have a B.S. in Environmental Engineering from the University of  
16 New Hampshire and a M.S. in Civil Engineering also from the University of New  
17 Hampshire.

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

19 A. I joined the Public Utilities Commission (PUC or Commission) in August 2012 in the  
20 Sustainable Energy Division working on renewable energy issues. I completed electric utility  
21 rate training at New Mexico State University's Center for Public Utilities. In August 2016, I  
22 became a Utility Analyst in the Electric Division at the PUC, which is now DOE. In January

1 2022, I became the Electric Director, in the Regulatory Support Division of the DOE. Prior  
2 to the PUC, I was employed at the NH Department of Environmental Services, Air Quality  
3 Division, from 1999 until 2012, in various positions. Prior to joining the State, I worked as a  
4 consultant at ICF and AER\*X, Inc. Throughout my career, I have focused on energy,  
5 environmental, and economic issues and analysis. I earned a B.S. in Mathematics from the  
6 University of Vermont. I have testified in the energy efficiency program dockets (DE 17-136  
7 and DE 20-092), Liberty Utilities' battery storage pilot docket (DE 17-189), and Unitil  
8 Energy System's distribution rate case (DE 21-030). In addition, I have provided  
9 recommendations or testimony in several other dockets, including the grid modernization  
10 docket (IR 15-296) and electric vehicle rate design dockets (IR 20-004 and DE 20-170).

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

12 A. I started at the New Hampshire Public Utilities Commission ("Commission" or "PUC") in  
13 June of 2015 as a Utility Analyst in the Electric Division. Effective July 1, 2021, the Electric  
14 Division was transferred to, and became part of, the newly created DOE, and I am presently  
15 employed by that agency. Before joining the Commission, I was employed at the Vermont  
16 Public Service Board (now known as the Vermont Public Utilities Commission, "VT-PUC")  
17 for seven years as a Utility Analyst and Hearing Officer. In that position I was primarily  
18 responsible for the analysis of financing and accounting order requests filed by all Vermont  
19 utilities, including review of auditor's reports, financial projections, and securities analysis.  
20 As a Hearing Officer, I managed and adjudicated cases involving a broad range of utility-  
21 related issues including rate investigations, construction projects, energy efficiency, consumer  
22 complaints, utility finance, condemnations, and telecommunications. Prior to working for the

1 VT-PUC, I worked in the commercial banking sector in Vermont for twenty years where I  
2 held various management and administrative positions. My most recent role was as Vice  
3 President and Chief Credit Officer for Lyndon Bank in Lyndonville, Vermont. In that  
4 position I was responsible for directing and administering the analysis and credit risk  
5 management of the bank's loan portfolio, including internal loan review, regulatory  
6 compliance, audit, and coordinating periodic bank examinations by state and federal  
7 regulators. I received my Bachelor of Arts degree in Political Science from St. Michael's  
8 College. Throughout my career in banking, I took advantage of numerous Continuing  
9 Professional Education (CPE) opportunities involving college level coursework in the areas  
10 of accounting, financial analysis, real estate and banking law, economics, and regulatory  
11 compliance. Also, during my tenure with the VT-PUC I took advantage of various CPE  
12 opportunities including the Regulatory Studies Program at Michigan State University  
13 (sponsored by the National Association of Regulatory Utility Commissioners "NARUC"),  
14 Utility Finance & Accounting for Financial Professionals at the Financial Accounting  
15 Institute, Standard & Poor's seminars on credit ratings for public utilities, and Scott  
16 Hempling seminars on Electric Utility Law and Public Utility Regulation.

17 **Q. Mr. Toscano, please summarize your education and professional work experience.**

18 A. I am a licensed Professional Engineer (PE) in the State of New York and New Hampshire  
19 and a Certified Energy Manager (CEM) through the Association of Energy Engineers (AEE).  
20 I earned a Bachelor of Science degree in Mechanical Engineering Technology from the New  
21 York Institute of Technology and an Associate's degree in Air Conditioning and Heating  
22 Technology from Farmingdale University. I was employed for approximately three (3) years

1 by the Long Island Lighting Company (LILCO), an investor-owned utility, where I worked  
2 as a Project Engineer for the implementation of energy efficiency and demand-side  
3 management programs. My primary activities included advising large commercial and  
4 industrial customers on demand reduction methods and the coordination of advanced  
5 metering installations. I was employed for approximately thirty-three (33) years at the  
6 Brookhaven National Laboratory (BNL) in various roles including as a Project Engineer,  
7 Project Manager, Energy Manager, and the Manager of Energy Management and Utilities  
8 Engineering. I joined the DOE's Regulatory Support Division in March 2022.

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

10 A. Our testimony provides comments and recommendations of the DOE regarding the 2024-  
11 2026 New Hampshire Statewide Energy Efficiency Plan ("Plan" or "2024-2026 Plan") dated  
12 June 30, 2023 filed jointly by the New Hampshire electric and gas utilities ("Utilities" or  
13 "Joint Utilities"). The Utilities are Liberty Utilities (Granite State Electric) Corp. d/b/a  
14 Liberty ("Liberty Utilities - Electric"), New Hampshire Electric Cooperative, Inc. ("NHEC"),  
15 Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"), Unitil  
16 Energy Systems, Inc. ("UES"), EnergyNorth Natural Gas, Inc. d/b/a Liberty Utilities  
17 ("Liberty Utilities - Gas"), and Northern Utilities, Inc. ("Northern").

18  
19 **Summary**

20 **Q. Please summarize your testimony.**

21 A. DOE provides support for the Plan filed by the Utilities and recommends approval. DOE  
22 specifically addresses the following topics in our testimony:

- 1           • Statutory Requirements, including but not limited to RSA 374-F:3, VI-a, as amended  
2           by HB 549 and approved on February 24, 2022, including the requirement for  
3           \$400,000 for education and outreach programs from SBC funds that are separate from  
4           the utilities' program budget, the requirement that 20 percent of the system benefits  
5           charge (SBC) funds collected should be spent on low income programs, and the  
6           requirement that planned electric savings must be at least 65 percent of planned,  
7           annual energy savings.
- 8           • Cost-Effectiveness, including the Granite State Test (GST) and Total Resource Cost  
9           Test (TRC), the Avoided Energy Supply Cost (AESC) Study, and net savings  
10          calculations documented in the Technical Resource Manual (TRM).
- 11          • Active Demand Response Programs.
- 12          • Performance Incentive.
- 13          • Planning Process for Next Three-Year Plan.

14

15   **Statutory Requirements**

16   **Q. Will your testimony cover the statutory and legal requirements regarding this docket?**

17   A. Given the September 7 PUC order requesting a legal brief, we only provide an overview of  
18   some of the statutory and legal requirements. The forthcoming legal brief will go into more  
19   detail regarding energy efficiency frameworks and statutory provisions.

20   **Q. Do you believe that the Utilities' Plan meets the applicable statutory requirements?**

21   A. Yes. We will explain in more detail as part of this testimony how we believe the Utilities'  
22   Plan meets the applicable statutory requirements. We have included responses to data



1 requests provided by the Utilities that explain how they believe they have met these  
2 requirements. We will focus first on the recent requirements that were part of HB 549 (2022),  
3 but also address some other requirements.

4 **Q. RSA 374-F:3, VI-a(b) states that “up to \$400,000 from system benefits charge funds**  
5 **collected annually shall be used to promulgate the benefits of energy efficiency**  
6 **according to guidelines developed as specified in RSA 125-O:5-a, I(c) as determined by**  
7 **the department of energy.” Have the Utilities accounted for the \$400,000?**

8 A. Yes. We have verified that the electric utilities propose to collect \$400,000 through the SBC  
9 for marketing and education efforts to be used in accordance with guidelines as determined  
10 by DOE and other stakeholders. The Plan provides the statewide summary for the program  
11 funding less the \$400,000,<sup>1</sup> while the Utilities’ response to data request DOE 1-003, included  
12 as Attachment DOE 1, provides the statewide calculation to demonstrate how the \$400,000 is  
13 allocated as well as each respective utility’s annual amount of the \$400,000 funding. This  
14 funding amount is not included in EE program budgets and therefore not included in the  
15 Performance Incentive (PI) calculations. As shown, each electric utility’s sales forecast was  
16 used to determine the portion of funding to be collected by each electric utility.

17 **Q. Does the Utilities’ Plan demonstrate that they meet RSA 374-F:3, VI-a(c), “No less than**  
18 **20 percent of the portion of the funds collected from the system benefit charge for**  
19 **energy efficiency shall be expended on low-income energy efficiency programs.”**

20 A. The Utilities make a statement in their Plan that they meet this requirement, but they do not  
21 make a specific demonstration of such in the Plan. (See Bates p. 14 of the Plan.) However,

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<sup>1</sup> See Bates page 23 of the Plan, which provides the statewide summary for program funding.

1 the Utilities have demonstrated in their response to a data request that they meet this  
2 requirement. See the attached data response DOE 1-004 included as Attachment DOE 2.

3 **Q. Please explain how the Utilities meet RSA 374-F:3, VI-a (d)(1), which lists the various**  
4 **funding sources for the energy efficiency programs.**

5 A. The Plan provides descriptions for each funding source, which include the SBC, Regional  
6 Greenhouse Gas Initiative (RGGI) funds, Forward Capacity Market (FCM), local distribution  
7 adjustment charge (LDAC), and carryover.<sup>2</sup> The statewide aggregated budgets are also  
8 described in the Plan. Attachments E3 through H3 and J3 of the Plan list the funding sources  
9 and show the calculations for each utility's budget.<sup>3</sup> See the attached data response DOE 1-  
10 005 included as Attachment DOE 3.

11 **Q. Does the Plan meet the requirements of RSA 374-F:3, VI-a(d)(5) relating to the**  
12 **Evaluation, Measurement, and Verification (EM&V) study funds?**

13 A. As shown in the Plan,<sup>4</sup> the budget for EM&V ranges annually from 2.2% - 3.8% or total of  
14 3.1% over the Plan and does not exceed the 5% cap of RSA 374-F:3, VI-a(d)(5). The  
15 proposed EM&V studies helps to ensure that the savings claimed by the utilities are accurate  
16 and reflective of actual program intervention and therefore reflect an appropriate use of  
17 ratepayer funds and provide recommendations for improving the energy efficiency programs'  
18 design and deployment. This information is contained on Bates pages 97-100 of the Plan.  
19 The Utilities also explain how the EM&V funds will be optimized "to secure funds available

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<sup>2</sup> See Bates pp. 23-27 in the Plan.

<sup>3</sup> Note that DOE was unable to find the attachment for Liberty-Gas that shows the funding and budget calculations in Attachment I, but the total budgets are presented in the Plan as well as the associated rates in Liberty Gas' testimony in Attachment K.

<sup>4</sup> See Table 7-1 on Bates p. 100 of the Plan.

1 from wholesale energy and ancillary markets.” The Plan’s EM&V efforts enable the savings  
2 from NHSaves programs to be bid into the FCM, as discussed on Bates 655, which allows  
3 them to access an additional funding stream for the programs. See the data response DOE 1-  
4 007 included as Attachment DOE 4.

5 **Q. Per the Commission’s Order commencing this docket, does the Joint Utilities’ Plan**  
6 **offer benefits consistent with RSA 374-F’s policy “to develop a more efficient industry**  
7 **structure and regulatory framework that results in a more productive economy by**  
8 **reducing costs to consumers while maintaining safe and reliable electric service with**  
9 **minimum adverse impacts on the environment. RSA 374-F:1”?**

10 A. Yes. Please refer to the Utilities’ response to data request DOE 1-001 included as Attachment  
11 DOE 5. As stated, the Joint Utilities’ Plan for the NHSaves programs is to offer benefits  
12 consistent with these provisions since these programs are available to all retail customers in  
13 NH and promote awareness of energy use and conservation. Further, the total program  
14 portfolio for all utilities combined has a benefit cost ratio of 2.27.<sup>5</sup>

15 **Q. Does the proposed Plan contain programs that are targeted to minimize distribution**  
16 **costs pursuant to RSA 374-F:4, VIII(e)?**

17 A. According to the Utilities, the Plan does not contain any “geotargeted” programs designed to  
18 address specific distribution system constraints. See data response DOE 1-010 included as  
19 Attachment DOE 6. DOE, however, believes that the active demand response programs will  
20 assist in minimizing distribution costs, in general, since these programs target the peak

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<sup>5</sup> Bates pp. 9-14 of the Plan provides an overview of these benefits.

1 demand period, which will in turn help reduce constraints and potential future costs on the  
2 distribution system.

3 **Q. Pursuant to RSA 374-F:4, VIII-a, does the Plan include “program design, and/or**  
4 **enhancements, and estimated participation that maximize energy efficiency benefits to**  
5 **public schools, including measures ...to improve indoor air quality”?**

6 A. Yes. Through the Municipal program offerings, the electric utilities have historically and will  
7 continue to offer dedicated funding for municipalities and their schools to access technical  
8 assistance, funding, and incentives to pursue energy efficiency projects. If funding within the  
9 Municipal program is fully expended, public schools are eligible for their projects to be  
10 served by the NHSaves C&I programs to ensure they continue to have access to technical  
11 assistance and energy efficiency measures, including those that result in improved indoor air  
12 quality because of the reduction of fossil fuel use, application of high efficiency air  
13 conditioning, tightening of building shell, etc. While the energy efficiency programs offered  
14 by the Gas Utilities have historically provided similar support to municipalities and public  
15 schools throughout the state, the 2024-2026 Plan proposes a dedicated Municipal program  
16 for the two Gas Utilities (Liberty-Gas and Northern). As with the electric portfolio, public  
17 schools served by the Gas Utilities will be eligible to utilize the Large and Small C&I  
18 programs should Municipal program funding be exhausted during the term. Table 3-2 on  
19 Bates p. 47 summarizes the municipal programs, including the program budgets, annual and  
20 lifetime savings, and demand reductions (in kilowatts) for the electric utilities, and the  
21 number of participants. For more details, please refer to Bates pages 38-39 and 44-47 of the  
22 Plan and data request DOE 1-011 included as Attachment DOE 7.

1 **Cost-Effectiveness**

2 **Q. Please describe the cost-effectiveness tests that the Utilities use in the 2024-2026 Plan**  
3 **filing.**

4 A. The Plan uses the Granite State Test (GST) as the primary test and the Total Resource Cost  
5 Test (TRC) as the secondary test. These tests use the latest Avoided Energy Supply Cost  
6 Study<sup>6</sup> for New England as the basis as well as Evaluation, Measurement, and Verification  
7 (EM&V) Studies, which are summarized in the Technical Resource Manual (TRM)<sup>7</sup>  
8 prepared by the Utilities with assistance from the EM&V Working Group (consisting of the  
9 utilities, DOE, a stakeholder representative, and the DOE consultant). As shown in the TRM,  
10 the savings impacts associated with free ridership are taken into account. See Attachment  
11 DOE 8, which includes the Utilities' explanation of how the Plan meets these requirements in  
12 their response to data request DOE 1-006.

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

15 A. Yes. All of the programs shown for the cumulative three years of the proposed Plan have  
16 benefit/cost ratios greater than 1.0 except for one—NHEC's municipal program which has an  
17 estimated B/C ratio for the GST of 0.66. RSA 125-O:23, III. (b) requires that up to  
18 \$2,000,000 annually from the Regional Greenhouse Gas Initiative (RGGI) funds be offered  
19 for municipal program and local government programs. As noted in the Plan filing, these  
20 municipal energy efficiency projects provide assistance to towns and schools to "reduce their

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<sup>6</sup> See Attachment R in the 2024-2026 Plan filing starting on Bates p. 677.

<sup>7</sup> See Attachment T in the 2024-2026 Plan filing starting on Bates p. 1104.

1 buildings' energy costs, often a large component of their operations and maintenance  
2 ("O&M") budgets, allowing them to redirect the savings toward other public services."<sup>8</sup> The  
3 benefits of being able to redirect public dollars toward other services or even reduce local  
4 property taxes are not captured in the benefit/cost calculation presented. As noted in RSA  
5 374-F:3, VI-a, (d)(4), the benefit/cost ratio is only one of many factors to consider when  
6 prioritizing programs. DOE recommends approval of these programs given that these  
7 programs have a benefit/cost ratio greater than one and/or provide additional benefits beyond  
8 those captured in the benefit-cost test.

9 **Q. Does the benefit/cost ratio shown for the total portfolio of programs include all of the**  
10 **utility costs including the performance incentive?**

11 A. The benefit/cost ratio is calculated and shown for the total portfolio of programs on the tables  
12 calculating the performance incentive since the performance incentive is based on the total  
13 portfolio of programs.

14 **Q. Is the benefit/cost ratio for the total portfolio of programs greater than one for all**  
15 **utilities?**

16 A. As shown by the utilities in Attachments E1-J1, page 10 of 12 and as summarized in Table 1  
17 below, the benefit/cost ratio for the total portfolio of programs for all utilities is greater than  
18 one without the inclusion of the performance incentive. As shown by the utilities in  
19 Attachments E1-J1, page 12 of 12, the benefit/cost ratio for the total portfolio of programs  
20 for all utilities is greater than one with the inclusion of the performance incentive.<sup>9</sup>

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<sup>8</sup> See Bates p. 39 in the Utilities' 2024-2026 Plan.

<sup>9</sup> See Bates pp. 155, 163, 213, 215, 252, 254, 277, 279, 309, 311, 329, and 331 in the Utilities' 2024-2026 Plan.

Please note that the costs used in each of the benefit/cost calculations with and without PI is different year dollars, so these benefit/cost ratios cannot be compared without making the year dollars similar.

Table 1. Summary of Benefit/Cost Ratio  
for Total Portfolio

Utility	2024-2026 Total Portfolio Benefit/Cost Ratio (Excluding Planned Performance Incentive)
Eversource	2.41
Liberty-Electric	2.05
NHEC	2.82
Unitil	1.61
Liberty (Gas)	1.88
Northern	1.83

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

A. The Utilities and the EM&V working group have developed and continue to update the TRM to document the savings calculations for each program and the associated measures. The TRM considers EM&V studies conducted in New Hampshire, and also uses EM&V studies conducted in other states to inform the assumptions for New Hampshire. The TRM is the foundation for New Hampshire's energy efficiency programs. The TRM includes such factors as peak coincidence factors, realization rates, free ridership,<sup>10</sup> and other assumptions to consider when determining the net savings. The net savings calculation takes these factors into account. The TRM (and the underlying assumptions from EM&V studies) are a fundamental part of the energy efficiency programs, because it not only provides consistent calculation methodologies across the utilities' programs and individual projects and

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<sup>10</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 measures, but through the use of the EM&V studies, the actual savings are verified and then  
2 incorporated into future program plans.

3 **Q. Do you have any additional comments regarding the cost-effectiveness tests?**

4 A. Yes, as we stated above, DOE plans to file a legal brief per the PUC Order of September 7,  
5 2023, which will provide more detail regarding the cost-effectiveness tests and associated  
6 assumptions and methodologies.

7 **Active Demand Response Programs**

8 **Q. Have you reviewed the proposed Active Demand Response (ADR) program?**

9 A. Yes. The Department had several discussions with the Utilities prior to the submission of the  
10 Plan. Those discussions covered the overall program, the Performance Incentives (PI), going  
11 from the pilot to full program, and the methodologies used to calculate/determine the demand  
12 reduction performance and estimated savings. We were particularly interested in the PI  
13 calculation and how the financial impact (savings) are determined. After the Plan was  
14 submitted, the Department carefully evaluated the ADR section (Chapter 5) and Attachment  
15 Q in the Plan. The PI for ADR programs will be discussed in other portions of this  
16 testimony.

17 **Q. Does the Department support the ADR program transitioning from a pilot to the full  
18 program?**

19 A. Yes. The Department is generally supportive of the transition to a full program. We came to  
20 this conclusion from our discussions with the Utilities review of the Plan, responses to our  
21 data requests (DRs), and review of some of the ADR Energy and Measurement Verification  
22 (EM&V) studies referenced in Attachment Q. Several ADR EM&V studies have been



1 completed for the New England area, with one specifically including NH that was completed  
2 in 2019, and one follow-up study that includes NH that will evaluate 2023 performance. This  
3 study is expected to be completed in early 2024.

4 **Q. Given the ADR EM&V follow-up study is not due to be completed until after the new**  
5 **Plan is in effect, does the Department believe the full program should be delayed until**  
6 **the results are provided?**

7 A. No, as noted in the previous response there is considerable supporting material in the  
8 referenced ADR EM&V studies to support going forward with a full ADR program. Further,  
9 Department staff have experience in other jurisdictions regarding the effectiveness of ADR  
10 programs that provides additional comfort with this recommendation.

11 **Q. How did you determine the estimated demand reduction savings methodology is**  
12 **reasonable?**

13 A. DOE spent time reviewing the Benefit-Cost (BC) models for ADR, which are based on the  
14 Granite State Test (GST) and the most recent versions of the Avoided Energy Supply Cost  
15 (AESC) Report, Appendices, and Supplements. Both the GST and AESC are well-vetted,  
16 comprehensive tools to estimate savings. The AESC utilizes models based on ISO-NE load  
17 forecasts and other relevant load and cost data. The AESC and GST methodologies account  
18 for the compound effects of demand reduction on transmission, distribution, capacity, and  
19 energy supply costs. DOE believes the overall assumptions and methodologies used for  
20 determining/estimating ADR savings are reasonable.

21 **Q. Do you have any general concerns or recommendations regarding ADR programs?**

1 A. The Department is keenly interested in the results of the ADR EM&V follow-up study  
2 expected to be completed in early 2024. As previously stated, this report will evaluate the  
3 2023 ADR pilot study for NH. Presently, we do not have concerns. However, depending on  
4 the results of the study, we may develop recommendations for future ADR programs.

5  
6 **Performance Incentive (PI)**

7 **Q. What changes were made to the performance incentive calculation for energy efficiency**  
8 **programs prior to the last plan update approved by the Commission?**

9 A. In Order No. 26,095 in Docket No. 17-136, the Commission approved a Settlement  
10 Agreement (Settlement) for the 2018-2020 Plan which provided for the creation of a working  
11 group to review potential modifications to the calculation of performance incentive for year  
12 2020. The Performance Incentive Working Group (PIWG) was established in January 2018  
13 to review potential PI calculation methodologies that could further promote the achievement  
14 of energy efficiency goals established under the New Hampshire Energy Efficiency Resource  
15 Standard (EERS). The PIWG met in monthly sessions during January-December 2018 and  
16 January-July 2019, resulting in the development of a new PI framework which disaggregates  
17 the calculation of PI into five performance components: 1) lifetime kWh savings, 2) annual  
18 kWh savings, 3) summer peak demand savings, 4) winter peak demand savings, and 5)  
19 value/benefits. A similar PI framework was developed for gas consisting of three  
20 performance components: lifetime MMBtu savings, annual MMBtu savings, and Value. A  
21 report summarizing the conclusions and recommendations of the working group, *NH Energy*  
22 *Efficiency Calculation of Performance Incentive Beginning in 2020, dated July 31, 2019*

1 (PIWG Report) was prepared and issued. The Commission approved the new PI framework  
2 in Order No. 26,323, dated December 31, 2019 in Docket No. 17-136. The new PI  
3 framework became fully implemented during the triennium plan for 2021-2023.

4 **Q. Please describe the mission of the PIWG and how it arrived at establishing the existing**  
5 **minimum PI thresholds.**

6 A. As stated above, the PIWG was established by the Commission in Order No. 26,095 in  
7 Docket No. 17-136. Our understanding of the PIWG's assignment was to undertake a  
8 comprehensive review of potential PI methodologies that could further promote the  
9 achievement of New Hampshire's EERS goals, with the objective of implementing any  
10 changes to the performance incentive calculation beginning in the 2020 program year.  
11 During the course of the PIWG's review, it became clear that developing a more  
12 comprehensive and transparent PI methodology to better encourage greater savings within  
13 key metric areas was the appropriate path to follow. The end product was the existing PI  
14 methodology which seeks to encourage greater performance in the five key metric areas:  
15 Lifetime kWh savings, Annual kWh savings, Summer Peak Demand savings, Winter Peak  
16 Demand savings, and Net Benefits. Discussions leading up to consensus on the new  
17 framework were extensive, and at times, contentious. A significant amount of time and work  
18 went into developing the finalized methodology. One of the more controversial issues  
19 involved establishing the minimum threshold amounts for all five of the performance  
20 components. During the final phase of the PIWG's discussions in 2019, PUC Staff (now  
21 DOE) circulated a proposal, based on recommendations from several consultants advising the  
22 working group, to increase the minimum PI savings threshold from 65 percent to 75 percent

1 for all PI components included in the new PI matrix. Ultimately, in a give-and-take fashion  
2 similar to that of settlement negotiations, the Utilities, stakeholders, and Staff reached an  
3 agreement in principle to a modified structure for the new PI matrix whereby the 75 percent  
4 savings threshold would apply to the Lifetime kWh Savings, Annual kWh Savings, and Net  
5 Benefit/Value PI components, and the 65 percent savings threshold would apply to the  
6 Summer Peak Demand and Winter Peak Demand components. Likewise for gas, the  
7 thresholds for lifetime MMBtu savings, annual MMBtu savings, and Value were all  
8 increased to 75 percent.

9 **Q. Have the Utilities proposed any modifications to the PI framework approved in DE 17-**  
10 **136 as part of the proposed 2024-2026 Plan?**

11 A. Yes. The utilities will continue to utilize the existing PI framework and related requirements  
12 but with three proposed changes. First, the Utilities have proposed to integrate the benefits  
13 achieved from the ADR program into the Net Benefits component of the PI matrix to include  
14 those benefits as part of the PI calculation going forward since the ADR program is no longer  
15 proposed as a pilot program. The Utilities estimate that this integration of the benefits  
16 achieved from the ADR program will contribute approximately 3.7 percent to the planned net  
17 benefits which in turn becomes part of the 35 percent weighting for this component. This  
18 equates to approximately 2.7 percent of the overall planned portfolio of PI achievement.<sup>11</sup>  
19 The percentage contribution of the ADR program to planned net benefits was derived from

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<sup>11</sup> See Attachment DOE 9, which is Response *DOE 1-019*.

1 data contained in the 2021 Avoided Energy Supply Cost (AESC) study related to avoided  
2 capacity costs.<sup>12</sup>

3 Second, the Utilities propose to continue to file their annual reports on June 1 with the  
4 Commission, however, the PI calculations will be illustrative based on progress against  
5 annual benchmarks. The Utilities will book PI each year based on the estimated amounts but  
6 with a true-up to actual performance being performed at the end of the three-year term of the  
7 Plan.<sup>13</sup>

8 Third, in Docket DE 20-092, the DOE expressed concerns that a separate performance  
9 incentive associated with Eversource's SmartSTART program was no longer necessary since  
10 Eversource was adequately incentivized through the PI provided by the energy efficiency  
11 programs. The SmartSTART program was initiated in the early 2000's as an on-bill  
12 financing program for municipalities that provides municipal customers with the opportunity  
13 to install energy saving measures with no upfront costs and the ability to pay for the  
14 measures over time on their electric bill. SmartSTART provides a separate annual PI  
15 payment separate from and in addition to the overall PI calculation, based on 6 percent of the  
16 amount of total loan repayments received. Given that the program is now mature and has  
17 been successful within its target market, DOE has recommended that this separate PI  
18 mechanism is no longer needed and should be eliminated in the next triennium plan. The  
19 Commission agreed with and supported the DOE's recommendation in Order No. 26,621,  
20 Docket DE 20-092, at 27. At a technical session held on July 27, 2023, DOE raised this issue

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<sup>12</sup> Id.

<sup>13</sup> See Attachment DOE 10, which is Response *DOE 1-012*.

1 with Eversource, and Eversource agreed to terminate the performance incentive associated  
2 with the SmartSTART program as part of this 2024-2026 Plan.<sup>14</sup>

3 **Q. What is the Department's recommendation involving the utilities PI modifications?**

4 A. The Department supports the modifications as proposed by the utilities and does not find the  
5 proposals to be a major change to the way in which PI is calculated. Integrating the benefits  
6 provided by the ADR program into the net benefits metric seems reasonable and appropriate  
7 given that ADR is now moving from a pilot program into a full-fledged program. In addition,  
8 the ADR benefit calculations are based on the 2021 AESC like the other benefit calculations.  
9 Likewise, the utilization of PI estimates in the Utilities' annual reporting does not represent a  
10 significant alteration of the way PI is calculated given that the existing PI framework is still  
11 to be followed, which continues to impose the 125 percent cap on PI earned and includes a  
12 true-up mechanism to be applied at the end of the Plan period to insure proper verification  
13 and reconciliation of those amounts. In terms of the separate PI for the SmartSTART  
14 program, as described above, Eversource and DOE reached agreement to permanently  
15 discontinue that incentive starting with this 2024-2026 Plan, and the Commission has already  
16 approved such change.

17  
18 **Proposed Planning Process for Next Three-Year Energy Efficiency Plan**

19 **Q. What does DOE propose for the planning process for the next three-year plan?**

20 A. DOE proposes a process similar to that used for the 2021-2023 three-year plan in which DOE  
21 hires a consultant to facilitate a stakeholder planning process and also to provide advice and

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<sup>14</sup> See Attachment DOE 11, which is Response which is DOE 1-021.

1 suggestions for improvements and other options regarding energy efficiency programs for  
2 New Hampshire. At the first planning meeting, stakeholders could determine the various  
3 topics and issues to be discussed and explored during the planning process.

4 **Q. What are the estimated costs for the consultant?**

5 A. Based on the cost of the consultant for the planning process for the 2021-2023 plan,<sup>15</sup> DOE  
6 estimates that a consultant would cost about \$375,000 for about a two-year time period.

7  
8 **Conclusion**

9 **Q. What do you recommend regarding the Utilities' 2024-2026 Plan?**

10 A. DOE recommends approval of the Plan as discussed above. Specifically, DOE recommends  
11 approval as follows:

- 12 • The Plan meets statutory and regulatory requirements.
- 13 • The Plan appropriately used the Granite State Test as the primary test and the Total  
14 Resource Cost Test as the secondary test for evaluating cost-effectiveness.
- 15 • The benefit/cost ratio for the proposed portfolio, including both residential and  
16 commercial sectors, for the 2024-2026 Plan exceed 1.0 for all the electric and gas  
17 utilities.
- 18 • The benefit/cost ratio for all of the programs for the 2024-2026 Plan exceed 1.0,  
19 except for one – NHEC's municipal program. Per RSA 125-O:23, III. (b), RGGI  
20 dollars fund the programs for municipalities. Also, the municipalities as well as the

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<sup>15</sup> The contract for the planning consultant for the 2021-2023 plan was not to exceed \$250,000 for about a 16-month time period, but a longer planning process would be more beneficial.

1 residences and businesses in the municipalities will benefit from the municipal  
2 programs beyond what is included in the benefits quantified. Therefore, all of the  
3 programs proposed should be approved because they either show a B/C ratio of  
4 greater than 1.0 or they provide benefits beyond that represented in the B/C ratio.

- 5 • DOE supports approval of the active demand response programs as full programs.
- 6 • DOE supports approval of the performance incentive as proposed including the  
7 incorporation of the benefits from the active demand response program in the net  
8 benefits portion of the formula and also the elimination of a performance incentive  
9 for Eversource's Smart Start Program.

- 10 • DOE proposes the initiation of a stakeholder process and the hiring of a consultant to  
11 assist with the planning process for the next three-year plan.

12 In summary, DOE supports the approval of the Utilities' 2024-2026 Plan as described above.

13 **Q. Do you have anything else that you would like to mention regarding this testimony?**

14 A. Yes. On Monday, September 11, 2023, the day before intervenor testimony was due, the  
15 Utilities submitted a revised Plan. DOE did not review that filing prior to writing and  
16 submitting this testimony. Therefore, this testimony does not take into consideration that  
17 September 11, 2023 filing.

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

19 A. Yes.

20