

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DE 23-068**

**ELECTRIC AND GAS UTILITIES**

**2024 – 2026 Triennial Energy Efficiency Plan**

**Procedural Order Re: Second Set Record Requests and Requests for Specific Answers**

The Commission requests that Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty; New Hampshire Electric Cooperative, Inc.; Public Service Company of New Hampshire d/b/a Eversource Energy (“Eversource”); Unitil Energy Systems, Inc. (“Unitil”); Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty; and Northern Utilities, Inc. (together, the “joint utilities”) respond to the following record requests and requests for specific answers. These requests are designed to aid the Commission’s expedited review of the 2024–2026 Triennial Energy Efficiency Plan (“Plan”) to ensure programming and incentive levels have been optimized to deliver ratepayer savings. We issue these requests in the spirit of clarifying many aspects of the Plan prior to hearing, understanding the supporting data in this proceeding, and to meet the Commission’s statutory responsibility pursuant to RSA 374-F:3, VI-a(d)(5) to issue an order no later than November 30, 2023.

The joint utilities should identify the source of the data and provide backup workpapers and live Excel spreadsheets, as applicable. The Commission requests responses be filed on a rolling basis as they are available, with all responses to filed by September 15, 2023.

**Subset 1 – Inquiries Related to Benefit-Cost (“B/C”) Testing**

**Request 2-001-01**

Please provide a break-up of the program costs and the performance incentive related costs borne by ratepayers into participants’ share and non-participants’ share. Please indicate where in the B/C models the program costs and performance incentives are broken up into participants and non-participants. If this is not captured in the B/C

models, please estimate the shares for participants and non-participants and provide the supporting analytics and assumptions behind the estimates.

Request 2-001-02

Was B/C testing conducted on the Active Demand Reduction (“ADR”) pilots previously offered by Eversource and Unitil? If so, please provide such testing results. If not, Eversource and Unitil are requested to respond with a timeframe within which they would be able to provide such testing results within this docket.

Request 2-001-03

Why is the discount rate used in Unitil’s ADR-specific B/C test different from that which is used for the broader B/C model?

Request 2-001-04

Please explain in detail the reasoning for the differences between the ADR-B/C ratios for Liberty (0.87), Eversource (1.14), and Unitil (2.12) for the residential class.

Request 2-001-05

Refer to the Plan, Bates page 91. The joint utilities are requested to provide sensitivity analyses by providing an updated B/C model for each of the following scenarios:

1. Please apply the most up-to-date Prime Rate and latest inflation rate in the LookUps tab of the B/C model and re-run the analysis. Please save this file as UtilityName\_B/C Model\_PR\_IR.
2. Apply the Weighted Average Cost of Capital (WACC) instead of the real discount rate, removing any value or formula pertaining to the nominal discount rate in the look-ups tab. Please save this file as UtilityName\_B/C Model\_WACC.
3. Refer to Pages 8–11, (section 8) related to Discount Rate Policy of [White House Circular A-94 of the Office of Management and Budget](#)<sup>1</sup>. Re-run all B/C models using the 7 percent real (social) discount rate referred to in Section 8. c(3). Please save this file as UtilityName\_B/C Model\_OMB\_discount.

Request 2-001-06

Please explain why ADR is not proposed for the natural gas utilities’ programming? Is there a plan to develop a natural gas ADR program in the future?

Request 2-001-07

The Commission notes the following:

With respect to the Unitil Electric B/C Model:

- All data is hard-coded in tab 1.Att H1 Cost Eff.
- All data is hard-coded in tab 2.Att H1 Ben.
- Tab 3. Att H1 PI has broken references in 2025 and 2026 calculations.

---

<sup>1</sup> Refer specifically to the portion related to investments that include internal cost savings and external social benefits.

With Respect to the Northern Utilities, Inc. Gas B/C Model:

- All data is hard-coded in tab 1.Att H1 Cost Eff.
- All data is hard-coded in tab 2.Att H1 Ben.
- There is no “Primary Data” tab to compare benefits against costs.

With respect to the Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Gas B/C Model:

- Tab 2. Attach I1 Ben has broken references in its subtotals for 2024-2026, leading to broken references in 3. Att I1 PI.

1. As applicable, please explain why the aforementioned data are hard-coded? Please provide all the source data to ensure that the aforementioned data can be supported analytically.
2. The aforementioned utilities are requested to ensure that any future B/C model submissions (including today’s requests) address the issues noted above.

Request 2-001-08

The joint utilities are requested to provide a consolidated comparison sheet across utilities using the following format:

Measure ID	Measure Name	Liberty Electric Life	NHEC Life	Eversource Life	Unitil Life

Request 2-001-09

Please explain why the sums of incentives by measure type for each subprogram in Column J (“Incentive (Total)”) of the “Calculations Yr 1” tab don’t always match the customer incentives provided at the subprogram-level in Column F of the “Costs” tab and Column I of the “Primary Data” tab of the model. Additionally, please provide the customer incentive amounts at the measure level that reconcile with the subprogram-level incentive totals.

Request 2-001-10

Please provide the following analysis in live MS Excel format with supporting schedules for each utility and explain the results:

1. Updated B/C models with a new, separate tab using input from the Cost-Effectiveness tab, providing B/C ratios at the measure and sub-program level. Name this tab: Measr\_SP\_CostEff.
2. Next, consolidate all B/C ratios across utilities to create a linked worksheet with the following tables, sent separately. Name this table: Question#\_ConsolidatedBC.

Program Year	Measures	Eversource	Liberty Electric	Unitil	NHEC	Liberty Gas	Northern Utilities Gas

Program Year	Sub-Program	Eversource	Liberty Electric	Unitil	NHEC	Liberty Gas	Northern Utilities Gas

3. In a separate tab, provide a ranking of measures, programs and sub-programs according to the spending on incentives, providing the dollar amounts for measure-level spending. Name this tab: Incentive Rank.
4. In another new tab, please copy the Incentive Rank sheet, and add two additional columns to: (i) include the budgeted funding allocations for each program at the measure level; and, (ii) include B/C ratio for each measure from (a) above.

Request 2-001-11

Refer to Bates Page 64 of the Plan. It does not appear that the B/C models provided include data for conversion to heat pumps.

1. How will the B/C for this initiative be determined for the proposed Plan?
2. How are incentives determined for each heat pump type, e.g., heating and cooling, water heater etc.?

Request 2-001-12

Please confirm whether the Total Avoided Energy Benefits (Calculations Yr 1 Column BH) includes all the avoided energy supply and capacity costs to supply all ratepayers' load.

**Subset 2 – Follow-up Questions on the joint utilities’ August 25, 2023 Responses to Commission Information Inquiries**

Request 2-002-1

Refer to response 1-001-2. The joint utilities state that “The \$675 million referenced reflects *participating customers*’ estimated avoided energy expenses...” Further, refer to Bates Page 9 of the Executive Summary from the Plan where it states: “The 2024-2026 NHSaves Programs will result in customer energy cost savings of more than \$675 million over the lifetime of the measures installed under the program, accruing to *both participating and non-participating customers* from all sectors and parts of the state.”

1. Please explain the disparity.
2. Please provide the breakup of the \$675 million referred above for each utility for each program year. Provide this information in one worksheet that combines all

- the information, including totals. Also, provide the supporting analytics (with Excel cell references) based on the B/C models submitted with the Plan.
3. Please provide the dollar amount of other total benefits (other than \$675 million referenced above) that are captured in the B/C models. Please confirm whether all of such benefits are non-energy benefits or not. Also, provide the supporting analytics (with Excel cell references) based on the B/C models submitted with the Plan.
  4. Do the participating customers achieve a reduction in their distribution portion of the bill due to reduced usage? Does the \$675 million avoided cost include the distribution charge savings? Please provide calculations of any such participants' benefits for the 2024-2026 NHSaves Programs.
  5. Under decoupling, how does the company collect the reduction of any distribution revenue achieved by participating customers? What is the impact on the non-participating customers?

#### Request 2-002-02

Refer to response 1-002-1., The joint utilities state that “there is no baseline data to directly compare the programs over time ... the 2024-2026 Plan were developed in compliance with HB 549 and SB 113, which effectively set a new baseline ... energy efficiency programs in New Hampshire, and elsewhere throughout the country, evolve to overcome new and emerging barriers to the adoption of energy efficiency, target different types of equipment, and reach different participants, and therefore the same funding can provide a different “baseline”, as savings potential can vary.” The joint utilities are requested to comment on the following:

1. Attachment PUC 1-002-1 shows an increasing trend in program funding, and an overall decreasing trend in cumulative MWh/MMBTu savings. It also shows that the Program Cost per Lifetime kWh Savings is expected to increase by 288 percent over 8 years, between 2018 and 2026. Please explain the reasoning behind this cost increase trend, given that this cost calculation is “normalized.”
2. At page 2 of response 1-002-1, if the joint utilities consider baselines, including B/C ratios to be non-comparable over time, what clear methodology is recommended so that the Commission can understand trends or to identify how program/sub-program funding, benefits, and costs are evolving?
3. If one of the goals of energy efficiency programming is to overcome market barriers, can parties demonstrate with evidence that new levels of market barriers continue to create additional hurdles before existing efforts to eliminate market barriers are addressed, thereby becoming a moving target?
  - a. For the baseline period of 2018-2022, please provide supporting evidence in favor of the statement “energy efficiency programs in New Hampshire ... target different types of equipment.”
  - b. Please explain why energy-efficient lighting remains “an important element” of the C&I portfolio when the market has transformed.

#### Request 2-002-03

Refer to response 1-004-2, at page 2 of 3. The joint utilities state that “[T]he program aims to reach both property owners and tenants.” Please provide a table with showing the split between recipients that are property owners and those that are tenants by year, from 2018 to 2022, inclusive, for both number of recipients and dollars spent.

Request 2-002-04

Refer to response 1-005-4 along with similar linked responses pertaining to energy efficiency incentives, with emphasis on the statement “Many variables factor into assigning an incentive level for a measure, including the incremental cost between a standard efficiency and high efficiency measure and the estimate volume that offering an incentive will achieve among customers.” The joint utilities are requested to provide evidence, in a live MS Excel sheet using actuals from the Energy Star Products Program between 2018 and 2022, for each of the following:

1. The difference between standard and high-efficiency measures;
2. Measure-level incentives; and
3. Volume the incentive achieved.

**Subset 3 – Further Questions on the 2024–2026 Plan**

Request 2-003-01

Reference Bates page 64 of the Plan. The joint utilities propose to evaluate the cost-effectiveness and customer benefits of the Energy Star Retail Products Program (ESRPP), and states that “the NH Utilities will research other state’s ESRPP programs and evaluations of those offerings to help determine best practices regarding a possible deployment of a New Hampshire ESRPP.”

Please provide a status report outlining research performed and any data or evaluations collected to date.

Request 2-003-02

Refer to the footnote on Bates page 66 of the Plan stating that the Energy Star Home Performance program is expected to sunset by 2025. Please provide a detailed explanation on how that aligns with the spending trend as well as the planned number of participants until 2026.

Request 2-003-03

Refer to Section 4.3.2 of the Plan.

1. What percentage of total savings (in \$ and kWh) is from the lighting measures in the current programs? Please provide the data in the format of Table 4-3 at Bates page 65 of the Plan.
2. What were the percentages in the previous 2021-2023 Triennial Plan and what were the actuals? Please provide the data in the format available in Table 4-3 at Bates page 65 of the Plan.

Request 2-003-04

Please provide the Peak Demand Reduction Savings data as compared to the previous triennial plan. Please explain the reasoning for the change and its implications.

Request 2-003-05

Refer to Section 6.5 of the Plan. The Commission notes that the target 5.5% performance incentive applied to energy efficiency costs was last reviewed in 2019. Given recent statutory and regulatory changes since then, including the implementation of revenue decoupling, do the joint utilities consider that there is opportunity/need to revisit this framework? If so, please provide rationale for the support, and if not, please explain why not.

Request 2-003-06

Refer to Bates page 93, Table 6.1 and Table 6.2 of the Plan. For all utilities individually, using the previous triennial plan data at the portfolio level, please explain how the performance incentive (PI) was calculated based on the weights assigned in the Tables. Provide the responses in live Excel format.

1. What were the actual percentages that resulted from each of the components?
2. What would the overall PI amount be, at the individual utility level, if the Annual kWh Savings component receives 35% incentive weightage while the Lifetime kWh Savings receives 10%?
3. What would the PI amount be, at the individual utility level, if in addition to (2.) above, the minimum threshold for Summer and Winter Peak Demand Savings is increased from 65% to 75%?
4. What would the PI amount be, at the individual utility level, if all minimum thresholds increased to 100% and 110% respectively?

Request 2-003-07

The Avoided Distribution Costs used in the B/C and ADR models for all utilities appear to be dated (2017) and the Water costs appear to be based on 2016 dollars.

1. Please explain the rationale behind these differences.
2. Is updated data available for each of these?

Request 2-003-08

For each utility, please provide the most recently available annual number of customers by class allocated as follows:

1. All residential customers
2. All qualifying low-income customers
3. All commercial and industrial customers
4. All municipal customers

Request 2-003-09

For each utility, please provide the most recently available annual energy sales for the following groups of ratepayers:

1. All residential customers
2. All qualifying low-income customers
3. All commercial and industrial customers
4. All municipal customers

Request 2-003-10

Please provide the following breakdown of energy efficiency programming spending from 2021 to 2026 in 2024 dollars:

	2021	2022	2023	2024	2025	2026
Spending Directly Benefitting Rate Payers						
Spending on Planning and Administration, Implementation, Education and Marketing, EM&V						
Spending on Performance Incentives						
Other <i>(please list categories, e.g., roll-overs)</i>						
<b>Total Budget</b>						

Request 2-003-11

Please provide the amount of private funding assumed to be used in the 2024-2026 Triennial Plan and the source of the funds.

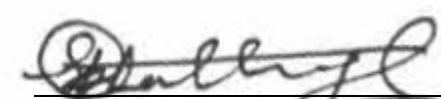
Request 2-003-12

Please summarize the total dollars allocated for 2024, 2025, and 2026 by end use (e.g., lighting, weatherization, etc.)

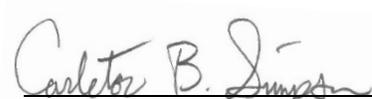
So ordered, this first day of September 2023.



Daniel C. Goldner  
Chairman



Pradip K. Chattopadhyay  
Commissioner



Carleton B. Simpson  
Commissioner

## Service List - Docket Related

Docket#: 23-068

Printed: 9/1/2023

Email Addresses

---

ClerksOffice@puc.nh.gov  
Faisal.DeenArif@energy.nh.gov  
Scott.T.Balise@energy.nh.gov  
keith.black@cpowerenergymanagement.com  
rburke@nhla.org  
john.butler@eversource.com  
campbellm@unitil.com  
carroll@unitil.com  
nancy.chafetz@cpowerenergymanagement.com  
jessica.chiavara@eversource.com  
clemsenrobertsa@nhec.com  
rclouthier@snhs.org  
Michael.J.Crouse@oca.nh.gov  
Tyler.Culbertson@libertyutilities.com  
Energy-Litigation@energy.nh.gov  
paul.b.dexter@energy.nh.gov  
downesm@unitil.com  
kimberly.dragoo@libertyutilities.com  
kdrought@nhla.org  
jay.e.dudley@energy.nh.gov  
Stephen.R.Eckberg@energy.nh.gov  
steven.elliott@eversource.com  
maromilee.emerick@eversource.com  
sam@cleanenergynh.org  
thomas.c.frantz@energy.nh.gov  
sandra.gagnon@eversource.com  
sgeiger@orr-reno.com  
glenshawp@nhec.com  
loreley@cleanenergynh.org  
dgoldberg@synapse-energy.com  
gonzalezs@nhec.com  
meredith.hatfield@tnc.org  
jenningsm@nhec.com  
maureen.karpf@libertyutilities.com  
James.King@libertyutilities.com  
nkrakoff@clf.org  
donald.m.kreis@oca.nh.gov

marc.lemenager@eversource.com  
heidi.w.lemay@energy.nh.gov  
Molly.M.Lynch@energy.nh.gov  
mainc@unitil.com  
emalone@synapse-energy.com  
nelson.medeiros@eversource.com  
frank.melanson@eversource.com  
peter.miezejeski@eversource.com  
morans@unitil.com  
munozc@nhec.com  
nelsonj@nhec.com  
nhregulatory@eversource.com  
elizabeth.r.nixon@energy.nh.gov  
amanda.o.noonan@energy.nh.gov  
ocalitigation@oca.nh.gov  
katherine.peters@eversource.com  
tina.poirier@libertyutilities.com  
kschultz@synapse-energy.com  
michael.sheehan@libertyutilities.com  
karen.sinville@libertyutilities.com  
chris@cleanenergynh.org  
dsosland@acadiacenter.org  
eric.stanley@libertyutilities.com  
taylork@nhec.com  
mark.p.toscano@energy.nh.gov  
mark.toussaint@eversource.com  
stower@nhla.org  
jacqueline.m.trottier@energy.nh.gov  
jvanrossum@clf.org  
kiersten.williams@eversource.com  
woodsca@nhec.com  
twoolf@synapse-energy.com  
Adam.Yusuf@Libertyutilities.com