New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-1 **Page 1 of 2**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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.

Response:

Program costs and performance incentives are funded through the SBC by all ratepayers: participants and non-participants alike. Electric program budgets are also funded in part by revenues from the Forward Capacity Market and Regional Greenhouse Gas Initiative auctions. The percentage of costs borne by non-participants can only be determined by knowing how many New Hampshire customers are non-participants and the cumulative energy usage of those non-participants compared to total kWh usage statewide for all customers, since the SBC rate is a flat cents per kWh rate. The Utilities do not currently know what percent of the overall customer base participates in the program in any given year, due to the existence of midstream and instant incentives for which the participating account number is not collected. Therefore, it is not possible to determine precisely what percent of the program costs are borne by participants compared with non-participants and no such calculation is performed in the BC models. However, provided below are calculations based on 2022 participation exclusive of midstream participation:

Utility	Sector	Participating Accounts	Total Accounts (as reported in 2022 annual returns)	%
Eversource	Residential	8,944	454,103	2.0
Eversource	C&I	1,524	80,767	1.9
Liberty Electric	Residential	10,829	37,414	28.9
Liberty Electric	C&I	238	6,602	3.6

NHEC	Residential	2,256	64,653	3.5
NHEC	C&I	64	4,920	1.3
Unitil Electric	Residential	29,478	67,505	43.7
Unitil Electric	C&I	243	11,126	2.2
Liberty Gas	Residential	26,702	90,544	29.5
Liberty Gas	C&I	1,503	12,923	11.6
Unitil Gas	Residential	12,031	29,258	41.1
Unitil Gas	C&I	49	7,186	0.7

Notes:
These values will not reconcile with the Number of Customer Served that are filed for each utility in their 2022 annual reports, which include estimates for customers served by midstream programs.
Unitil and Liberty participation rates include customers served through the behavioral Home Energy Reports program, which Eversource and NHEC do not currently offer. It is also important to note that non-energy saving programs, such as education and training, serve customers but the Utilities do not track or report participation in those offerings.

Participants also contribute to the costs of implemented measures through their shares of the measure costs. These additional costs that apply only to participants are reflected in the BC model in multiple places, including the Primary Data tab and the Cost Effectiveness tab as "Customer Costs" or "Participant Costs".

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-2

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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.

Response:

Yes, both electric utilities captured the savings from their ADR pilot programs and populated B/C models for 2020 through 2022 showing the results of pilot offerings, including benefit-cost ratios. Please refer to the tables below for the results.

2020 Programs - Actual Results					
	Benefit/ Cost Ratio	Benefit ($000)	Utility Costs ($000)	Summer kW Savings	Customers Served/Qty
Unitil					
Residential DR *(Wi-Fi Control & Storage)*	0.12	$7.3	$60.9	35.6	111
C&I DR *(Interruptible Load)*	3.73	$513.5	$137.6	2,502.5	13
Total	**2.62**	**$520.8**	**$198.5**	**2,538.1**	**124**

Eversource					
Residential DR *(Wi-Fi Control & Storage)*	2.11	$226.4	$107.5	1,086.5	1,485
C&I DR *(Interruptible Load)*	3.58	$2,234.3	$624.1	10,889.1	43
Total	**3.36**	**$2,460.6**	**$731.7**	**11,975.6**	**1,528**
2021 Programs - Actual Results					
	Benefit/ Cost Ratio	Benefit ($000)	Utility Costs ($000)	Summer kW Savings	Customers Served/Qty
Unitil					
Residential DR *(Wi-Fi Control & Storage)*	1.56	$105.7	$67.7	597	532
C&I DR *(Interruptible Load)*	3.8	$642.7	$169.0	3,629	17
Total	**3.16**	**$748.4**	**$236.7**	**4,226**	**549**
Eversource					
Residential DR *(Wi-Fi Control & Storage)*	1.78	$186.8	$104.7	777.9	1,422
C&I DR *(Interruptible Load)*	4.19	$1,646.9	$393.0	7,582.0	37
Total	**3.68**	**$1,833.7**	**$497.7**	**8,359.9**	**1,459**
2022 Programs - Actual Results					
	Benefit/ Cost Ratio	Benefit ($000)	Utility Costs ($000)	Summer kW Savings	Customers Served/Qty

Unitil					
Residential DR *(Wi-Fi Control & Storage)*	1.86	$105.1	$56.6	580	504
C&I DR *(Interruptible Load)*	4.83	$506.4	$104.9	2,662	11
Total	**3.79**	**$611.6**	**$161.5**	**3,242**	**515**
Eversource					
Residential DR *(Wi-Fi Control & Storage)*	1.45	$124.6	$86.2	659.2	1,039
C&I DR *(Interruptible Load)*	4.24	$1,268.2	$299.4	6,995.9	35
Total	**3.61**	**$1,392.8**	**$385.6**	**7,655.0**	**1,074**

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-3 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:
Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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?

Response:

Unitil inadvertently submitted an outdated version of its ADR model, which contained an older calculation of the discount rate. Please see Attachment 2-001-03 for a corrected version. This model, as well as a corrected version of the EE model reflecting the change in benefits resulting from the use of a higher discount rate, was filed in DE 23-068 on September 11, 2023.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-4 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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.

Response:

Liberty has not yet developed or deployed the Wi-Fi Thermostat ADR offering, so it is presumed that the program will become cost-effective as it is deployed and scaled consistent with Eversource and Unitil's experience. The planned BC reaches 2.08 in 2026. The ADR B/C ratio provided for Liberty is specific to program year 2024 only. In 2024, Liberty will be incurring one-time vendor setup costs that depress the B/C ratio and are costs that Eversource and Unitil already incurred in prior years. Also, consistent with a new program offering, lower customer participation volume is forecasted in 2024 since it will be the first year of the program rollout which requires subscribing the program entirely through the recruitment of new enrollees, which cost approximately twice the amount of keeping previously enrolled customers engaged in subsequent years. It should be noted that Liberty's planned ADR B/C ratio for the cumulative 2024-26 period is 1.50, and therefore meets the legal threshold for cost-effectiveness using the Granite State Test.

Unitil first deployed the residential Wi-Fi Thermostat ADR offering in 2020 and has increased enrollment in the offering since that time, improving the benefit-cost ratio each year since. It expects the BC ratio to remain above 2.0 for the entire plan.

Eversource offers the Wi-Fi Thermostat ADR offering, but also offers a residential battery storage ADR offering, which realizes a lower BC ratio and thus provides some downward pressure on the overall BC ratio for Eversource's Residential ADR program when compared to those of other utilities.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-5 **Page 1 of 3**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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/CModel_WACC.
3. Refer to Pages 8-11, (section 8) related to Discount Rate Policy of White House <https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/circulars/A94/a094.pdf> Circular A-94 of the Office of Management and Budget <https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/circulars/A94/a094.pdf>[1]. 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/CModel_OMB_discount.

[1] Refer specifically to the portion related to investments that include internal cost savings and external social benefits.

Response:

1. The June 30 filing incorporated the most up to date Prime Rate and inflation rate available, consistent with past practice. The Prime Rate reflects that in effect as of June 1, 2023, and the inflation rate was based on Q1 2022 to Q1 2023. The Prime and inflation rate values must be fixed to establish the benefits targets that the utilities will be measured against. The Plan was designed according to this rate.

2. In order to change the "real" discount rate, variables related to both inflation and the nominal discount rate must be input into the B/C model. Since the question directs the Utilities to apply the WACC instead of the real discount rate but remains silent on which

WACC to use or how to treat inflation, which is an integral part of the existing calculation and framework, the Utilities are unable to provide the requested analysis. In particular, "removing any value or formula pertaining to the nominal discount rate," as directed in the question, would cause the benefit-cost model to function incorrectly, as other cells in the workbook reference the nominal discount rate ("NDR"). The NDR is used to convert the out-year program and customer costs to first-year dollars to be consistent with the present year being referenced in the calculation of lifecycle benefits.

Even if it were feasible to modify the model to incorporate the changes as requested, such changes would result in a flawed assessment of the cost-effectiveness of the energy efficiency programs, as the request calls for changes to a key input of the Granite State Test. The Granite State Test was developed after a lengthy stakeholder process. Following the issuance of Order No. 25,932 (August 2, 2016) establishing an Energy Efficiency Resource Standard, interested groups of stakeholders convened in working groups to discuss the framework, requirements, and expectations for the EERS. One such group was the Cost Effectiveness Working Group. The working group met regularly throughout 2018 and 2019, and once a set of recommendations had been developed, the group commissioned a third-party study to review the recommendations for consistency with industry best practices—primarily, the National Standard Practice Manual (NSPM) for Assessing Cost-Effectiveness of Energy Efficiency Resources.

The resulting report ("2019 New Hampshire Cost Effectiveness Review") included the following regarding the discount rate:

"New Hampshire utilities have historically used the prime rate to calculate costs and benefits in present value terms," and "Synapse recommends that New Hampshire stakeholders continue the current practice of using a low-risk discount rate. The low-risk discount rate gives more weight to long-term impacts, reflects the regulatory perspective in the Granite State Test, and is consistent with the objectives of cost-effectiveness analyses. We find this is an appropriate approach to valuing energy efficiency benefits, and there is no rationale or new policy for utilities to alter their current practices. This discount rate should be applied to the Granite State Test as well as any secondary tests." (New Hampshire Cost Effectiveness Review at 43).

The Utilities further note that the NSPM, attached as Attachment PUC 2-001-05a, states the following regarding the use of the WACC as a discount rate for energy efficiency programs:

> "The utility WACC is typically used to indicate the time preference for investor-owned utilities (i.e., reflects the time preference of the utility investors, which is the after-tax cost of equity and the cost of debt). The key goal of utility investors

> is to maximize the returns on their investments. Therefore, the time preference of utility investors is not necessarily the same as the time preference of utility customers, or the regulatory time preference. Regulators/decision-makers should recognize this important distinction when considering whether to use the utility WACC as a discount rate. **The primary objective of the cost-effectiveness analysis is to identify those utility resources that will best serve customers with safe, reliable, low-cost energy services over the long term. This objective is fundamentally different from the objective of maximizing utility investors' returns."** (NSPM at 77, emphasis added).

The Commission approved the recommendation to adopt the Granite State Test as the cost benefit test in Order No. 26,322, and the use of the Granite State test as the primary test was subsequently codified in law with the passage of HB 549 in 2022 and reaffirmed with the passage of SB 113 in 2023. Using the utility WACC would be a modification to the Granite State Test that would be contrary to the intent of the test.

3. Please refer to Attachments PUC 2-001-05 for the requested output from the B/C models. While the Utilities are able to provide this data, unlike the question above, hard-coding a real discount rate is not how the model is intended to function. Further, the results should not be used to assess the cost-effectiveness of the energy efficiency programs, as the request calls for changes to a key component of the Granite State Test, fundamentally modifying it contrary to the intent of the test.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-6 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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?

Response:

The NH natural gas utilities continue to monitor natural gas active demand offerings in other jurisdictions, including in Massachusetts where both Unitil and Liberty have affiliates. Should cost-effective programs become viable, the NH natural gas utilities will consider offering them to customers. As identified by the PI Working Group and discussed in the final report, there are currently no quantified benefits for gas curtailment during a short-term period of constraint. Until the benefits of such a program can be reliably estimated, there is no means by which cost-effectiveness can be calculated.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-7 **Page 1 of 2**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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.

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 for2024-2026, 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.

Response:

Unitil submitted a corrected version of its electric B/C model on September 11, 2023, which includes live formulas, resolving the broken references in the PI tab. The model was also updated to correct for an error in the discount rate applied to active demand offerings that resulted in over-stated benefits. Please see response to PUC 2-001-03.

Unitil re-submitted its gas B/C model on September 11, 2023, which includes live formulas and the Primary Data tab.

Submission of Unitil's models without live formulas was due to an inadvertent oversight. Consistent with the Commission's direction, the Company will work to ensure that any future B/C model submissions contain live formulas.

Liberty Gas submitted a revised gas B/C model on September 20, 2023. The revised model corrects a formula #REF error attributable to a calculation reference to a blank placeholder for a natural gas residential and C&I ADR program, which is not being proposed. The formula correction in the revised model does not impact any of the filed attachments or summary computations for Liberty Gas.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-8 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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

Response:

The measure life for each of the energy saving measures in the BC model is included in the TRM (Attachment S) and is consistent among the Utilities for individual measures. Certain projects (e.g., lighting) include multiple measures which leads to an individualized weighted measure life in a single project, or for custom projects, where the measure lives are estimated based on prior years' projects and experience and actual measure lives are developed based on the project-specific installation as determined by engineering and implementation staff. Please refer to Attachment PUC 2-001-08 for the requested table.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-9 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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.

Response:

The columns referenced in the Costs tab and Primary Data tab of the model include planned expenditures associated with "Customer Incentives", which are defined in Table 1-11: Accounting Cost Categories of the NH Utilities Plan (Bates 27-28) as "Reimbursement to vendors for the cost of direct services to customers and/or rebates provided directly to customers resulting in measurable energy or capacity savings. Includes the cost of energy audits, technical studies and expert support, and the appropriate deployment of energy saving measures or services." The measure-level incentive amounts captured in the BC models only show the rebates provided directly to customers; they do not capture the payment to vendors for the costs of their services. As a result, the sum of the incentive amounts at the measure level, as reflected in the Calculations tab, are not reconcilable with the sub-program incentive totals on the Costs and Primary Data tab.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-10

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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	N U

Program Year	Sub-Program	Eversource	Liberty Electric	Unitil	NHEC	Liberty Gas	N U

3. In a separate tab, provide a ranking of measures, programs andsub-programs according to the spending on incentives, providing the dollar amounts for measure-level spending. Name this tab: IncentiveRank.
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.

Response:

1. Please refer to Attachments PUC 2-001-10a for revised B/C models that have a new column on the Calculations tab (Column DO) that shows the BC ratio for each measure. The portrayed BC is calculated solely based on the incentives and does not include other associated program or overhead costs, as the Utilities do not have a method for allocating such costs at a granularity finer than the program level.

   The Utilities note that there are additional benefits claimed at the program level that are not allocated to the individual measures offered in the program. This is the case for income-eligible non-energy impact benefits resulting from weatherization projects (per the Granite State Test), which are included in a separate line in the BC model rather than incorporated into the various measures in the model. Because cost-effectiveness is measured under the Granite State Test at the program level, the measure-level BC ratios shown in column DO for income-eligible weatherization measures does not reflect all of the benefits associated with program activity.

   For some other measures, the costs for the measure are captured on a different line than the savings. For example, the Energy Star Homes program reflects costs at the whole-home level in the measures related to heating. The energy savings, on the other hand, are separately calculated for each measure in the program, including but not limited to air conditioning and water heating equipment, as well as certain appliances. As a result, the benefit-cost ratio shown in Column DO for the whole-home line is not intended to reflect actual measure level savings; rather, costs and benefits from individual measures should be summed and compared to the total cost on the whole-home line to evaluate cost-effectiveness. In other words, cost-effectiveness should be considered at the program level as planned, and not at a measure-by-measure level.

   Separately, in Attachment PUC 2-001-10b, the Utilities have included a tab labeled "SP_CostEff" that calculates Sub-Program cost-effectiveness. Because the Utilities do not have a method for allocating non-measure-specific costs to the sub-program level, these B/C ratios are again calculated using only the measure-level incentives, which means the B/C ratio is not a comprehensive accounting of program or portfolio level costs and benefits, and

cannot be relied upon as an accurate reflection of the cost-effectiveness of any given measure or the program to which it belongs.

2. Please refer to Attachment PUC 2-001-10b, tabs "ConsolidatedBC_Measr_E" and "ConsolidatedBC_SP_E" for the electric program consolidated B/C ratios, and tabs "ConsolidatedBC_Measr_G" and "ConsolidatedBC_SP_G" for the gas programs.

3. Please refer to Attachment PUC 2-001-10b, tabs "Incentive Rank_Measr_E" and "Incentive Rank_SP_E" for electric program incentive totals by measure and subprogram, and tabs "Incentive Rank_Measr_G" and "Incentive Rank_SP_G" for gas programs. It should be noted that ranking measures and programs does not necessarily provide insight as to whether programs and incentive levels have been "optimized", as required by RSA 374-F:3, VI-a(d), as optimized as it appears in the statute means "to deliver ratepayer savings" without further qualification. Further, RSA 374-F:3, VI-a(d)(4) explicitly states "[t]he commission shall use benefit per unit cost as only one factor in considering whether the utilities have prioritized program offerings appropriately among and within customer classes."

   The Utilities note that ranking measures by their cost-effectiveness is not an effective way to assess the efficacy of the energy efficiency programs. For example, while high efficiency commercial food service equipment is highly cost-effective, the market opportunity, and therefore planned quantity, for such measures is very low. Ranking measures based on their benefit-cost ratio may therefore give insight as to where to target outreach, but the actual energy efficiency opportunity is obscured by forcing programs into this construct. Successful energy efficiency programming is achieved by leveraging a blend of various levels of cost-effective measures while prioritizing the objective of serving the greatest number and diversity of customers, and customer needs. At times this may even include measures that may not be cost-effective on their own, but when combined with other measures leads to a project or program that meets energy efficiency's (and New Hampshire's) energy policy objectives: meeting a customer need, reducing the customer's energy usage, and diminishing the impact on the energy system.

4. Please refer to the response to part 3 of this question and to Attachment PUC 2-001-10b. Attachment PUC 2-001-10b, tabs "Incentive Rank_Measr_E" and "Incentive Rank_SP_E" for electric programs, and tabs "Incentive Rank_Measr_G" and "Incentive Rank_SP_G" for gas programs, show statewide incentive totals by measure and subprogram. Because the BC ratios at the measure level in Attachments PUC 2-001-10a and at the subprogram level in

Attachment PUC 2-001-10b, "tab SP_CostEff" are calculated for each utility, it is not possible to show these together as requested in 4(ii). The utilities do not compile statewide BC ratios by portfolio, program, or measure, as program goals and PI achievement are not assessed on a statewide basis.

As noted in part 2, the Utilities do not have a method of allocating non-measure-specific costs to individual measures as requested in 4(i), so the budget levels shown for measures and sub-programs reflect only measure-level incentives. The costs shown for programs are total costs as already shown in Attachments E-J of the filing.

As a final note, planning requires a degree of estimation of future demand and activity that will necessarily differ from actual performance. Therefore, the actual amount of incentive ultimately associated with any given measure will vary from what is shown in the Plan.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-11 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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.?

Response:

The NHSaves programs have and continue to provide customer incentives within the ENERGY STAR® Products Program for heat pumps utilizing a "lost opportunity" baseline. The program is designed to target customers who have already made a decision to install a heat pump, and the program encourages these customers to purchase a highly efficient heat pump rather than a standard efficiency model. Based on the relatively modest rebate offered, the programs are not designed to induce a customer to install a heat pump system who otherwise would not have. For customers who are displacing existing baseboard heating, the Utilities offer increased incentives to further encourage customers to adopt efficient heat pumps.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-001-12 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 1 - Inquiries Related to Benefit-Cost ("B/C") Testing

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.

Response:

The Total Avoided Energy Benefits (Calculations Yr 1 Column BH) includes AESC 2021 marginal avoided cost values resulting from electric energy savings generated by the NHSaves programs offered in 2024 and is the total of Columns BD-BG, which individually calculate these benefits based on the summer and winter peak/off-peak periods. Column BH does not include benefits related to Energy DRIPE (totaled in Column BN) or Electric Capacity (totaled in Column BW). For the total electric benefits, summing avoided energy, DRIPE, and capacity (which includes avoided electric generating capacity, transmission, and distribution), refer to Column BX.

Please see Section 6.4.3 of the Plan describing the Benefits derived from the AESC Study and applied to programs. Please also refer to the 2021 AESC study as previously filed with the Commission and posted to its website.

"The AESC Study provides estimates of avoided costs associated with energy efficiency measures for program administrators throughout New England states for purposes of both internal decision-making and regulatory filings. To determine the values of energy efficiency and other demand-side measures, avoided costs are calculated and provided for each New England state in a hypothetical future in which the New England program administrators do not install any new demand-side measures in 2021 or later years." (AESC Study Executive Summary, page 1)

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-002-1 **Page 1 of 3**

Request from: New Hampshire Public Utilities Commission

Request:

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

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?

Response:

1. The second reference on Bates 9 erroneously included reference to "non-participating" customers given that the calculation, as described and supported in the response to Part 2,

is intended to estimate the value of avoided energy use experienced by program participants, based on currently published retail energy prices.

2. The $675 million referenced reflects participating customers' estimated avoided energy expenses (i.e., an estimate of the retail value of the energy saved) over the lives of the measures installed. This estimated dollar amount does not incorporate any value accruing to non-participants. This estimate utilizes a rolling average of fuel prices as published periodically by NH DOE (https://www.energy.nh.gov/energy-information/nh-fuel-prices) and the savings goals included in the 2024-2026 Plan to derive the estimated cost savings. Please see Excel Attachment PUC 2-002-01 for the supporting calculation. This value, which is a nominal estimate of customer avoided fuel costs, is distinct from the net present value of marginal avoided electric and fossil fuel costs calculated in the benefit cost model. The Granite State Test benefit value calculated in the model also includes benefits related to avoided water and sewer costs, reduced fossil fuel emissions, and low-income non-energy impacts.

3. Please refer to part 2 of this response. The $675 million is an alternative way of valuing the energy that the NH Utilities' 2024-2026 Plan proposes to avoid through its suite of energy efficiency programs. It is not in addition to the value calculated by the BC model, which is based on the value of marginal avoided energy from the 2021 AESC Study.

   Non-energy impacts (NEIs) are captured in the utilities' BC models but, with the exception of Income Eligible programs, these impacts are not included in the calculation of benefits under the Granite State Test, and therefore not a determinant as to whether a program is cost-effective. The value of NEIs can be found in the Primary Data tab, Column CH labeled "Total Non Energy Impacts".

4. The $675M is a simplified calculation based on average retail pricing, including $/kWh values only for electric pricing. The $/kWh does include savings on the volumetric portion of the distribution charge. The calculation used to estimate the $675M does not include any demand-charge savings that participants on demand rates might experience from reducing their peak demand.

5. For Eversource, the LBR rate is assessed to all customers to recoup lost distribution revenues attributable to the energy efficiency program impacts. The utilities with full decoupling mechanisms have their variations in distribution revenue reconciled from all causes, including weather and effectiveness of the energy efficiency programs, through

the approved decoupling mechanism with rates assessed to all customers. Please refer to the bill impacts provided as part of the Plan in Attachments E3-J3 for the estimated average bill impacts for a non-participating customer, which are consistently a fraction of one percent of the customer's total bill. Docket No. DE 23-080 contains the explanation of and support for Eversource's proposed 2024 LBR rate of $0.00181.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-002-2 **Page 1 of 4**

Request from: New Hampshire Public Utilities Commission

Request:

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

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.

Response:

1. The program cost per lifetime kWh saved over the 8 years between 2018-2026 is estimated to increase by 188 percent, not 288 percent, as referenced in the question. Beyond the general increase in the cost of labor and materials that will occur over that time frame, the Utilities highlight the transformation of the lighting market as a driver of the increased cost of achieving lifetime kWh savings. As stated in the response to PUC 1-002-1,

   "A final caution regarding comparisons from year to year concerns the evolving role of energy efficiency lighting measures in the NHSaves portfolio. Until recently, high efficiency residential lighting was a major source of relatively inexpensive energy savings, but as of 2023 has been removed from the residential portfolio due to the transformation of that market. While savings from energy efficient lighting remains an important element of the C&I portfolio, lifetime kWh savings for many types of lamps and fixtures in that sector have been reduced by more than 50% since 2022 due to the transformation of that market as well."

   By end use, lighting has historically been the most cost-effective source of long-lasting kWh savings for energy efficiency programs in New Hampshire specifically and across the world more generally. With that energy efficient resource having largely been captured, the Utilities are now pursuing less cost-effective sources of kWh savings. As mentioned in the response to PUC 1-002-6, evaluation studies included in the Strategic Evaluation Plan include investigating electric system opportunities 'Beyond Lighting' to help identify additional sources of kWh savings.

2. As stated in the response to PUC 1-002-1, each Plan should be considered separately and discretely, because various elements and assumptions change with each plan. For example, the energy efficiency *funding levels* change each year, which impacts the amount of activity that can be undertaken and the resulting savings that can be achieved. Meanwhile, the basis of most *benefits* calculations is revised every three years as a result of updates to the Avoided Energy Supply Component study. *Energy savings* calculations are updated by impact evaluations, and recommendations are included in each year's Technical Reference Manual. Finally, *program delivery costs,* including but not limited to utility and energy efficiency firms' labor, equipment, training, EM&V, and the regulatory process continually evolve based on market dynamics. When taken as a whole, each Plan must stand and be evaluated on its own.

   High B/C ratios are not necessarily a sign of evolved programs. Somewhat the opposite, the more mature a program becomes, the more expensive it is likely to be to continue to

achieve savings, as a more sophisticated labor force, refining efforts to accommodate customer behavior changes, and more site-specific, hands-on support from vendors and utilities are all needed as the program evolves.

Regarding recommended methodologies that can provide insight into trends and shed light on how program/sub-program funding, benefits, and costs are evolving, the Utilities note that evaluations are regularly commissioned by the Utilities in coordination with the EM&V Working Group to assess both qualitative and quantitative trends and evolution of programs. The research plan is included in a collaboratively developed Strategic Evaluation Plan to provide a roadmap for what will be studied when, and recommendations resulting from completed evaluations are generally implemented as soon as practicable. In addition, results of impact evaluations are reflected in the annual update to the Technical Reference Manual, and measure level savings updated in the B/C models so that reporting of savings is reflective of the latest findings. The results of all evaluations are incorporated into the TRM and filed with the Commission in the latest EE docket, so that all parties are regularly and consistently apprised of the evolution of the various measures and variables impacting the NHSaves programs.

3. Market barriers are ever present and are a constantly moving target. However, it is to be expected that evolution of the energy efficiency market will require correlating incentives, as well as customer support, outreach, and education to address. On the other hand, as existing technologies mature and the high-efficiency option becomes standard practice (in part because of program actions), market barriers for those technologies may disappear, and program support would no longer be needed. Therefore, while the types of market barriers are largely the same over time, the specific barriers for any given technology are continually evolving. Energy efficiency programs that are designed as "resource acquisition" interventions, including those offered in New Hampshire, reduce the overall demand for electricity and provision of natural gas (and other fossil fuels). In the process, the programs also promote an awareness of the value of energy efficiency more generally among various market actors, including builders, distributors, retailers, contractors, and customers, thereby encouraging market and industry standard practices that are higher than the minimum efficiencies allowed by law or regulation. Thus, market barriers are overcome incrementally, which over time leads to more significant market change for specific technology types, such as lighting, heating equipment efficiencies, etc.

   A. Please refer to each utility's "Program Summary" Attachments, which are outputs from the worksheets of the same name within the BC models. These lists of measures demonstrate that various kinds of equipment are offered within multiple end uses: refrigeration, HVAC, lighting, behavior, etc.

B. The reference to the "lighting market being transformed" referred to the fact that the only non-LED lamps still being stocked on store shelves are specialty lighting. In the C&I market, fluorescent lighting is still widely available and low cost, providing a viable and attractive alternative to commercial and industrial customers in the absence of incentives or other support. While the length of time that these measures will remain available, and therefore a viable alternative to LED technology, gets shorter each year, there is still cost-effective opportunity available that remains an appropriate use of ratepayer funds.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-002-3 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

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

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.

Response:

The Utilities have not historically tracked this information and therefore do not have complete or necessarily accurate information available. The historical data relied on assumptions from field auditors or other third parties, building size, or other variables and did not have this data verified or quality controlled as it was not utilized in any meaningful way. Please refer to Attachment PUC 2-002-03 for an estimate of the renters and owners served within HEA from 2018-2022.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-002-4 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

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

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.

Response:

Please refer to PUC Attachments 2-002-04 for the requested information.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-1 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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.

Response:

New Hampshire's analysis of the ESRPP has not yet commenced and no conclusions or decisions have been made. Please refer to Attachment PUC 2-003-01 for the Connecticut evaluation of the ESRPP.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-2 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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.

Response:

The NH energy efficiency program that is focused on comprehensive building improvements and weatherization in the form of air sealing and insulation for non-low-income residential customers *is not sunsetting*. Rather, the ENERGY STAR® designated program that was launched in 2001 by the Federal Environmental Protection Agency to promote standardization of weatherization programs across the country is being phased out to give state energy efficiency program administrators, such as the utility administrators of NHSaves, more flexibility to tailor weatherization offerings based on local jurisdictional priorities and opportunities. Thus, only the "Home Performance with ENERGY STAR®" program *nomenclature* is expected to sunset by 2025. The intent and objectives of the NHSaves Home Performance program remain core elements of the residential energy efficiency program offerings and will continue to be offered to customers throughout the 2024-2026 term.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-3 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:
Subset 3 -Further Questions on the 2024-2026 Plan

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.

Response:

Please note that Section 4.3 of the Plan refers specifically to the Residential ENERGY STAR® Products program, and section 4.3.2 refers to that program's "design and priorities".

Attachment PUC 2-003-03 shows for 2021 and the 2022-2023 Plan the planned and actual statewide expenditures related to residential lighting rebates in the Retail Program, as well as associated annual and lifetime kWh savings, summer kW savings, and the percent lighting measures represented relative to the ENERGY STAR® Products program overall. Because participants typically purchase or are provided more than one lightbulb at a time, participation is based on the assumption that each customer received 4 lightbulbs.

As stated in the 2024-2026 Plan and elsewhere, residential lighting measures are not being offered in the 2024-2026 term under the ENERGY STAR® Products program, thus there is no budget, savings or participants.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-4 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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.

Response:

Information related to the average summer and winter peak passive demand savings is included in each utility's annual performance incentive filings. For ease of reference, the requested information relating to actual performance in 2021 and 2022 is included in Attachment PUC 2-003-04 as well as planned values for 2023, 2024, 2025, and 2026. In addition to passive demand savings, the NH electric utilities have also included in the attachment the actual results of the ADR pilot programs from 2021 and 2022 as well as planned summer peak demand savings for 2023-2026.

Regarding the reasoning for the changes related to active and passive demand savings, please refer to the response provided to PUC 1-002-1.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-5 **Page 1 of 2**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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.

Response:

No, the NH Utilities do not believe that recent statutory and regulatory changes since 2019 warrant a need to revisit the PI framework. The current PI framework also began in program year 2020, as directed by Commission Order No. 26,323 approving the 2020 Update Plan. RSA 374-F:3, VI-a codified this same PI framework, and RSA 374-F:3, VI-a(d)(5) states that "[o]n July 1, 2023, the joint utilities shall petition the commission to approve changes to program offerings for the next 3-year period, consistent with the system benefits charge and local distribution adjustment charges described in subparagraph (2)" (emphasis added). The 2024-2026 plan makes changes to the program offerings to update the NHSaves programs for the current marketplace and assumptions. While the same provision does not allow for changes to the PI framework to be deemed automatically approved with the plan if an order isn't issued by November 30, 2023, it does state "the commission shall promptly review and approve by order" the PI proposed. The 2024-2026 plan makes a minor change to the performance incentive, as described on Bates pages 92 of the June 30 Plan filing, to reflect the transition to a true three-year plan, as required by legislative reference to "triennial energy efficiency plans". This is not a change in the PI framework however, but rather an adjustment to align the current PI framework with a three-year planning process.

Commission Order No. 25,932 in Docket No. DE 15-137 approved the use of LBR mechanisms and issued a requirement for the regulated utilities to seek approval of a decoupling or other lost-revenue recovery mechanism as an alternative to the LBR mechanism in their first distribution rate cases after the first EERS triennium, if not before. (Order No. 25,932 at 60). In light of the

addition of LBR mechanisms, the Order also reduced the level of performance incentives from 8% to the 5.5% now in place and referenced in the question. (Order No. 25,932 at 60). So LBR and the revenue decoupling mechanisms that have replaced it for four of the five regulated utilities have already been taken into account with regard to PI. Beyond that, however, PI does not serve the same purpose as LBR: PI is an incentive to execute exemplary program administration resulting in highly successful programs, where LBR is meant to replace the distribution revenue lost due to the implementation of energy efficiency measures. Therefore, LBR does not supplant PI; the two serve distinct purposes. As noted by ACEEE, "While decoupling potentially removes the disincentive to pursue energy efficiency, utilities with only decoupling in place still lack a positive incentive for efficiency... Performance incentives can provide that." (http://www.aceee.org/sites/default/files/publications/researchreports/u1504.pdf)

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-6 **Page 1 of 3**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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 thecomponents?
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 allminimum thresholds increased to 100% and 110%respectively?

Response:

1. The Utilities note that there is no previous triennial plan as it concerns PI; in previous terms, each year's achievement was assessed individually. The Utilities are not proposing to change PI components or weights in the 2024-2026 Term, and Tables 6-1 and 6-2 reflect the same PI components and weights applied during the 2021-2023 term. For natural gas programs, as reflected in Table 6-2, the incentive weight for lifetime MMBtu savings is (and has been) 45% of total PI and for annual MMBtu savings is (and has been) 20% of total PI.

Actual PI earned based on performance during each of the two recently completed program years was calculated and presented to the Commission in each Utility's annual performance incentive reports, filed on or about June 1 of each year, for the previous program year.

The design-level weight assigned during planning to each component of PI is based on Commission Order 26,323 approving the PI framework, and then legally set by RSA 374-F:3,

VI-a(d). Actual weights applied to each PI component are based on the utility's actual performance compared to planned performance. For example, if the utility achieves 80 percent of the annual kWh savings target, only 80 percent of the designed co-efficient will be applied to that PI component.

Please refer to Attachments 2-003-06 for a summary of planned, actual and, for the electric utilities, alternative PI based on the question's scenario, by each of the utilities in program years 2021 and 2022.

2. If the PI associated with achievement of annual kWh changed from 10% to 35% of total PI and that associated with lifetime kWh changed from 35% to 10%, there would be no change in the overall amount of PI that a utility could earn. However, it would put greater emphasis on the utility's achievement of first-year electricity savings, and less on those measures with long measure lives. Under such a scenario, the Utilities would be incented to prioritize remaining lighting opportunities and short-lived behavior change and be less focused on more persistent savings and from longer-lived measures, such as HVAC and weatherization. Therefore, these changes would result in a shift to the core planning approach to the programs. RSA 374-F:3, VI-a(d)(5) states that "[o]n July 1, 2023, the joint utilities shall petition the commission to approve changes to program offerings for the next 3-year period, consistent with the system benefits charge and local distribution adjustment charges described in subparagraph (2)" and that is what the plan proposes. No party has presented such a change to the PI framework in this docket.

3. As with changing the weights for annual and lifetime kWh, changing the minimum threshold for summer and winter kW from 65% to 75% would make no difference to the amount of planned PI, which would remain at 5.5% of portfolio spending. In practice, however, it would increase the threshold that the electric utilities would have to clear before they could earn any PI on those passive demand components of the framework, making this a change to the PI framework itself which, as mentioned above, is outside the scope of the proceeding, and has not been proposed to the Commission.

4. As with the other scenarios posed, the planned PI would not change were the minimum thresholds changed, and planned PI would remain at 5.5% of program budgets. However, it is illogical to increase the "minimum" threshold to one that exceeds the programs' design-level savings. The purpose of performance incentive is to align public policy goals with the utilities' interests. Should the performance incentive be locked up until 100% or 110% of the savings goals proposed by the Utilities is achieved with legislatively limited funding, then the mechanism disincentivizes the Utilities should it become clear the goals cannot be met. This

would be the case even though public policy is otherwise being met, and real, cost-effective benefits are being achieved. It could also induce the Utilities to promote different measures or pursue varying strategies should one be struggling to achieve the 100% threshold while another is confident of clearing the hurdle. Such a result would be contrary to the policy purpose codified in RSA 378:37 to "maximize the use of cost-effective energy efficiency" as well as the general policies of the NHSaves program framework, which, consistent with the purpose of RSA 374-F:3, VI-a, aims to reach customers meeting diverse demographic attributes, with particular emphasis on need-based customers.

The result of this drastic and fundamental change to the PI framework could create market confusion and result in the pursuit of the easiest-to-achieve, most cost-effective measures, reducing equitable delivery of benefits, and potentially leading to neglect of the more costly customer segments or emerging opportunities that are initially more expensive to research, market, deploy and evaluate. This would frustrate the legislative purpose of the statutes mentioned above and is contrary to the specific directive of RSA 374-F:3, VI-a(d)(5) when no such changes to the PI framework have been proposed, supported or entered into the record by any party for the Commission's consideration.

As stated in response to PUC 1-007-4, the existing PI framework is designed so that each Utility must achieve cost-effectiveness for the portfolio of programs and surpass minimum thresholds to earn any incentive at all. The PI framework also properly scales incentives to encourage the Utilities to exceed the minimum necessary administrative performance to receive incentives to pursue additional benefits and savings for the programs, if possible, while also safeguarding against overcompensation by having caps on each component of the framework and by having a robust stakeholder process help inform the goals established within each plan. The PI framework also encourages continuous improvement and acceptance of evaluation results and recommendations, as well as a degree of risk taking and innovation in program design and delivery that would be impeded should there be a significant and sudden change in the Utilities' ability to earn PI consistent with the existing framework.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-7 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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?

Response:

Please refer to the response to PUC 1-007-1.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-8 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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

Response:

The customer counts can be found in the Lookups tab of the BC Model and reflect what was included in the 2022-2023 Plan on March 1, 2022. It should be noted, however, that slightly dated customer counts do not impact the model and have only a de minimis impact on its outputs. In some cases, the Utilities are not able to distinguish the number of municipal customers from other C&I customers as those customers are typically on a commercial rate. Neither cost effectiveness testing nor performance incentives are impacted by customer counts or sales.

Please reference Attachment PUC 2-003-08 for each utility's counts.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-9 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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

Response:

Please reference Attachment PUC 2-003-09 for the requested information. Please refer to the response provided to PUC 2-003-08 regarding municipal customers.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-10 **Page 1 of 2**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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 *(please list categories, e.g., roll-overs)*						
Total Budget						

Response:

The question presumes a false dichotomy between spending directly benefiting ratepayers and all other spending. All spending, even that not associated with incentives directed at customers to reduce the up-front cost barriers associated with high efficiency equipment and projects, is geared toward delivering continually improving energy efficiency programs and are critical to the success of the programs overall. Education, evaluation, marketing, and even regulatory and legal expenses are all deployed for the express purpose of improving program design and

delivery and capturing cost-effective energy efficiency. As a result, there is no clear demarcation between spending that directly benefits ratepayers and all other spending as the two are inextricably linked: without the spending supporting the "spending directly benefitting ratepayers", fewer benefits would reach ratepayers. However, for the purpose of responding to the question, the first row reflects spending on customer incentives. The 'Other' category remains unpopulated because there is no spending that does not fall within the other categories. Carryovers/unders are considered revenues, which would be accounted as expenditures in subsequent program years within an expense category, consistent with the mandate of RSA 374-F:3(d)(1). Please refer to Attachment PUC 2-003-10.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-11 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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

Response:

Please refer to the "Customer Costs" portion of the BC Models, which are reflected in BC model in multiple places, including the Primary Data tab the Cost Effectiveness tab, and the Performance Incentive tab. Additional private or public funding that might supplement the revenues collected by the Utilities for the regulated NHSaves programs would not be under the control of the Utilities or "assumed to be used in the 2024-2026 Triennial Plan" and would therefore not be included in the program plan or BC models.

New Hampshire Utilities
Docket No. DE 23-068

Date Request Received: September 01, 2023 **Date of Response: September 22, 2023**
Data Request No. PUC 2-003-12 **Page 1 of 1**

Request from: New Hampshire Public Utilities Commission

Request:

Subset 3 -Further Questions on the 2024-2026 Plan

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

Response:

Please refer to Attachment PUC 2-003-12, which summarizes the statewide total nominal incentive dollars associated with each end use for each year of the Plan.

Illustrating what was discussed in the response to Request PUC 2-001-09, Attachment PUC 2-003-12 shows only incentives provided directly to customers by end use and does not capture the payment to vendors for the costs of their services. As a result, the sum of these incentive amounts at the measure level, aggregated by end use, will not reconcile with the sub-program incentive totals on the Costs and Primary Data tab.