**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 20-092**

**ELECTRIC AND GAS UTILITIES**

**2021-2023 New Hampshire Statewide Energy Efficiency Plan**

# ORDER OF NOTICE

On September 1, 2020, Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities, New Hampshire Electric Cooperative, Inc., Public Service Company of New Hampshire d/b/a Eversource Energy, and Unitil Energy Systems, Inc. (collectively, the Electric Utilities), together with Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities and Northern Utilities, Inc. (collectively, the Gas Utilities) jointly proposed a 2021-2023 Statewide Energy Efficiency Plan (the Plan), which includes energy efficiency programs and related rates, for approval by the Commission. The Plan and subsequent docket filings, other than any information for which confidential treatment is requested of or granted by the Commission, will be posted to the Commission's website at: https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092.html.

Funding for the electric energy efficiency programs contained in the Plan is provided through a portion of the System Benefits Charge (SBC) paid by the Electric Utilities' customers and is supplemented by funds available through the Independent System Operator-New England's Forward Capacity Market and the Regional Greenhouse Gas Initiative. Funding for the natural gas energy efficiency programs proposed in the Plan is provided through a portion of the Local Distribution/Delivery Adjustment Clause (LDAC) paid by the Gas Utilities' customers. Any unspent funds from prior program years for both the Electric Utilities and Gas Utilities,

including interest, are carried forward to the following year's budget. The energy efficiency programs proposed in the Plan are designed to be consistently available to eligible customers across New Hampshire, subject to available budgets.

The Electric Utilities and Gas Utilities seek approval of the Plan in accordance with Order No. 25,932 (August 2, 2016) (approving establishment of an Energy Efficiency Resource Standard) and Order No. 26,323 (December 31, 2019) (approving 2020 Update Plan and establishing process for development and submission of 2021-2023 Plan). The Electric Utilities propose three annual changes to the SBC, for effect on January 1 of each year between 2021 and 2023. The Gas Utilities propose three annual changes to the LDAC, which is reviewed by the Commission in each utility's annual Cost of Gas filing, for effect on November 1 of each year between 2021 and 2023. The proposed SBC and LDAC changes are intended to recover projected energy efficiency program costs, performance incentive costs, and for certain utilities, lost base revenues.

The filing raises, inter alia, issues related to whether the proposed Plan programs offer benefits consistent with RSA 374-F:3, VI; whether the proposed Plan programs are reasonable, cost-effective, and in the public interest consistent with RSA 374-F:3, X; whether the proposed programs will properly utilize funds from the Energy Efficiency Fund as required by RSA 125-O:23; and whether, pursuant to RSA 374:2, the Electric Utilities' and Gas Utilities' proposed rates are just and reasonable and comply with Commission orders. Each party has the right to have an attorney represent the party at the party's own expense.

**Based upon the foregoing, it is hereby**

**ORDERED**, that, consistent with Governor Christopher T. Sununu's Emergency Order #12, the Commission will hold a web-enabled remote prehearing conference, pursuant to

N.H. Admin. R., Puc 203.15, on September 14, 2020 at 10:30 am, at which each party will provide a preliminary statement of its position with regard to the Plan, proposed rates, and any of the issues set forth in N.H. Admin. R., Puc 203.15. Members of the public who wish to access the prehearing conference may do so by clicking here: https://www.puc.nh.gov/Regulatory/Calendar-Remote.html. **If you have any difficulty obtaining access to this remote event, please notify the Commission by calling (603) 271-2431 as soon as possible**. Parties will be provided with additional instructions prior to the prehearing conference; and it is

**FURTHER ORDERED**, that, immediately following the prehearing conference, the Electric Utilities and Gas Utilities, the Staff of the Commission, and any intervenors shall hold a web-enabled remote technical session to review the Plan; and it is

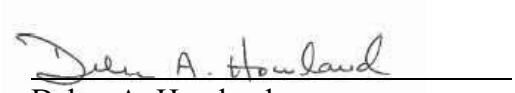
**FURTHER ORDERED**, that pursuant to N.H. Admin. R., Puc 203.12, the Electric Utilities and Gas Utilities shall notify all persons desiring to be heard at this hearing by publishing a copy of this order of notice on their websites no later than one business day after the date of issue. In addition, the Executive Director shall publish this order of notice on the Commission's website no later than one business day after the date of issue; and it is

**FURTHER ORDERED**, that consistent with N.H. Admin. R., Puc 203.17 and Puc 203.02, any party seeking to intervene in the proceeding shall file with the Commission a petition to intervene with copies sent to the Electric Utilities and Gas Utilities and the Office of the Consumer Advocate on or before September 9, 2020, such petition stating the facts demonstrating how its rights, duties, privileges, immunities, or other substantial interests may be affected by the proceeding, consistent with N.H. Admin. R., Puc 203.17. Pursuant to the secretarial letter issued on March 17, 2020, which is posted on the Commission's website at https://www.puc.nh.gov/Regulatory/Secretarial%20Letters/20200317-SecLtr-Temp-Changes-in-

Filing-Requirements.pdf, any party seeking to intervene may elect to submit this filing in electronic form; and it is

**FURTHER ORDERED**, that any party objecting to a petition to intervene make said objection on or before September 14, 2020.

By order of the Public Utilities Commission of New Hampshire this eighth day of September, 2020.



Debra A. Howland
Executive Director

Individuals needing assistance or auxiliary communication aids due to sensory impairment or other disability should contact the Americans with Disabilities Act Coordinator, NHPUC, 21 S. Fruit St., Suite 10, Concord, New Hampshire 03301-2429; 603-271-2431; TDD Access: Relay N.H. 1-800-735-2964. Notification of the need for assistance should be made one week prior to the scheduled event.

# Service List - Docket Related

Docket#: 20-092

Printed: 9/8/2020

Email Addresses

---

ExecutiveDirector@puc.nh.gov
roshan.bhakta@eversource.com
kelly@cleanenergynh.org
brian.buckley@puc.nh.gov
bill.bullock@eversource.com
john.butler@eversource.com
richard.chagnon@puc.nh.gov
brandy.chambers@eversource.com
jessica.chiavara@eversource.com
gary.cronin@puc.nh.gov
kristi.davie@eversource.com
paul.dexter@puc.nh.gov
jay.dudley@puc.nh.gov
tracy.dyke-redmond@eversource.com
Stephen.Eckberg@puc.nh.gov
steven.elliott@eversource.com
eemerson@primmer.com
tom.frantz@puc.nh.gov
tomas.fuller@eversource.com
michael.goldman@eversource.com
dhill@energyfuturesgroup.com
miles.ingram@eversource.com
nkrakoff@clf.org
donald.kreis@oca.nh.gov
marc.lemenager@eversource.com
mcdonald@optenergy.com
nelson.medeiros@eversource.com
frank.melanson@eversource.com
erica.menard@eversource.com
madeleine@cleanenergynh.org
Mosenthal@OptEnergy.com
elizabeth.nixon@puc.nh.gov
amanda.noonan@puc.nh.gov
ocalitigation@oca.nh.gov
katherine.peters@eversource.com
bryant.robinson@eversource.com
Christa.Shute@oca.nh.gov
jvanrossum@clf.org
dvoorhees@veic.org
kiersten.williams@eversource.com

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 20-092**

**ELECTRIC AND GAS UTILITIES**

**2021–2023 Triennial Energy Efficiency Plan**

**Order on 2021–2023 Triennial Energy Efficiency Plan and Implementation of Energy Efficiency Programs**

**O R D E R N O. 26,553**

**November 12, 2021**

In this order, the Commission sets ratepayer-funded and utility-managed energy efficiency rates for 2021 through 2023 in aggregate at a level consistent with the previous Triennial Plan. The Joint Utilities shall identify energy efficiency programs that provide the greatest benefit per unit cost with the lowest overhead and administrative costs within the approved budget and file a program proposal for review and approval by the Commission. The Commission moves the funding requested for the Performance Incentive, over $20,000,000 in the Triennial Plan Proposal, from the Joint Utilities to the energy efficiency programs; and therefore to ratepayers.

As the Commission held at the outset of restructuring, "the most appropriate policy is to stimulate, where needed, the development of market based, not utility-sponsored and ratepayer-funded, energy efficiency programs."[1] The Proposal and Settlement before the Commission present a

[1] *Electric Utility Restructuring*, Order No. 22,875 at 79 (March 20, 1998)

stark contrast to those long-held tenets, instead proposing nearly $400,000,000 in entirely ratepayer-funded and utility-sponsored programs, placing an enormous burden on New Hampshire ratepayers. We view this Triennial Plan as an inflection point, with ratepayer-funded and utility managed energy efficiency programs peaking in 2020 and 2021 and returning to the intended transition to market-based energy efficiency after this triennium within the guidelines provided by the Legislature.

## I. BACKGROUND AND PROCEDURAL HISTORY

On September 1, 2020, the following parties filed a proposal (the Proposal) for ratepayer funded energy efficiency programs for 2021, 2022, and 2023:

- The Electric Utilities:
  - Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
  - New Hampshire Electric Cooperative, Inc.
  - Public Service Company of New Hampshire d/b/a Eversource Energy
  - Unitil Energy Systems, Inc.
- The Gas Utilities:
  - Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities
  - Northern Utilities, Inc.

The above-listed Electric Utilities and Gas Utilities are collectively referred to as the Joint Utilities.

The Office of the Consumer Advocate (OCA) notified the Commission of its participation in this docket on behalf of residential ratepayers. *See* RSA 363:28, II. Clean Energy New Hampshire (CENH), the Conservation Law Foundation (CLF), the Acadia Center, The Way Home, the Department of

Environmental Services (DES), and Southern New Hampshire Services each filed petitions to intervene. The Commission granted all petitions to intervene at the prehearing conference held on September 14, 2020. Hearing Transcript of September 14, 2020 at 11.

On December 3, the Joint Utilities, OCA, CLF, The Way Home, Southern New Hampshire Services, and CENH (collectively, the Settling Parties) filed a settlement agreement (Settlement Agreement) that called for approval of the 2021–23 Proposal with certain modifications. The Acadia Center and DES did not sign the Settlement agreement but filed letters in support. The Department of Energy (formerly Staff Advocates with the Commission) did not join the Settlement Agreement.

The Commission held hearings on the Proposal on December 10, 14, 16, 21, and 22. The Commission held the record open for responses to the Commission's record requests and the filing of Exhibit 25B. Hearing Transcript of December 22, 2020 (12/22/20 Tr.) at 141. Responses to the Commission's record requests and Exhibit 25B were filed on December 22.

On December 29, 2020, the Commission issued Order No. 26,440, maintaining the current System Benefits Charge (SBC) rates and structure of the existing energy efficiency programs until the Commission's issuance of its final order in this proceeding.

On February 19, 2021, the Commission issued Order No. 26,458, granting the motion of the OCA for rehearing of Order No. 26,415, which had declined to designate then Commission employees Elizabeth Nixon and Paul

Dexter as Staff Advocates pursuant to RSA 363:32. On rehearing the Commission granted the OCA's motion and designated Elizabeth Nixon and Paul Dexter as Staff Advocates pursuant to RSA 363:32, II.

The Proposal, Settlement, testimony, exhibits, and other docket filings, except any information for which confidential treatment is requested of or granted by the Commission, are posted at: https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092.html.

## II. SUMMARY OF THE PROPOSAL FILED SEPTEMBER 1, 2020

### A. Proposal Plan Targets and Budget

The Proposal significantly expands the programs and spending implemented in the prior plan. The Proposal increases Energy Efficiency (EE) program budgets as seen in the table below with 2018–2020 EE program budgets for comparison:

| **Table 1: Proposed Energy Efficiency Program Budgets** | | | | |
|---|---|---|---|---|
| | 2021 | 2022 | 2023 | Total |
| Electric | $93,582,000 | $115,554,000 | $141,692,000 | $350,829,000 |
| Gas | $12,038,000 | $13,706,000 | $16,137,000 | $41,882,000 |

Exh *1.* at 32, Table 1-9; 1-10.

| **Table 2: 2018–2020 Energy Efficiency Program Budgets** | | | | |
|---|---|---|---|---|
| | 2018 | 2019 | 2020 | Total |
| Electric | $36,624,000 | $46,911,000 | $62,580,000 | $146,115.000 |
| Gas | $9,158,000 | $10,029,000 | $10,902,000 | $30,089,000 |

Exh. 2 at 32-33, *Docket DE 17-136; Order No. 26,095 at 5 (January 2, 2018).*

1. Proposal Plan Funding

The Proposal seeks to fund electric and natural gas programs through different sources. Exh. 1 at 30–31. For the electric energy efficiency programs, funding is derived from: (1) a portion of the SBC, which is included on the

electric bills of all customers receiving delivery service from a participating utility; (2) a portion of the Regional Greenhouse Gas Initiative (RGGI) auction proceeds; and (3) proceeds obtained by the Electric Utilities from their participation in the regional Forward Capacity Market (FCM). *Id.* In addition, under the Proposal, any unspent funds from prior program years are carried forward to future years, including interest at the prime rate. *Id.*

The Proposal seeks to fund natural gas energy efficiency programs from a portion of the Local Delivery Adjustment Clause (LDAC), which is included on the bills of all gas utility customers, as well as from any unspent funds from prior program years, which are carried forward to future years including interest at the prime rate. *Id.*

The Proposal significantly changed how the SBC and LDAC charges are calculated, allocated, and set, and has increased proposed rates for each year of the proposal. Under the Proposal, the Joint Utilities seek to review actual sales and revenues each year to determine whether the rates approved by the Commission for the following year should apply for collection of the approved budget. *Id.* at 37. Based on this reconciliation, the Joint Utilities request to adjust the charges by up to 10 percent of the approved rate without the need for Commission approval. *Id.*

For the first time in the history of EE programs, the Proposal separates residential and commercial/industrial (C&I) EE program budgets for Electric Utilities and bases its proposed SBC rates applicable to those customer classes on their respective budgets. *Id.* at 38. Currently, the EE portion of the SBC

charge is uniform between customer classes, however, the overall SBC charges are not uniform among utility service territories. The utilities' proposed EE portion of SBC rates are laid out in the tables below:

| Table 3: EE Portion of the Electric Utilities' SBC Rates (per kWh) | | | | | |
|---|---|---|---|---|---|
| | | 2020 | 2021 | 2022 | 2023 |
| Eversource[2] | Residential | $0.00528 | $0.00651 | $0.00646 | $0.00673 |
| | C&I | | $0.01029 | $0.01498 | $0.02062 |
| Liberty[3] | Residential | $0.00528 | $0.00568 | $0.00864 | $0.00922 |
| | C&I | | $0.00561 | $0.00843 | $0.01061 |
| Unitil[4] | Residential | $0.00528 | $0.00615 | $0.00773 | $0.00767 |
| | C&I | | $0.00867 | $0.01070 | $0.01333 |
| NHEC[5] | Residential | $0.00528 | $0.00838 | $0.00873 | $0.008530 |
| | C&I | | $0.00906 | $0.01036 | $0.01004 |

Exh. 4 at 8.

| Table 4: EE Portion of the Gas Utilities' LDAC Rates (per therm) | | | | | |
|---|---|---|---|---|---|
| | | 2020 | 2021 | 2022 | 2023 |
| Liberty[6] | Residential | $0.0640 | $0.0831 | | |
| | Commercial | $0.0426 | $0.0441 | | |
| Unitil[7] | Residential | $0.0613 | $0.0994 | $0.0985 | $0.1203 |
| | Commercial | $0.0266 | $0.0367 | $0.0509 | $0.0704 |

### B. Commercial and Industrial EE Programs

The Proposal has four ratepayer-funded C&I EE programs: the Small Business Energy Solutions Program; the Municipal Program; the Large Business Energy Solutions Program; and Eversource's Large Business Energy Rewards Request For Proposals (RFP) Program. Exh. 1 at 52–53.

[2] Exh. 1 at 38.
[3] Exh. 1 at 725.
[4] Exh. 17 at 19.
[5] Exh. 1 at 773.
[6] Exh. 1 at 853–54.
[7] Exh. 1 at 925.

1. Small Business Energy Solutions Program

The Small Business Energy Solutions Program is described as a "retrofit and new equipment & construction initiative" providing incentives and technical expertise to small businesses. *Id.* at 52. The proposed 2021–23 electric budget is $68,248,328, while for gas the proposed budget is $7,810,522. *Id.* at 65.

2. Municipal Program

The Municipal Program is described as providing "technical assistance and incentives to municipalities and school districts to help them identify energy-saving opportunities and implement projects." *Id.* at 52. The 2021–23 electric budget is proposed to be $5,871,702. *Id.* at 76. According to the 2021–23 Proposal, natural gas utilities also serve municipalities through the Small and Large Business Energy Solutions programs. *Id.* at 52.

3. Large Business Energy Solutions Program

The Large Business Energy Solutions Program is described as offering "technical services and incentives to assist large C&I customers who are retrofitting existing facilities or equipment, adding or replacing equipment that is at the end of its useful life, or constructing new facilities or additions." *Id.* at 53. The proposed 2021–23 electric budget is $105,736,654, while the proposed gas budget is $10,160,707. *Id.* at 89.

4. Eversource's Large Business Energy Rewards Program

Eversource's Large Business Energy Rewards RFP Program is described as encouraging "customers to propose energy efficiency projects through a

competitive solicitation process." *Id.* at 53. The 2021–23 budget for this encouragement is $17,781,164. *Id.* at 93.

**C. Residential EE Programs**

The Proposal has four Residential ratepayer funded programs: the ENERGY STAR© Homes Program; the ENERGY STAR© Products Program; the Home Energy Assistance Program (HEA); and the Home Performance ENERGY STAR© Program.

1. ENERGY STAR© Homes Program

The ENERGY STAR© Homes Program is described as providing incentives and contractor support for residential single-family and multi-family new construction homes. *Id.* at 97. The proposed 2021–23 electric budget for this program is $10,854,423, while the proposed gas budget for the same time period is $4,762,071. *Id.* at 118.

2. ENERGY STAR© Products Program

The ENERGY STAR© Products Program is described as helping residential customers overcome the extra expense of purchasing and installing ENERGY STAR-certified appliances, electronics, HVAC equipment and systems, hot water-saving equipment, and lighting. *Id.* at 97. The proposed 2021–23 electric budget for this program is $31,627,751, while the proposed gas budget is $4,906,684. *Id.* at 126.

3. Home Energy Assistance (HEA) Program

The HEA Program is described as being a fuel-neutral weatherization program designed to reduce energy use from both electric and gas appliances, lighting,

and HVAC systems. The proposed 2021–23 electric budget for this program is $69,854,034, while the proposed gas budget is $7,136,139. *Id.* at 137. Under the Proposal, the per-project incentive cap would be more than doubled from $8,000 to $20,000. In addition, the Proposal would allow exceptions to that increased cap. *Id.* at 130.

4. Home Performance ENERGY STAR© Program

The Home Performance ENERGY STAR© Program is described as providing "comprehensive energy-saving services at significantly reduced cost to customers' existing homes, and covers lighting improvements, space heating and hot water equipment upgrades, weatherization measures, and appliance replacements." *Id.* at 98. The 2021–23 proposed electric budget for this program is $29,062,551, while the proposed gas budget is $4,840,463. *Id.* at 148.

**D. Active Demand Reduction programs**

The proposed Active Demand Reduction (ADR) program is a ratepayer-funded program described as seeking "to reduce peak demand and capture benefits as quantified in the regional Annual Energy Supply Components ("AESC") study." *Id.* at 150. In the Proposal, program offerings include a residential Wi-Fi Thermostat offering from Eversource and Unitil Electric; a residential Battery Storage offering from Eversource; a C&I Load Curtailment from Eversource, Unitil Electric, and Liberty Electric; and a C&I Storage Performance offering from Eversource and Until Electric. *Id.* at 151. The 2021–

23 proposed budget for ADR programs is $626,372 for residential offerings, and $4,775,494 for C&I offerings. *Id.* at 157.

**E. Behavioral-Based Strategies**

The Joint Utilities describe Behavioral-Based Strategies as being designed to make customers aware of their energy consumption to empower and motivate them to adopt energy-efficient behaviors or technologies. *Id.* at 150. The proposed strategies include providing Unitil Electric and Gas customers and Liberty Electric and Gas customers Home Energy Reports (HERs), with energy consumption information and energy-saving information. Over the triennium, the total budget proposal for the electric HER program is $963,157, and the total budget proposal for the gas HER program is $651,850. *Id.* at 585. In addition, Eversource proposed a Customer Engagement Initiative, which is a behavioral-based marketing strategy encouraging energy efficiency measures through other residential program offerings. *Id.* at 159-164. Finally, Liberty Gas proposes performing aerial infrared mapping to provide a visual profile of heat loss to help drive customer behavior changes and program participation. *Id.* at 165. The proposed budget for Liberty's aerial mapping is $460,250 in 2021, $271,428 in 2022, and $262,884 in 2023. *Id.* at 861.

**F. Energy Optimization**

This proposed pilot program is described as minimizing "customers' total energy usage across all energy sources while maximizing customers' benefits" with a focus on conversions from gas heating systems to higher-efficiency heating systems consisting of cold climate air source heat pumps. *Id.* at 177.

The Joint Utilities claim the pilot is necessary to provide "a more comprehensive understanding and experience of the benefits of heat pumps to the electric system, as well as the impact on emissions from [greenhouse gases] and nitrogen and sulfur oxides." *Id.* Over the triennium, the total budget proposal for the Energy optimization Pilot is $1,492,259. *Id.* at 585.

**G. Financing Mechanisms**

The Proposal has multiple financing mechanisms, including low-interest, zero-interest, and on-bill mechanisms. For C&I programs, all utilities offer zero percent on-bill financing to certain customers, and facilitate the use of third-party financing options. Eversource and the NHEC also offer tariffs to municipal customers that allow municipalities to repay upfront costs through charges that are less than or equal to the customer's estimated savings. *Id.* at 55–56.

For Residential programs, each of the Joint Utilities proposes varying amounts of on-bill financing for the Home Performance program. *Id.* at 101. Additionally, each of the Joint Utilities partners with third-party lenders offering low-interest EE loans residential customers and zero-interest loans for moderate-income residential customers. *Id.* at 102–103.

**H. Benefit/Cost Screening**

Under the Proposal, the Joint Utilities propose using a new cost-effectiveness screening framework for the EE programs. The framework consists of a complicated series of tests; a primary test, called the "Granite State Test," and two secondary tests: the "Utility Cost Test," and the

"Secondary Granite State Test." *Id.* at 209–211. Energy benefits are evaluated using the "Avoided Energy Supply Cost" (AESC) study.[8] *Id.* at 44–45. The Joint Utilities propose to file an informational report with information on the results of the AESC study update in 2021, which may result in proposed program changes. *Id.*

### I. Performance Incentive

Under the Proposal, the Joint Utilities propose ratepayer-funded performance incentives for themselves of up to 6.875 percent of actual program expenditures. *Id.* at 218. Over the triennium, the total budget proposal for the electric program performance incentives is $19,289,318, *id.* at 617, and the total budget proposal for gas program performance incentives is $2,303,525, *id.* at 621. Additionally, the Proposal asks to transition the ADR offerings from demonstration projects to full programs, and include a performance incentive component for achievement of ADR goals at 5.5 percent of actual expenditures, with a threshold for savings and benefits components of 65 percent and maximum performance incentive level of 125 percent. *Id.* Over the triennium, the budget proposal's cap for performance incentives related to the ADR program is $109,719 for Unitil Electric, *id.* at 792, $574,198 for Liberty Electric, *id.* at 701, and $902,775 for Eversource, *id.* at 633.

[8] The Commission notes that this study was not performed on a New Hampshire-specific basis and was, instead, performed across all New England States. An updated study is due to be released in 2021. *Id.* at 44–45.

### J. Lost Base Revenue

The Proposal maintains the existing practice of allowing Joint Utilities that have not instituted decoupling to collect revenue lost due to decreased energy sales resulting from EE programs. *Id.* at 938–941. Electric utilities collect lost base revenue (LBR) as another component of the SBC, while gas utilities collect LBR as a component of the LDAC. NHEC does not collect LBR, and Liberty Electric only calculated a LBR charge for 2021, based on its intent to implement revenue decoupling in its general rate scheme. *Id.* The Joint Utilities proposed electric LBR rates for electric customers, per kWh, as follows:

**Table 5: Joint Utilities' LBR Proposals**

| 2021 | Eversource | Liberty | Unitil |
|---|---|---|---|
| Residential | $0.00065 | $0.00068 | $0.00120 |
| C&I | $0.00091 | $0.00068 | $0.00129 |
| **2022** | **Eversource** | **Liberty** | **Unitil** |
| Residential | $0.00102 | N/A | $0.00145 |
| C&I | $0.00159 | N/A | $0.00121 |
| **2023** | **Eversource** | **Liberty** | **Unitil** |
| Residential | $0.00118 | N/A | $0.00186 |
| C&I | $0.00220 | N/A | $0.00130 |

*Id.* at 938, Table 3.

### K. Technical Reference Manual

The Joint Utilities created a Technical Reference Manual (TRM) that documents how the Joint Utilities propose to calculate savings from the installation of EE measures by providing methods, formulas, and assumptions for estimating energy, peak demand, and other resource impacts from EE measures. *Id.* at 241. In the Proposal, the Joint Utilities will update the TRM on an annual basis, and in advance of any program plan or update filing. *Id.* at

219. Updates would take into account savings assumptions, incorporate results from New Hampshire evaluations, identify changes in federal equipment standards, reference neighboring states' evaluations, and update relevant savings algorithms. *Id.* The Joint Utilities propose to update the TRM in coordination with the Evaluation, Measurement, and Verification (EM&V) Working Group. *Id.* at 220.

## III. POSITIONS OF THE PARTIES

The Proposal and Settlement Agreement address an array of programmatic topics including: the proposed plan targets and budgets; changes to the SBC and LDAC rates; modifications to plan programs and pilots; utility performance incentives; evaluation, measurement and verification (EM&V); savings assumptions; recovery of lost revenue; plan updates, reporting requirements, and mid-term modifications; and stakeholder involvement in future planning and review. The Settling Parties supported the Joint Utilities' continuing role as the program administrator, continuation of existing programs, and a three-year planning cycle. The Acadia Center and Department of Environmental Services did not join the Settlement Agreement. However, they expressed their support for the submitted Settlement Agreement in written correspondence and/or at the hearing. Exh. 15 at 1-3; 12/22/20 Tr. at 56. Energy opposed the Settlement.

## A. Plan Targets, Budgets, and Rates

### 1. Settlement Agreement

In the Settlement Agreement, the parties proposed electric energy savings targets of 4.5 percent of 2019 electric sales, which they estimate equates to cumulative annual MWh savings of 476,616 achieved from 2021–23. Exh. 14 at 4. The Settlement Agreement also proposes a gas energy savings target of 2.8 percent of sales, or an estimated 706,065 annual MMBtus from 2021–23. *Id.*

The Settlement Agreement modifies Eversource's budget as set forth in the Proposal from $272.5 million to $258.2 million by reducing the C&I budget by $17.6 million, increasing the residential sector budget by $7.4 million, and reducing the income-eligible program budget by $4.1 million. *Id.* at 5. The table below shows the SBC rates proposed by the Settling Parties in their Settlement Agreement, as compared to the rates initially proposed by the Electric Utilities.

**Table 6: Proposal and Settlement Agreement SBC Rate Comparison (per kWh)**

| | | 2021 | | 2022 | | 2023 | |
|---|---|---|---|---|---|---|---|
| | | Proposal | Settlement Agreement[9] | Proposal | Settlement Agreement | Proposal | Settlement Agreement |
| Eversource[10] | Residential | $0.00866 | $0.00986 | $0.00898 | $0.01070 | $0.00941 | $0.01185 |
| | C&I | $0.01270 | $0.01215 | $0.01807 | $0.01587 | $0.02432 | $0.01994 |
| Liberty[11] | Residential | $0.00719 | $0.00803 | No rate proposed | $0.01014 | No rate proposed | $0.01072 |
| | C&I | $0.00712 | $0.00836 | | $0.00993 | | $0.01211 |
| Unitil[12] | Residential | $0.00885 | | $0.01068 | | $0.01165 | |
| | C&I | $0.01146 | $0.01145 | $0.01341 | $0.01340 | $0.01613 | $0.01612 |
| NHEC[13] | Residential | $0.00838* | $0.00761* | $0.0087343* | $0.00848* | $0.008534* | $0.00825* |
| | C&I | $0.00906* | $0.00818* | $0.0103636* | $0.01050* | $0.010046* | $0.01000 |

* Rate reflects only the EE portion of the SBC rate.

[9] The Settlement Agreement requested 2021 rates be made effective as of January 1, 2021. Exh. 14 at 4
[10] Exh. 1 at 38, Exh 14 at 33.
[11] Exh. 1 at 725, Exh 25B at 1.
[12] Exh. 17 at 19, Exh 14 at 34.
[13] Exh. 1 at 773, Exh 14 at 35.

No Modifications to the LDAC rates proposed in the Proposal were included in the Settlement Agreement. Rather, the Settling Parties proposed that any necessary changes to account for collection adjustments or true-ups over the course of the 2021–23 triennium shall be filed for review and approval by the Commission. Exh. 14 at 13.

2. Energy

At the hearing, Energy expressed agreement with the Settlement's treatment of the funding structure, and with the requirement for Commission approval of any SBC or LDAC changes for over/under recoveries during the term. Exh. 8 at 32; Hearing Transcript of December 21, 2020 (12/21/20 Tr.) at 111–112.

Energy expressed concern that Eversource's C&I customers would experience rate and bill increases approximately twice that of other C&I customers. Exh. 8 at 35. Energy opined that the resulting C&I rates, with specific emphasis on Eversource's C&I Rate, would not be reasonable because they fail to embrace rate gradualism[14]. Energy further represented that the rates would not strike the proper balance between short-term impacts and long-term energy savings. 12/21/20 Tr. at 112–113, 127–128. Energy

[14] "Rate gradualism" is the concept of progressively changing rates over time to mitigate shock to customers that has been cited to by this Commission on multiple occasions. *See, e.g., Development of New Alternative Net Metering Tariffs,* Order No. 26,026 at 33 (June 23, 2017). Gradualism was embraced by all parties to the settlement agreement approved by Order No. 25,932, which contained the provision that "The Settling Parties agree that the savings goals balance the goals of capturing more cost effective energy efficiency and benefits to ratepayers with the goal of gradually increasing funding for efficiency while minimizing the impacts on all ratepayers." Exh. 1 at 8, Docket DE 15-137.

recommended revision of the customer budgets to better balance short-term rate impacts with the long-term goal of achieving cost-effective energy efficiency. Exh. 8 at 35. Energy also recommended that future SBC and LDAC rate changes should not be pre-approved. *Id.* at 36–37.

**B. Program Changes**

1. Settlement Agreement

The Settlement Agreement proposes adjustments to certain programs. Exh. 14 at 14. The Settlement Agreement increases by 1,200 the number of ratepayer-funded electric baseboard to heat pump conversions. *Id.* In advance of implementing the proposed Energy Optimization pilot, the Joint Utilities propose soliciting feedback through the proposed Stakeholder Advisory Council,[15] making an informational filing with the Commission, and to EM&V working group oversight. *Id.* Prior to offering any electric vehicle managed charging measure as a part of active demand management, under the Settlement Agreement, the Joint Utilities would solicit feedback through the Stakeholder Advisory Council and make an informational filing with the Commission. *Id.* For Eversource, the Settlement Agreement proposes shifting funds from its RFP program to the Large Business Energy Solutions program. *Id.* at 15.

[15] The Stakeholder Advisory Council proposal is discussed in greater detail in Section H-1 below.

2. Energy

Energy proposed changes to ADR weighting, stating that it should be deducted from the Value/Net Benefits component and not diminish the weighting of summer and winter peaks. Exh. 6 at 11. Additionally, Energy recommended the Joint Utilities develop and propose a performance incentive based on a percentage of shared savings associated with the ADR pilot to encourage the use of ADR resources to target monthly peaks. *Id.* at 12.

Regarding the HER program, Energy recommended an independent evaluation be included in the EM&V plan in 2021. Exh. 7 at 5. Regarding Liberty Gas's AIM program, Energy recommended ample implementation time for customers to learn about the program and opt out. *Id.* at 7. Energy noted that Liberty's aerial infrared mapping is not cost effective in its first year. *Id.* at 8.

Regarding the HEA program, Energy expressed concern about the significant increased spending limit per household from $8,000 to $20,000, recommending a new cap at $12,000. *Id.* at 10–11.

Energy also made recommendations relating to the Energy Optimization pilot, including that any customers installing heat pumps be included in the study so the relationship between reduced fuel use and increased electricity consumption can be evaluated. Energy recommended requiring the utilities to receive Commission authorization before moving from a pilot to a full program. Exh. 8 at 38. Regarding the ADR program, Energy recommended the utilities provide monthly peak load reduction data for pilots, that residential ADR

programs and C&I battery storage and thermal programs remain pilots, and that utilities be required to seek Commission approval to add new technologies (such as electric vehicles) to ADR programs. *Id.* at 39.

### C. Performance Incentives

1. Settlement Agreement

The Settlement Agreement did not modify the performance incentive framework presented in the 2021–23 Proposal.

2. Energy

Energy expressed concern with the Proposal's performance incentive methodology. Exh. 6 at 5. Energy opposed changing the minimum threshold percentage requirement for the Lifetime Savings component, Annual Savings component, and the Value Savings component from 75 percent to 65 percent. *Id.* Energy also recommended the performance incentive specific to Eversource for the SmartStart Program be eliminated or phased out based on the maturity of the program and the potential for double counting of benefits. *Id.* at 13.

### D. Evaluation, Measurement, and Verification

1. Settlement Agreement

The Settling Parties proposed that the Evaluation, Measurement, and Verification ("EM&V") working group authorized in connection with the 2018-2021 triennium should continue through 2023. Exh. 14 at 9. The Settling Parties stated the working group should consist of representatives of the Joint Utilities, Energy representatives, a consultant chosen by Energy (paid for out of EERS funds), and include a representative of other stakeholders as chosen by

the Stakeholder Advisory Council (which the Settlement Agreement recommends forming). *Id.* The EM&V working group would be require hiring a consultant that would guide, facilitate and help bring to consensus the entire working group. Hearing Transcript of December 14, 2020 (12/14/20 Tr.) at 22. In the event the EM&V working group is unable to reach consensus on any issues after consulting with the consultant, pursuant to the Settlement Agreement, any working group member could seek a Commission determination on a specific issue or refer policy matters (as opposed to technical matters) to the Stakeholder Advisory Council, which in turn could "address the issue as appropriate." Exh. 14 at 9.

2. Energy

Energy recommended the EM&V Working Group use its consultant to resolve any disputes between the stakeholders, and if they do not agree with the consultant's resolution, the Commission should resolve remaining disputes. Exh. 8 at 40. Energy supported the settlement provisions relating to the EM&V Working group, assuming Energy continues to have the right to supervise the billing of the EM&V consultant. 12/21/20 Tr. at 197–200. Energy supported the consultant's role in resolving non-consensus issues, but recommended the Commission not adopt the ten-day period proposed in the Settlement Agreement. *Id.*

### E. Savings Assumptions

1. Settlement Agreement

The Settlement Agreement proposes a Non-Energy Impacts adder for the secondary cost-effectiveness test. Exh. 14 at 6. For natural gas utilities, the adder is for residential and C&I sectors. *Id.* For electric utilities, the adder would be 25 percent for the residential sector (excluding the income-eligible program), and 10 percent for the C&I sector. *Id.*

Net-to-gross adjustments are used to account for the fact that some customers would have implemented EE measures without incentives or make EE investments due to the influences of the program without directly participating in programs. The Settlement Agreement proposes applying a net-to-gross factor to C&I lighting of 94 percent in 2021, 89 percent in 2022, and 84 percent in 2023. *Id.* at 7. The EM&V working group would also be charged with identifying additional measures to which net-to-gross factors should be applied. *Id.*

Realization rates are used to account for the difference between predicted and actual energy savings. The Settlement Agreement proposes applying new realization rates to certain programs. Under the Settlement Agreement, realization rates would be set at 90 percent for C&I, custom large business, small business, and municipal program electric non-lighting measures; and 87 percent for C&I custom large business and small business program gas measures. *Id.* at 8. Additionally, a New Hampshire-specific C&I impact evaluation of the Large Business Energy Solutions program would be

completed by the end of the first quarter of 2022, and a C&I custom impact evaluation would be completed triennially. *Id.*

The Settling Parties propose applying the 2018 AESC values to 2021 and the 2021 AESC values to 2022 and 2023. *Id.* at 12. Under the Settlement Agreement, the Joint Utilities would file amended attachments and benefit cost models to account for the AESC update by September 1, 2021. *Id.*

2. Energy

For Non-Energy Impacts in the "Secondary Granite State Test," Energy recommended the gas utilities use a 15 percent adder for residential and C&I programs (excluding the low-income programs), and that the electric utilities use a 25 percent adder for residential programs (excluding the low-income programs) and a 10 percent adder for C&I. Exh. 8 at 31–32. At hearing, Energy expressed agreement with the settlement's treatment of non-energy impacts. 12/21/20 Tr. at 111–112.

Energy agreed with the Settlement Agreement's treatment of net savings assumptions, with an exception for a subset of C&I lighting. 12/21/20 Tr. at 129. Energy recommended incorporation of a net savings figure for C&I downstream lighting offerings, such as non-networked TLEDs, that is similar to the midstream lighting offerings. Exh. 8 at 22–23.

Energy recommended that a realization rate of 85 percent for C&I custom gas programs and 85 percent for C&I custom non-lighting electric programs be applied for planning purposes until the completion of the large C&I impact evaluation planned for 2021–23 can be completed. *Id.* at 24–25.

Energy recommended the Commission consider a transition to the use of industry standard practice (ISP) baselines, as informed by the results of the pending evaluation. Exh. 8 at 23. At hearing, Energy expressed agreement with the settlement's treatment of the pending ISP evaluation. 12/21/20 Tr. at 111–112.

Energy advocated for an evaluation of the HER and AIM programs. Exh. 7 at 13. Energy expressed support at hearing for the Settlement Agreement's treatment of the planned behavioral program evaluations. 12/21/20 Tr. at 111–112.

**F. Lost Base Revenue**

1. Settlement Agreement

The Settling Parties proposed a method for calculating planned and actual Lost Base Revenue (LBR) with six criteria. The utilities collecting LBR shall:

1) employ the terminology set forth in the LBR working group report of August 29, 2018;
2) adhere to a quarterly reporting requirement;
3) apply 100 percent of the calculated monthly savings using the paid date;
4) cease accruing lost base revenues in the first month following the effective date of any decoupling mechanism;
5) use the average distribution rate in effect at the time of the triennial plan filing, or as updated by Commission order during the term, for planning purposes, while using the actual rate in effect at the time of the reconciliation filing for reconciliation purposes; and
6) determine carrying costs on LBR over and under recoveries using the prime rate, compounded monthly.

Exh. 14 at 10.

2. Energy

Energy highlighted inconsistencies in the approaches taken by different utilities in calculating LBR during the first month of a new measure's installation and recommended one-half of the calculated monthly savings be used consistently in such circumstances. Exh. 8 at 15–16. In cases where decoupling has not been implemented, Energy recommended installations installed prior to and during the test year should not be factored into the LBR. *Id.* at 16. Energy recommended that for planning purposes in calculating LBR the utilities use the distribution rate in effect at the time of the filing and for reconciliation purposes the utilities use the rates in effect for the installation period. *Id.* Energy recommended that the utilities use and apply the prime interest rate to the cumulative LBR balance. *Id.* Energy also incorporated recommendations made in an LBR working group report supporting the utilities plan to use average distribution rates calculated by sector and further recommended that for EE measures that increase electric energy usage be subtracted from LBR. *Id.* Last, Energy opined that ADR program results should not be included in LBR calculations because the purpose of the ADR program is to reduce peak load and shift load, not reduce distribution or customer peaks. *Id.* at 16–17.

**G. Plan Updates, Reporting, and Mid-Term Modifications**

1. Settlement Agreement

The Settlement contained modifications to the updating, reporting, and mid-term modification terms contained in the 2021–23 Proposal. Exh. 14 at 11.

As a preliminary matter, the Settling Parties state that Commission approval of the 2021–23 Proposal shall constitute the adoption of a plan for the entire three years. *Id.* The Settling Parties proposed that certain mid-term modification triggers and review and oversight by the Commission contained in the 2021–23 Proposal be removed and transferred to the Stakeholder Advisory Council. *Id.*

2. Energy

Energy recommended greater oversight by the Commission than the Settlement Agreement provides. Regarding planning structure, Energy recommended the utilities file with the Commission any changes to savings and cost-effective analysis based on recent studies or changes in assumptions, including filing updates resulting from the anticipated spring 2021 AESC study update within a few months of the completion of the study. Exh. 8 at 35–36. Energy further recommended that the utilities file annual updates to the cost-effectiveness analysis when assumptions change, and that the notification requirements remain the same as in the 2018–20 plan. *Id.* at 36–37. Lastly, regarding future planning, Energy recommended that the planning and stakeholder engagement structure used to develop plans and plan modifications should allow full and forthright participation of all potential participants in the litigated process, including Energy. *Id.* at 40. Energy recommended that the next three-year plan be proposed by April 1, 2022, and presented to the Commission no later than July 1, 2023. *Id.*

### H. Planning and Review - Stakeholder Advisory Council

1. Settlement Agreement

The Settlement Agreement proposed a Stakeholder Advisory Council to serve as the stakeholder forum throughout the implementation of the 2021–23 Proposal and as the stakeholder forum associated with planning additional ratepayer-funded programs beginning in 2024. Exh. 14 at 15. The initial members of the Stakeholder Advisory Council would consist of a representative of each of the Joint Utilities, Commission Staff now with the Department of Energy, the Office of the Consumer Advocate, and each intervenor in Docket DE 20-092. *Id.* The Stakeholder Advisory Council would make decisions on leadership and operation by consensus, and admit new members under identified circumstances. *Id.* at 16. The Stakeholder Advisory Council would be require hiring an outside facilitator, contracted with by a utility for up to $150,000 per year, which cost would be recovered as an administrative EERS program expense and ultimately from ratepayers. *Id.* The Settlement Agreement establishes a timeline for the development of the ratepayer funding programs beginning in 2024, with a goal to present a final plan to the Commission in 2023, and, if an increase to the SBC charge is to be pursued, presentation of such increases to the Commission during the second half of 2022 for introduction at the legislature in 2023. *Id.*

2. Energy

Energy supported the proposed Stakeholder Advisory Council but noted that such groups have been overseen by the Commission in the past, and

recommended the Commission oversee the Council as a part of the instant docket. 12/21/20 Tr. at 146–147. Energy supported the hiring of an outside consultant. *Id.* at 147–148.

## IV. COMMISSION ANALYSIS

Energy efficiency plays a role in reducing consumption of electricity and gas. However, as the Commission held at the outset of restructuring, "the most appropriate policy is to stimulate, where needed, the development of market based, not utility-sponsored and ratepayer-funded, energy efficiency programs." *Electric Utility Restructuring*, Order No. 22,875 at 79 (March 20, 1998). *See also,* Order 23,574 at 10-11 (November 1, 2000) ("[t]he benefits of a retail electric market will not be fulfilled without a competitive wholesale market and a vibrant, unsubsidized energy efficiency market"); Order 25,059 at 10 (December 31, 2009) ("a transition from utility-sponsored to market-based demand-side management programs is an important policy objective"). The Proposal and Settlement before us present a stark contrast to those long-held tenets, instead proposing nearly four hundred million dollars of ratepayer-funded energy efficiency that is entirely utility-sponsored.

As explained in greater detail below, the record presented in this docket does not establish by a preponderance of the evidence that the proposed increases are just, reasonable, and in the public interest. In fact, the record does not even establish by a preponderance of the evidence that the EE program spending and related rates at their current levels are just, reasonable and in the public interest. Based upon the record and applicable law, the

Commission cannot conclude that the 2021–2023 Triennial Energy Efficiency Plan Proposal of the Joint Utilities, as well as the Settlement Agreement filed by the parties relating to the approval of that Proposal is just, reasonable and in the public interest. Specifically, the Commission has determined that, under the standards laid out below, the Settling Parties have not met their burden to prove by a preponderance of the evidence that the Settlement Agreement or Proposal meet applicable standards with respect to (1) the proposed EE program spending and resulting rate increases, (2) benefit-cost testing, (3) the LBR calculation, (4) the Performance Incentives, (5) the year-to-year budget carryforwards, (6) HEA program caps, (7) Behavioral Strategies, (8) EM&V, (9) the proposed Stakeholder Advisory Council, and (10) Commission oversight of the programs. The Commission, therefore, rejects the Settlement Agreement and Proposal in their entirety other than as specifically set forth herein and directs the Joint Utilities to prepare and submit a proposal of EE programs ("Program Proposal") including only programs that are consistent with this order.

**A. Standard of Review**

We review EERS triennial plans for conformity with the laws underlying the establishment of an EERS. The Commission has historically relied upon its authority in RSA 374:2 (public utilities to provide reasonably safe and adequate service at just and reasonable rates); RSA 378:7 (Commission required to determine and fix the utility's just and reasonable or lawful rates); RSA 378:28 (permanent utility rates shall only include a just and reasonable return on

plant, equipment, or capital improvements which the PUC finds are prudent, used, and useful); RSA 374:1 and RSA 374:4 (Commission required to keep informed of utilities' operations and their provision of safe and adequate service); RSA 374-F:3, X (restructured electric market should "reduce market barriers to investments in energy efficiency and provide incentives for appropriate demand-side management and not reduce cost-effective customer conservation" and "utility sponsored energy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers"); RSA 378:38 (electric and natural gas utilities are required to file least cost integrated resource plans); RSA 378:39 (utilities required to prioritize energy efficiency and other demand-side management resources when supply or resource options have equivalent financial costs). *See* Order No. 26,095 at 17 (January 2, 2018).

The applicable standard of review for a settlement agreement, pursuant to N.H. Admin. R., Puc 203.20(b), is whether the settlement results are just and reasonable and serve the public interest. Because it must review any settlement agreement for compliance with this standard, the Commission's role is distinct from that of the adjudicator in typical civil litigation. Even when all parties join a settlement agreement, the Commission cannot approve it without independently determining that the results comport with the applicable underlying standards. *EnergyNorth Natural Gas Inc. d/b/a National Grid NH*, Order No. 25,202 at 18 (March 10, 2011). Underlying standards in this matter include RSA 374-F:3, VI; RSA 374-F:3, X; RSA 125-O:23; and RSA 374:2.

When the Commission rejects a settlement agreement, it may order the settling parties to renegotiate those provisions that fail to meet the standard, or it may reach its own conclusion as to those matters and issue a final order pursuant to RSA 363:17-b.

Legal basis for EERS Framework

RSA 374-F:3, VI, requires benefits for all consumers, and authorizes the SBC in furtherance thereof:

> Restructuring of the electric utility industry should be implemented in a manner that *benefits all consumers equitably and does not benefit one customer class to the detriment of another*. Costs should not be shifted unfairly among customers. A nonbypassable and competitively neutral system benefits charge applied to the use of the distribution system *may* be used to fund public benefits *related to the provision of electricity*. Such benefits, *as approved by regulators*, may include, but not necessarily be limited to, programs for low-income customers, energy efficiency programs. . . [P]rior approval of the New Hampshire general court shall not apply to the energy efficiency portion of the system benefits charge if the increase is authorized by an order of the [public utilities] commission to implement the 3-year planning periods of the Energy Efficiency Resource Standard framework established by commission Order No. 25,932 . . .

(Emphasis added). Order No. 25,932 (August 2, 2016) is a 65-page order that establishes an EERS "framework within which the Commission's energy efficiency programs shall be implemented" Order No. 25,392 at 1. Among other things, Order 25,392's framework requires the Commission's advance approval of program spending. *Id.* at 59. It further requires that such spending will only be approved to the extent that it is just, reasonable, and least cost. *Id.*

RSA 374-F:3, VI gives the Commission broad discretion regarding approval of the benefits to be provided by the SBC, including energy efficiency

programs. This statutory framework and the Commission's subsequent orders clearly establish the Commission's regulatory role in approving any proposed EERS programs. Regardless of any agreement that may be reached by the parties to a Commission proceeding, RSA 374-F:3, IV requires an independent review by the Commission to ensure that proposed programs are just, reasonable, and least cost. Order 25,392 identified both avoided energy supply and cost-effectiveness tests to inform whether the total costs of energy efficiency are less than the costs of supply. *Id.* at 50–51.

RSA 374-F:3, X, provides specific guidance relating to energy efficiency:

> Restructuring should be designed to *reduce market barriers* to investments in energy efficiency and provide incentives for appropriate demand-side management and not reduce cost-effective customer conservation. Utility sponsored energy efficiency programs *should target cost-effective opportunities that may otherwise be lost due to market barriers*.

(Emphasis added). RSA 125-O:23, directs that certain RGGI auction proceeds be used for specific low-income and municipal energy efficiency programs, with the remainder to all-fuels energy efficiency programs "distributed among residential, commercial, and industrial customers based upon each customer class's electricity usage to the greatest extent practicable." RSA 374:2, requires that all charges demanded by a utility be just, reasonable, and lawful.

Finally, the Commission has long held that gradualism is "an important principle in sound ratemaking." *Dev. of New Alternative Net Metering Tariffs &/or Other Regul. Mechanisms & Tariffs for Customer-Generators*, Order No.

26,029 at 53 (June 23, 2017); *accord Hampstead Area Water Co.*, Order No. 24,626 at 8 (May 26, 2006).

**B. Application to the Proposal and Settlement Agreement**

We find that the Settling Parties failed to establish that the 2021–23 Proposal as modified by the Settlement Agreement: 1) provides benefits to all consumers and does not benefit one customer class to the detriment of another pursuant to RSA 374-F:3, VI; 2) is consistent with Order 25,932's substantive framework; 3) reduces market barriers consistent with RSA 374-F:3, X; 4) has fuel-neutral energy efficiency programs that are evenly allocated among residential and C&I customer classes pursuant to RSA 125-O:23; and 5) results in just, reasonable and lawful charges under RSA 374:2 that are least cost and in the public interest. We therefore reject the Settlement Agreement and Proposal as set forth herein.

We are mindful of the policy goals of the statutory requirements, including RSA 374-F:3, X, summarized and elaborated by the Commission in Order 23,574 (November 1, 2000). In that order, the Commission cited to order 22,875 for the propositions that:

> The most appropriate policy is to stimulate, where needed, the development of market-based, not utility sponsored and ratepayer funded, energy efficiency programs, a principle that the Legislature incorporated into RSA 374-F.
>
> [...]
>
> We believe that efforts during the transition toward market-based DSM programs should focus on creating an environment for energy efficiency programs and services that will survive without subsidies in the future.

Order 23,574 at 10-11 (November 1, 2000). We agree that "the benefits of a retail electric market will not be fulfilled without a competitive wholesale market and a vibrant, unsubsidized energy efficiency market." *Id.* at 11.

The evidentiary record in this matter established that residential electric non-participant utility customers will not receive economic benefits commensurate with the costs they would be required to pay. Exh. 4 at 37, 39, 43. Non-participant small C&I customers are, similarly, not expected to see benefits commensurate with the costs they would be required to pay. *Id.* at 38, 40, 44. The large difference in proposed SBC rates for residential and C&I customers highlights the fact that C&I customers fund programs that produce the majority of lifetime kWh savings, while residential customers fund a suite of programs that do not produce the same economic benefits to ratepayers.[16] This appears to be due in part to the residential suite of programs containing all fuel-neutral EE programs, where most of the projected benefits do not relate to electric energy consumption.[17] Exh. 1 at 28, Table 1-4.

The evidentiary record in this matter also fails to establish that the suite of EE program offerings is least cost. The Joint Utilities do not demonstrate the selected energy efficiency programs were evaluated on a similar basis to supply-side resources or market purchases. Rather, the market potential study

---

[16] *See* Exh. 1 at 584 (Proposal's residential program budget of $141,398,758 projected lifetime savings of 741,591,853 kWh, as compared to Proposal's C&I program budget of $179,856,684 projected lifetime saving of 5,631,884,304 kWh).

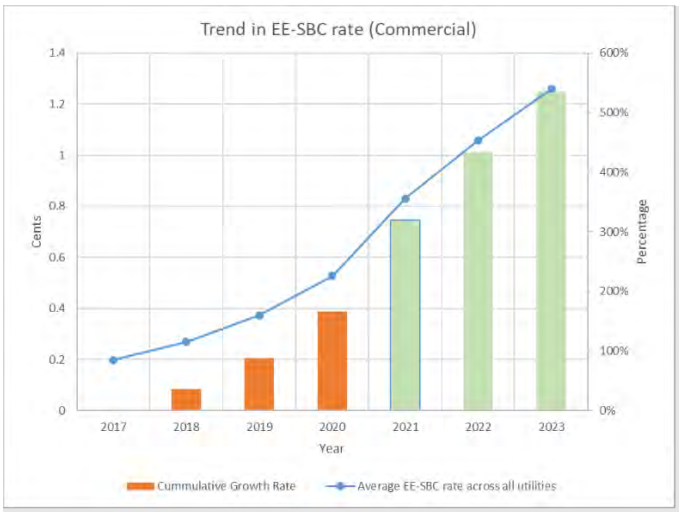
[17] Pursuant to RSA 125-O:23, RGGI auction proceeds are directed to low-income fuel neutral programs, such as HEA

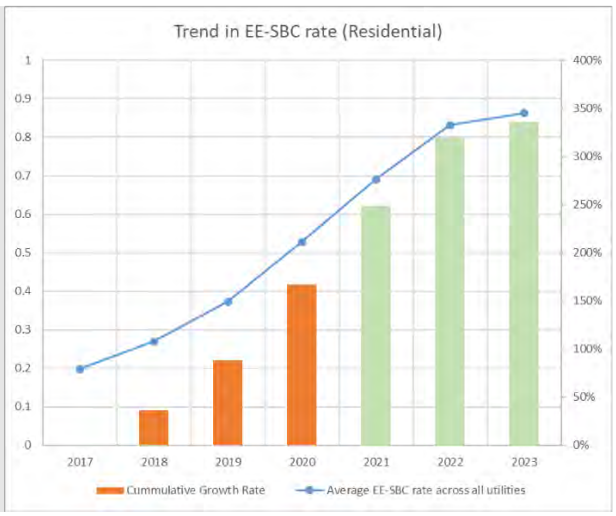
required Order 25,932 to be utilized in the Joint Utilities' future Least Cost Integrated Resource Plans was introduced into evidence as a part of Exhibit 36, and was referenced during testimony multiple times for the proposition that higher savings scenarios would occur under higher spending modes. Hearing Transcript of 12/10/20, a.m., at 60, 78–79, 82; 12/16/20 Tr. at 67, 76–77. Because the record does not contain direct comparisons of cost of energy savings to supply alternatives, or information on how the program portfolios were maximized to achieve economic benefits, we find that the least cost showing requirement in from Order 25,392's framework has not been adequately demonstrated, and that the market potential study does not, on its own, justify an escalation in EE programing.

**C. Application to EE Portion of SBC rates**

We have carefully reviewed the proposed spending plans and the modeling assumptions provided in support of the proposed nearly $400,000, 000 in spending. As Energy pointed out, the transition to an EERS in 2018 resulted in rapidly increasing budgets and rates with significant rate impacts to ratepayers. *See* Exh. 8 at 10. In 2017, the Energy Efficiency portion of the SBC charge was 0.198 cents/kWh. Upon implementation of the EERS, in 2018, the rates jumped to 0.275 cents/kWh, .373 cents/kWh in 2019, and 0.528 cents/kWh in 2020, a 167% increase in only 3 years. In the current Proposal, the proposed rates surge further to 1.259 cents/kWh for C&I customers and

.863 cents/kWh for residential customers by 2023, representing cumulative 536% and 336% increases since 2017, respectively.[18]




We find that such drastic increases, unequally allocated between rate classes, are not reasonable and are inconsistent with the principle of gradualism in ratemaking. The Settling Parties have, moreover, failed to show that these increases provide equitable benefits to all consumers. The focus and intent of RSA Ch. 374-F and least cost planning is the minimization of consumer costs for energy supplies and services. *See Appeal of Algonquin Gas Transmission,* 170 N.H. 763, 774 (2018) ("Pursuant to its plain language, and reading the statute as a whole, we discern that the primary intent of the legislature in enacting RSA chapter 374-F was to reduce electricity costs to consumers.")

[18] The EE portion of the SBC charge was same across all utilities until 2020. The proposed Triennial EE portion of the SBC charges are for the first time different across the electric utilities. The noted 2023 EE portion of the SBC charges is the simple average of the EE portions of the SBC charges proposed by the electric utilities in the Proposal as modified by the Settlement Agreement. The cumulative growth rates for the 2021-23 Triennial years are shown in green bars to differentiate them from growth rates that are historical.

As already noted above, the Commission is obligated under RSA 374-F:3, VI to conduct its own independent analysis of EE programs, regardless of what the parties may have agreed to. Because the Settling Parties have failed to demonstrate by a preponderance of the evidence that their proposed increases are reasonable, just, and in the public interest, the Commission authorizes energy efficiency program spending at an overall level consistent with the 2018–20 Plan. While the overall level of the 2021–23 plan will be similar to the 2018–20 plan, consistent with the Commission's longstanding preference for gradualism in ratemaking, the rates set by the Commission below will descend gradually year-on-year until they return to a reasonable level, and transition toward market-based programs following the schedule laid out below.

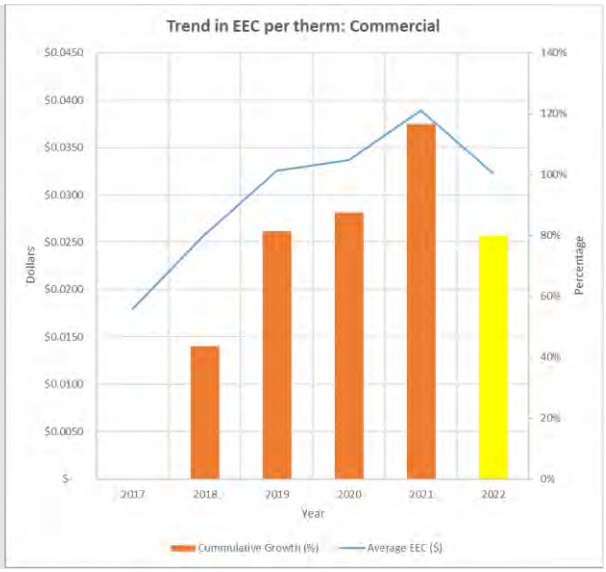
In addition, the Settling Parties failed to establish that the proposed different SBC rates for residential and C&I rate classes are appropriate, and do not unreasonably benefit one class at the expense of the other. As a result, the Commission sets maximum SBC rates that are the same across residential and C&I rate classes, as has always been the case. The Commission hereby sets the maximum Energy Efficiency portion of the SBC rate for all rate classes to 0.528 cents/kWh in 2021, 0.373 cents/kWh in 2022 and 0.275 cents/kWh in 2023. To the extent any of the Joint Utilities lack sufficient Commission-approved programs to fund with SBC rates, they shall reduce their charged SBC rates accordingly.

### D. Application to EE Portion of LDAC rates

The LDAC rates in the 2021–23 Proposal were implemented pursuant to Order Nos. 26,419 (October 30, 2020), 26,420 (October 30, 2020), and 26,421 (October 30, 2020) before hearings began in this matter, subject to reconciliation following a decision here. The Joint Utilities asserted in the 2021–23 Proposal that "the LDAC rate itself is considered and approved in Liberty Gas's and Unitil Gas's utility-specific cost-of-gas filings." 2021–23 Proposal at 37. We disagree with the Joint Utilities' assertion that the EE portion of the LDAC is considered and approved in cost-of-gas filings. Cost of Gas proceedings are expedited dockets with a primary purpose of reviewing changes to commodity costs. The utility request and ultimate determination by the Commission regarding the EE portion of the rates is made in this docket. A reduction to LDAC charges in this docket could be reconciled through subsequent cost-of-gas filings. We note that the EE charge (EEC) within the LDAC is traditionally updated in COG filings for effect on November 1 of each year, therefore EEC rates are not implemented on a calendar year basis.

The average LDAC rates across utilities, while not rising as rapidly as the SBC rates, still shows high growth from 2017, cumulatively 79% for Residential and 80% for C&I since 2017.[19]

[19] The yearly figures in the graphs are the simple averages of the EECs for EnergyNorth and Northern for the respective years. The 2022 figures are shaded in yellow as they represent proposed EECs by the Gas Utilities for effect November 1, 2021, in DG 21-130 and DG 21-131.


As with the SBC rates, we find that such large increases are not supported by the record, are not reasonable, and are inconsistent with the principles of gradualism in ratemaking.

Keeping in line with the established principles of just and reasonable rates, including gradualism, the Commission sets the maximum EE portion of the LDAC rate for the Gas Utilities at a level consistent with the prior Triennial Plan. We set the rates for December 1, 2021 through October 31, 2023, on a downward trend to more reasonable rates. Beginning December 1, 2021, the maximum EE portion of LDAC rates for the Gas Utilities is hereby set at $0.0476 per therm for Residential customers and $0.0326 for C&I customers. Beginning Nov 1, 2022, the maximum EE portion of LDAC rates for the Gas Utilities are set at $0.0475 per therm for Residential customers and $0.0258 for C&I customers. To the extent either of the Gas Utilities lack sufficient Commission-approved programs to fund with LDAC rates, they must reduce their charged LDAC rates accordingly.

### E. Benefit-Cost Testing

The Commission finds the "Granite State Test" is overly dependent upon subjective factors such that any desired outcome could potentially be obtained from its application. As such, it cannot be solely relied upon for benefit-cost testing. Further, the Granite State Test and its growing complexity cannot be expected to be reasonably understood by the general public. At the level of spending that is contemplated, the ratepayers are entitled to a fully objective and understandable measure of the cost-effectiveness of the proposed programs. Going forward, including for identification of programs to be submitted in the Program Proposal as directed by this order, the Parties are therefore also required to calculate and report benefit-cost using the Total Resource Cost (TRC) test that was historically used until the Granite State Test was recently established.

### F. Lost Base Revenue

The Commission has weighed the evidence presented by the Settling Parties and by Energy with respect to LBR and finds that, as the Settling Parties agree, the utilities collecting LBR should apply consistent methods for calculating planned and actual LBR. We note that the Settlement Agreement incorporates several of Energy's recommendations,[20] and we approve those

[20] Exh. 14 at 10 lists six methods the Settling Parties agree to implement to calculate planned and actual LBR: "(1) employ the terminology set forth in the LBR working group report of August 29, 2018 to ensure that the methods used for actual LBR collections are consistent, (2) continue to file quarterly reports with the Commission, using a consistent format, (3) apply 100 percent of the calculated monthly savings using the paid date, which is on average two months after the install date, to account for the fact that not all installations are made on the first day of each month; (4) cease accruing lost base revenues in the first month following effective date

provisions of section F of the Settlement Agreement that are not inconsistent with Energy's recommendations, and further direct that LBR should: (1) include consistent calculation of LBR during the first month of a new measure's installation based on one-half of the calculated monthly savings; (2) where LBR is collected following a rate case where decoupling is not implemented, installations prior to and during the test year should not be factored into the LBR; (3) relating to average distribution rates used in calculating LBR, the distribution rate in effect at the time of the filing should be used, and for reconciliation purposes, the utilities should use the rates in effect for the installation period; (4) set and apply the prime interest rate to the cumulative LBR balance; (5) be consistent with the utilities plan to use average distribution rates calculated by sector; (6) discount "found revenues" from EE measures that increase electric energy usage, and (7) ADR program results should not be included in the LBR calculation as the purpose of that program is to reduce peak load and shift load, not reduce distribution or customer peaks.

### G. Performance Incentives

The Commission initially allowed performance incentives on a *temporary* basis for:

> …utility-sponsored programs that would either not be provided by the market or programs that will help the

---

of any decoupling mechanism approved by the commission, (5) use the average distribution rate in effect at the time of the triennial plan filing, or as updated by Commission order during the term, for planning purposes, while using the actual rate in effect at the time of the reconciliation filing for reconciliation purposes, and (6) determine carrying costs on LBR over and under recoveries using the prime rate, compounded monthly."

> transition to non-subsidized energy efficiency programs. The utility must demonstrate that the program for which it seeks incentive payments offers customers extraordinary benefits and will enhance the move toward either non-subsidized DSM programs or market-based energy efficiency. These benefits should be over and above what would accrue to ratepayers with prudent utility management.

Order No. 23,574 at 20 (November 1, 2000). Upon reviewing the record, the Commission has determined, taking into account the implementation of rate mechanism options including Decoupling, LBR, and LRAM, as well as the maturity of programs that yield measurable savings, that Performance Incentives are no longer just and reasonable and in the public interest in the context of ratepayer funded EE.

Because the parties have not demonstrated that the existing Performance Incentives meet the applicable standards, including RSA 378:7, 378:28, 374-F:3, and 378:39, we order that the Performance Incentives be eliminated effective December 31, 2021. We direct that the Performance Incentive funding that would have otherwise accrued to the utilities shall be redirected in its entirety to fund additional Energy Efficiency programs. As indicated in the 2021–23 Proposal, the original performance incentive budget for this triennium was in excess of $20,000,000, we therefore expect this directive to result in significant increased funding for EE programs. As indicated above, the utilities already receive LBR. LRAM, or Decoupling, and receive administrative costs[21]

[21] Internal utility costs associated with program design, development, regulatory support, and quality assurance (including employee labor, benefits, expenses, materials, and supplies); external costs associated with program administration (including contractors and consultants used in support of program design, development, regulatory support, and quality assurance);

and are thus sufficiently compensated. As a result of eliminating the cost, management, administration, and complexity of the Performance Incentive, the benefits will accrue to the ratepayer.

### H. Year-to-Year Budget Carryforwards

Year-to-year budget carryforwards do not properly balance the ratepayer's interest in paying the lowest rates possible because they result in ratepayer funds being held without commensurate benefits accruing to ratepayers in a timely manner. We therefore do not agree with the Settling Parties that benefits accrue to the public by its continuation. In fact, quite the opposite, year-to-year budget carryforwards result in ratepayer funds being held by Joint Utilities instead of being returned to the ratepayer.[22]

Where the actual amount collected is greater than the amount spent during any given year, the difference shall be returned to the ratepayer via bill credit by March 31 of the following year, where there is not a specific statutory obligation to carry forward funds. The Utility's shall submit a report in the instant docket by March 31 following the program year showing any carryforward. If the Utility has spent more than the budget, or actual amount

---

service costs such as technical audits, employee and contractor labor to install measures, expenses, materials, and supplies; internal implementation services costs associated with delivering programs to customers (including labor, benefits, expenses, materials, and supplies); marketing, advertising, trade shows, toll-free numbers, and NHSaves website costs; and evaluation costs for EM&V activities including labor, benefits, expenses, materials, supplies, consultants, contractors, and tracking systems. Exh. 1 at 33.

[22] We note the Joint Utilities' rebuttal testimony states that uniform funding rates between sectors and utilities would likely result in larger annual carryforwards. S*ee E*xh.13 at 17. Any increased likelihood of potential carryforwards resulting from more uniform EE charges does not displace our conclusion that ratepayer funds should be returned to ratepayers in a timely manner.

collected, in any program year, whichever is less, the cost shall be borne by the Utility's shareholders.

**I. HEA Program Caps**

The HEA program is currently capped at $8,000 per project. The Proposal seeks not only to increase that cap to $20,000 per project, but also to allow for exceptions to the cap. The Settling Parties have not shown by a preponderance of the evidence that such an increase is just and reasonable as is required of all EE program spending. Moreover, exceptions to this cap will result in unequal benefits to program participants. These proposed changes cannot be considered just and reasonable and are therefore rejected.

**J. Behavioral-Based Strategies**

The parties failed to meet their burden with respect to the aerial heat mapping program. The Parties may propose cost effective consumption data provision programs to be funded through the EE program when they resubmit their proposed programs, but those programs may not include the aerial mapping program.

**K. Program Oversight**

Since the establishment of the EERS program, Commission oversight has been key to "ensur[ing] that the programs and spending of ratepayer funds are just, reasonable, and least cost." Order No. 25,932 at 59. It is, moreover, the Commission's ultimate duty to determine whether utility rates and charges are just, reasonable, and lawful. RSA 374:2, Puc 103.01(d). As explained below, the

Commission is not permitted to abdicate its statutory responsibility for oversight as requested.

The Proposal and Settlement Agreement propose significantly reducing regular oversight by the Commission despite requesting a massive rate increase and significant additional burden to the ratepayers. This proposal is not reasonable. In light of the significant ratepayer funding provided in the current plan and approved by this order, a reduction in oversight is not reasonable or appropriate. The Commission will, therefore, continue to directly oversee the implementation of the 2021–23 plan and related programs to ensure they are just, reasonable, lawful and cost-effective, including a detailed review of administrative costs, requiring that any proposed pilot program receive Commission Approval to commence, and further requiring that any existing pilot program receive Commission approval to transition to a regular program. With respect to the 2021 AESC update and the Technical Reference Manual updates, we direct the Joint Utilities to file a copy of any AESC update released in 2021 into the instant docket.

We find the expenses associated with the NHSaves program to be of particular concern. The Proposal lists six categories of expenses: 1) Internal Administrative costs; 2) External Administrative costs; 3) Customer Rebates and Services; 4) Internal Implementation Services; 5) Marketing; and 6) Evaluation. Exh. 1 at 33. The sum of administrative costs ($9,549,829), implementation services ($22,138,735), marketing ($10,718,460), and EM&V ($15,892,143) totals $58,299,167, more than 15 percent of total expenses.

Exh. 2 at 352. Ratepayer funding spent on these expenses reduces funding for EE programs that directly benefit ratepayers.

The Commission will closely monitor the total of these expenses and costs going forward to ensure such costs are kept to a minimum. To that end, the Joint Utilities shall file annually, by March 31, financial information for the prior calendar year for the Commission to review the programs. The Joint Utilities shall provide calculations on program expenditures, broken down by categories including, but not limited to, internal administrative costs, costs associated with external consultants, and costs paid to subsidiaries. Additionally, in the same filing, the Joint Utilities shall provide calculations on the corresponding dollar savings per unit of energy estimated to have been produced by each program during the prior program year. This information shall be broken out by participating and non-participating ratepayers, by ratepayer class (Residential or Commercial & Industrial). The calculations on savings should be for gross savings, with the expenditures on each program listed separately. With the filing, the utilities shall provide all supporting documentation, in live excel formats, on the discount rates used each year to model these savings going forward, the estimated future prices of energy, as well as any additional assumptions used in these calculations. Finally, the Utilities shall include a written narrative for each of the calculations, explaining what market barriers would prevent the funding of each program if the EE portion of the SBC did not fund them.

**L. Evaluation, Measurement, and Verification**

The Settling Parties proposed that the EM&V working group and related spending authorized in the 2018 through 2020 Plan should continue through 2023. Exh. 14 at 9. We note that spending related to EM&V has risen to an unreasonable level of nearly $16 Million dollars. Exh. 2 at 352. According to the Proposal, this spending includes any studies identified by the EM&V Working Group and the Strategic Evaluation Plan, the AESC Study, ISO certification of utility demand resources, third-party consultants, updating and maintaining the TRM, program research, professional associations, utility tracking system upgrades and maintenance, quarterly and annual reporting, program modeling software, and other miscellaneous spending. Exh. 1 at 234. The EM&V working group shall submit a plan, including scope and cost, for review and approval to the Commission in advance of any costs being incurred related to EM&V during this triennium. We require spending to be significantly reduced in any EM&V proposal for 2022 and for all EM&V work to be completed by Dec 31, 2022.

**M. Stakeholder Advisory Council**

With respect to the specific request for the Commission to authorize a Stakeholder Advisory Council, we note that the EESE Board and its EERS stakeholder group currently fill this role. We understand that one of the reasons for the request to create the Council related to distinctions between roles of Commission Staff and other stakeholders in the development of EERS proposals and ongoing evaluation of program implementation. The concerns

regarding roles have been eliminated by the creation of the Department of Energy. Further, the EESE Board was created by the Legislature. The Commission will not supplant its role and authority here. We also note that while the majority of costs come from the C&I sector in the Proposal and Settlement Agreement, the Stakeholder Advisory Council as proposed does not have a single C&I representative proposed. Accordingly, we find that the need for and structure of the proposed Stakeholder Advisory Council is not supported by the record and we therefore do not approve the request.

**N. Other matters**

The Proposal and Settlement Agreement contain only ratepayer-funded programs, despite the clear mandate in 374-F:1, I to "harness the power of competitive markets," and 374-F:3, X to remove market barriers. We also note that the EERS framework included a requirement that private funding be pursued and utilized to the greatest extent possible. Order 25,932 at 58. The Joint Utilities' Program Proposal must include programs that are not solely ratepayer funded, programs that reduce market barriers, and a benefit/cost analysis using both GST and TRC.

The Joint Utilities and stakeholders shall calculate annual budgets for the remainder of the 2022 and 2023 triennium based on the rates established herein. In so doing, the Joint Utilities are directed to identify the programs which provide the greatest energy efficiency savings at the lowest per unit cost with the lowest overhead and administrative costs for further implementation, taking care to ensure statutory compliance with the specific directives

contained in RSA 125-O:23 and submit that Program Proposal to the Commission for review and approval. The Joint Utilities Program Proposal shall include, in live spreadsheet formats, all calculations relied upon, including the discount rate utilized, to determine which programs provided the greatest energy efficiency savings at the lowest per unit cost. These Program Proposals shall be filed by December 15, 2021.

**Based upon the foregoing, it is hereby**

**ORDERED**, that the Joint Utilities' request for approval of the proposed 2021–2023 New Hampshire Statewide Energy Efficiency Plan is hereby DENIED; and it is

**FURTHER ORDERED,** that the Settling Parties' request for approval of the 2021–2023 New Hampshire Statewide Energy Efficiency Plan as modified by that Settlement Agreement, is hereby DENIED as set forth herein; and it is

**FURTHER ORDERED**, that the System Benefits Charge rates established as set forth herein above are hereby approved for 2021, 2022, 2023; and the Energy Efficiency Portion of the LDAC rates established herein are hereby approved for effect December 1, 2021 and November 1, 2022, respectively; and that the Utilities shall file annotated and clean versions of their compliance tariffs within 30 days of this order, and it is

**FURTHER ORDERED**, that the Utilities collecting LBR shall recalculate their LBR rates in accordance with the Energy methodology adopted in this order, and it is

**FURTHER ORDERED,** that the Joint Utilities shall file their updated 2021 Energy Efficiency budgets, as well as their 2022 and 2023 Energy Efficiency budgets using the rates established in the body of this order, and shall include all program and cost items larger than $500,000 in live spreadsheets, by December 15, 2021; and it is

**FURTHER ORDERED,** that for approval of 2022 EE program spending, the Joint Utilities shall submit their Program Proposal within the proposed budget as set forth herein above, including proposed spending by program and each program's corresponding benefit/cost calculations, in live spreadsheets as outlined in this Order, by Dec 15, 2021; and it is

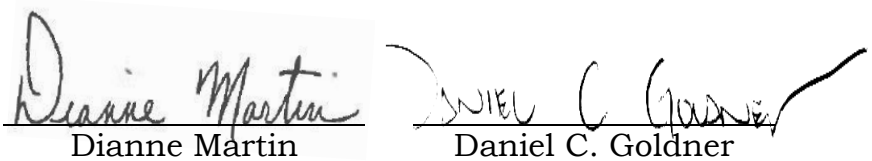
**FURTHER ORDERED,** that the Joint Utilities shall file annually, by March 31, financial information for the prior calendar year adequate for the Commission to review budgeted verses actual funding, budgeted verses actual spending, including each program and overhead expenditures, and corresponding program energy savings, as outlined in this order, using summary tables and live spreadsheets; and it is

**FURTHER ORDERED**, that carryforwards are eliminated except where there is a specific statutory obligation to carry forward funds: and it is

**FURTHER ORDERED**, that the Joint Utilities shall submit program oversight filings by March 1 of each calendar year as discussed in the body of this order; and it is

**FURTHER ORDERED**, that the EM&V Working Group shall submit a plan as described herein above in advance of incurring any EM&V costs, as discussed in the body of this order.

By order of the Public Utilities Commission of New Hampshire this twelfth day of November, 2021.



Dianne Martin
Chairwoman

Daniel C. Goldner
Commissioner

# Service List - Docket Related

***Docket# : 20-092***

***Printed: 11/12/2021***

Email Addresses

---

ClerksOffice@puc.nh.gov
asbury@unitil.com
roshan.bhakta@eversource.com
kelly@cleanenergynh.org
brian.d.buckley@energy.nh.gov
bill.bullock@eversource.com
rburke@nhla.org
john.butler@eversource.com
carroll@unitil.com
richard.t.chagnon@energy.nh.gov
brandy.chambers@eversource.com
jessica.chiavara@eversource.com
rclouthier@snhs.org
gary.m.cronin@energy.nh.gov
kristi.davie@eversource.com
mdean@mdeanlaw.net
paul.b.dexter@energy.nh.gov
downesm@unitil.com
kimberly.dragoo@libertyutilities.com
jay.e.dudley@energy.nh.gov
tracy.dyke-redmond@eversource.com
stephen.r.eckberg@energy.nh.gov
steven.elliott@eversource.com
eemerson@primmer.com
sam@cleanenergynh.org
thomas.c.frantz@energy.nh.gov
tomas.fuller@eversource.com
genestj@unitil.com
michael.goldman@eversource.com
gouldingc@unitil.com
dhill@energyfuturesgroup.com
miles.ingram@eversource.com
jarvis@unitil.com
maureen.karpf@libertyutilities.com

nkrakoff@clf.org
donald.m.kreis@oca.nh.gov
clane@synapse-energy.com
marc.lemenager@eversource.com
elevin@veic.org
jmarks@acadiacenter.org
mcdonald@optenergy.com
nelson.medeiros@eversource.com
frank.melanson@eversource.com
erica.menard@eversource.com
Mosenthal@OptEnergy.com
elizabeth.r.nixon@energy.nh.gov
amanda.o.noonan@energy.nh.gov
ocalitigation@oca.nh.gov
rebecca.ohler@des.nh.gov
palma@unitil.com
katherine.peters@eversource.com
tina.poirier@libertyutilities.com
ralph.prahl@gmail.com
Maureen.l.reno@oca.nh.gov
bryant.robinson@eversource.com
Melissa.Samenfeld@libertyutilities.com
michael.sheehan@libertyutilities.com
david.simek@libertyutilities.com
karen.sinville@libertyutilities.com
christopher.skoglund@des.nh.gov
skumatz@serainc.com
eric.stanley@libertyutilities.com
atakasugi@synapse-energy.com
taylorp@unitil.com
heather.tebbetts@libertyutilities.com
stower@nhla.org
jacqueline.m.trottier@energy.nh.gov
jvanrossum@clf.org
david.k.wiesner@energy.nh.gov
kiersten.williams@eversource.com
wirtino@comcast.net
woodsca@nhec.com
twoolf@synapse-energy.com

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 20-092**

**ELECTRIC AND GAS UTILITIES**

**2021–2023 Triennial Energy Efficiency Plan**

**Order Addressing Motions on the Composition of the Commission and Motions for Rehearing, Clarification, and/or Stay of Order No. 26,553**

**O R D E R N O. 26,560**

**January 7, 2022**

## I. Introduction

This order consolidates and addresses a series of motions filed by parties to this docket, following the Commission's issuance of Order No. 26,553 (November 12, 2021) on the 2021–2023 Triennial Energy Efficiency Plan. Among other things, Order No. 26,553 established energy efficiency rates for the System Benefits Charge and Local Delivery Adjustment Charge, rejected the proposed settlement and energy efficiency plan that would have cost New Hampshire ratepayers nearly $400 million over the course of the triennium, and discontinued the utility performance incentive and carryforward beginning January 1, 2022. The order further required the utilities to file new budgets and program proposals consistent with the Commission's order.

The various moving parties in this case have filed motions for rehearing and clarification of numerous aspects of Order No. 26,553, a request for a full commission and appointment of a special commissioner, and a motion for disqualification of one of the Commissioners. The utilities have provided the required budgets, and the Commission grants an extension until March 31, 2022, for submission of a new energy efficiency program proposal.

The Commission's specific rulings on these motions follow. Of particular note, however, the parties' motions for rehearing are premised, in significant part, upon a characterization of Order No. 26,533 as *reducing* the energy efficiency budget. Contrary to that characterization, *see, e.g.*, *LISTEN Cmty. Servs.'s Mot. for Reh'g*, at 2, when comparing the budget for the 2021–23 Triennium to 2018–2020 Triennium, the rates established in Order No. 26,533 will result in an *increase* of $4–8 million in energy efficiency program funding.[1] Also, when comparing 2021 to 2020, Order 26,533 results in an estimated increase of $4 million in program funding.

For these, and the other reasons explained in greater detail below, the parties' requests for rehearing and reconsideration are hereby denied, in part.

## II. Procedural History

### a. Background

On November 12, 2021, the Commission issued Order No. 26,553 (Order 26,553 or Order), addressing the 2021–2023 New Hampshire Statewide Energy Efficiency Plan and implementation of energy efficiency programs for the remainder of the 2021–2023 triennium. That Order set out a detailed history of the proceedings in this docket. Among other directives, Order 26,553 established energy efficiency System Benefit Charge (SBC) and Local Delivery Adjustment Charge (LDAC) rates for the remainder of the 2021–2023 triennium. Order 26,553 also modified aspects of the structure and oversight of the energy efficiency programs as proposed (Plan or

[1] Based on the Joint Utilities Dec 15, 2021 filing, the Commission estimates $180 million for gas and electric programs in the 2021–2023 Triennium compared to $176 million for the 2018–2020 Triennium budget. When the 2022–2023 Triennium gas and electric programs are compared to the 2018–2020 actuals of $172 million, the increase in program spending is approximately $8 million. The Commission used 5.12% to estimate the 2021 plan year performance incentive payment.

Proposal) by the Settling Parties,[2] and required further filings from the energy efficiency program administrators on the programming to be implemented in 2022 and 2023.

**b. Post-Order Filings**

On December 3, 2021, Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty filed a motion for immediate stay and, in the alternative, clarification of Order No. 26,553.

On December 6, 2021, the Commission issued an expedited order clarifying that, because the specifics of programming were not finalized by Order 26,553, the Joint Utilities could continue to rely on Order No. 26,440 (December 29, 2020) for authority to continue offering previously authorized energy efficiency programming until programming for 2022 and 2023 is finalized.

On December 10, 2021, the New Hampshire Electric Cooperative, Inc.; Public Service Company of New Hampshire d/b/a Eversource Energy; Unitil Energy Systems, Inc.; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty; Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty; and Northern Utilities, Inc. (together, the "Joint Utilities") filed a Motion for a Full Commission and Appointment of Special Commissioner(s).

On December 10, 2021, the Joint Utilities, the Office of the Consumer Advocate (OCA); Clean Energy New Hampshire; Conservation Law Foundation; and Southern New Hampshire Services (altogether, the "Joint Movants") filed a motion for rehearing,

[2] The Settling Parties to the Plan consisted of Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities, New Hampshire Electric Cooperative, Inc., Public Service Company of New Hampshire d/b/a Eversource Energy, Unitil Energy Systems, Inc., Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities, Northern Utilities, Inc., the Office of the Consumer Advocate, Conservation Law Foundation, The Way Home, Southern New Hampshire Services, and Clean Energy New Hampshire

clarification, and stay of Order No. 26,553 pursuant to RSA 541:3 (Joint Movants' Motion).

On December 10, 2021, the New Hampshire Department of Energy (Energy) filed a motion for rehearing and/or clarification of Order No. 26,553 pursuant to RSA 541:3 (Energy Motion).

On December 13, 2021, LISTEN Community Services (LISTEN) filed a motion for rehearing, clarification, and stay of Order No. 26,553, and joining the Joint Movants' Motion. LISTEN also filed a letter stating that it joined the Joint Utilities' request for a Full Commission and Appointment of Special Commissioner(s). Due to the similarity between LISTEN's motion and that of the Joint Movants, the Commission finds it administratively efficient to assume without finding that, for the purposes of this order, LISTEN is a "person directly affected" by the Order pursuant to RSA 541:3.

On December 14, 2021, the Commission issued Order No. 26,556. Order 26,556 suspended a number of filing requirements relating to programming while the Commission fully considered the motions for rehearing, clarification and/or stay of Order 26,553. Order 26,556 also reaffirmed the expedited order issued December 6, 2021.

On December 14, 2021, Commissioner Chattopadhyay filed a memorandum into the instant docket disclosing his prior affiliation with the Office of the Consumer Advocate and stating that he determined that mandatory disqualification was not required under any of the applicable statutory standards.

On December 15, 2021, the Joint Utilities made compliance filings in this docket consisting of overall budgets for energy efficiency programming for each year of the 2021–2023 triennium pursuant to Order 26,553. These budget proposals,

estimating revenues based on the rates established by the Order, show an overall increase to the budget as compared to the budgets approved for the first triennium of the Energy Efficiency Resource Standard of between $4-8 million in energy efficiency funding.

On December 17, 2021, the Office of the Consumer Advocate filed a Motion for Disqualification of Commissioner Chattopadhyay.

Order 26,553, Order 26,556, the various motions, and other docket filings, with the exception of any information for which confidential treatment is requested of or granted by the Commission, are posted at: https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092.html.

## III. Motion for Disqualification of Commissioner Chattopadhyay

### a. Position of the Office of the Consumer Advocate

The OCA requested that either the Commission, or Commissioner Chattopadhyay individually, disqualify Commissioner Chattopadhyay from further participation in the instant matter.

### b. Commission Analysis

Concurrently with this order, Commissioner Chattopadhyay issues a separate order denying the OCA's motion for his disqualification.

## IV. Motion for a Full Commission and Appointment of Special Commissioner(s)

### a. Positions of the Parties

The Joint Utilities, joined by LISTEN, requested a full Commission pursuant to RSA 363:17. The Joint Utilities posited that due to the significance of the issues presented in this docket and the risks associated with proceeding with two commissioners, including a possible deadlock or an unforeseen event that disqualifies one commissioner, that a full Commission is necessary going forward.

In addition, the Joint Utilities requested that the Commission apply to the Governor and Executive Council under RSA 363:20 for the appointment of one or two Special Commissioners, one who is an attorney licensed to practice law in New Hampshire to substitute for Commissioner Simpson, and a second Special Commissioner if Commissioner Chattopadhyay recuses himself.

**b. Commission Analysis**

As noted above, Commissioner Chattopadhyay has not recused himself in this matter; therefore, a majority of the Commission is present to issue this order and a majority of this Commission intends to be available for any future actions or proceedings in this matter.[3] In addition, pursuant to RSA 363:20, the Commission applied to the Governor for the appointment of a special commissioner to replace Commissioner Simpson in this matter. The request for a special commissioner is an additional step to ensure that either majority of the Commission or a full Commission will be available for any future actions or proceedings in this matter.

## V. Motions for Rehearing and/or Clarification of Order No. 26,553

### a. Positions of the Parties

#### i. Rehearing and/or Stay

The parties seeking rehearing and/or Stay of Order 26,553 have presented five distinct arguments: 1) that notice in this matter was inadequate; 2) that certain changes to program administration and oversight are retroactive in nature; 3) that a perceived departure from precedent is unreasonable; 4) that the Commission

[3] We note that a request for the full commission pursuant to RSA 363:17 is not a request for three commissioners, but a request for a quorum of the commission to preside over a matter, rather than a single commissioner or designee. *See* RSA 363:17 ("No hearing . . . shall be held or conducted *by a single commissioner* if any party whose interests may be affected shall . . . file a request in writing that the same be held or conducted *by the full commission, or a majority thereof*.") (emphasis added); *see also In re Bell Atl. N.H.*, Order No. 23,179 at 3 (Mar. 30, 1999), *In re Pub. Serv. Co. of N.H.*, Order No. 17,222 at 10 n.9 (Sept. 21, 1984).

misapplied or failed to cite to applicable legal standards; and 5) that the Order lacked evidentiary support. The Commission addresses in its analysis, below, these five arguments and the specific theories raised by the parties.

**ii. Clarification**

In addition to or in the alternative to moving for rehearing, the Joint Movants, joined by LISTEN and separately by Energy, seek clarification of certain aspects of the Order. Each request for clarification is summarized and addressed by the Commission, below.

**b. Commission Analysis**

**i. Rehearing and/or Stay**

The Commission may grant rehearing for "good reason" if the moving party shows that an order is unlawful or unreasonable. RSA 541:3; RSA 541:4; *Rural Tel. Cos.*, Order No. 25,291 (November 21, 2011); *see also Pub. Serv. Co. of N.H. d/b/a Eversource Energy*, Order No. 25,970 at 4-5 (December 7, 2016). A successful motion must establish good reason by showing that there are matters that the Commission "overlooked or mistakenly conceived in the original decision," *Dumais v. State*, 118 N.H. 309, 311 (1978) (quotation and citations omitted), or by presenting new evidence that was "unavailable prior to the issuance of the underlying decision," *Hollis Tel. Inc.*, Order No. 25,088 at 14 (April 2, 2010). A successful motion for rehearing must do more than merely restate prior arguments and ask for a different outcome. *Pub. Serv. Co. of N.H.*, Order No. 25,970, at 4–5 (citing *Pub. Serv. Co. of N.H.*, Order No. 25,676 at 3 (June 12, 2014); *Freedom Energy Logistics*, Order No. 25,810 at 4 (September 8, 2015)).

1) Adequacy of Notice

The statutory standard for notice in an adjudicative proceeding is found in RSA 541-A:31, III. RSA 541-A:31, III requires notice consisting of, among other things: (1) a statement of the legal authority under which the hearing is to be held, (RSA 541-A:31, III(b)); (2) a reference to the particular sections of the statutes and rules involved, ((RSA 541-A:31, III(c)); and (3) a short and plain statement of the issues involved ((RSA 541-A:31, III(d)). The notice provided in this matter included references to RSA 374-F:3, VI (which incorporates by reference Order No. 25,932 and its framework of authorities); RSA 374-F:3, X; RSA 125-O:23; and the just and reasonable standard applicable to rates and charges under RSA 374:2.

The various objections to the notice provided by the Commission are unavailing and do not state good cause for rehearing. The September 8, 2020, notice in this matter was broad and included whether proposed Plan programs were reasonable, cost-effective, and in the public interest, as well as whether the proposed rates are just and reasonable and comply with Commission orders. Additionally, the hearings in this matter were not limited to consideration of the settlement agreement filed by certain parties, as noted at the outset of hearings by then Chairwoman Martin. Hearing Transcript of December 10, 2020, morning session, at 8 ("We're here this morning in Docket DE 20-092 regarding the 2021 to 2023 Statewide Energy Efficiency Plan."). *See also*, Order of Notice dated September 8, 2020 ("The filing raises, inter alia, issues related to whether the proposed Plan programs offer benefits consistent with RSA 374-F:3, VI; whether the proposed Plan programs are reasonable, cost-effective, and in the public interest consistent with RSA 374-F:3, X; whether the proposed programs will properly utilize funds from the Energy Efficiency Fund as required by RSA 125-O:23;

and whether, pursuant to RSA 374:2, the Electric Utilities' and Gas Utilities' proposed rates are just and reasonable and comply with Commission orders.").

The Joint Movants' attempt to apply RSA 365:28 as a separate notice requirement is equally unpersuasive. RSA 365:28 relates to amending or modifying past Commission orders and requires notice commensurate to that provided in the original proceeding. The Order at issue here addressed requests for Commission action in this matter, entered new directives establishing rates and setting guidelines, and established procedures for future energy efficiency programming going forward. It did not amend or modify a past Commission order and RSA 365:28, therefore, does not apply.

To the extent that the parties' motions may be read to assert a deficiency of *constitutional* due process, no such process is due here. A party claiming a violation of constitutional due process rights must, as a threshold matter, show a fundamental right or liberty interest at stake. *In re R.H.*, 174 N.H. 332, 364, (2021); *Petition of Bagley*, 128 N.H. 275, 280, (1986). The various arguments relating to due process do not establish that a fundamental right or liberty interest in future ratepayer-funded energy efficiency programming exists, or that the requested rates or a presently effective rate are constitutionally protected. As such, we decline to further address any constitutional due process arguments.

2) Applicability of Order 26,553

We do not agree that the Order unlawfully made retroactive changes to programming components, including in the areas of evaluation, measurement and verification (EM&V) activities, performance incentives, carryforwards, or benefit cost testing. The Order made no retroactive changes to these aspects of ongoing energy efficiency programming in New Hampshire. The Order clearly states that performance

incentives are to be eliminated prospectively, effective December 31, 2021, *see* Order at 41; that carryforwards are to be eliminated prospectively and following reporting to the Commission, *see* Order at 42; that EM&V work is to be phased out over the course of 2022 with new expenses to be approved by the Commission, *see* Order at 46; and that the changes to benefit cost testing are to be applied prospectively to the new programming filings required by the Order. *See* Order at 39.

We do not agree with the Joint Movants' arguments that carryforwards should be continued. Requiring annual reconciliation ensures accountability for ratepayer funds, that benefits flow to ratepayers in a timely manner in exchange for their contributions, and that the Commission meets its duties as a regulator.

With respect to overspending carryforwards, however, we find that the Joint Movants have stated good cause for rehearing because NHEC does not have shareholders and the Joint Movants' argument that the rates could potentially be confiscatory was not addressed in the Order. We therefore order that, in the event NHEC, a member-owned utility, has an overspending carryforward, it shall file an explanation by April 30th following the applicable plan year that outlines the circumstances that led to the overspending and a verified statement that it will not use future SBC funds to cover the deficit. For investor-owned utilities, overspending carryforwards shall be addressed under a prudency standard on a case-by-case basis following the 2021 and 2022 plan years. In the event that an investor-owned utility incurs an overspending carryforward as identified in the March 31 annual filings required by the Order, that utility may file a separate explanation and cost recovery proposal by April 30th following the plan year. The explanation and cost recovery proposal shall be subject to an adjudicative proceeding and will be assessed under traditional prudence standards.

3) Applicability of Prior Orders

We do not agree that the arguments relating to the applicability of prior orders support rehearing. With respect to the arguments that the judicial doctrine of *stare decisis* applies or that the Commission violated RSA 365:28, both miss the mark. The doctrine of *stare decisis* does not apply because the Commission is an administrative agency vested only with statutory authorities and is "not disqualified from changing its mind...." *Appeal of Pub. Serv. Co. of N.H.*, 141 N.H. 13, 22, (1996) (quoting *Good Samaritan Hosp. v. Shalala,* 508 U.S. 402, 417, (1993)).

RSA 365:28 is a specific statutory authority relating to the alteration of past Commission orders and bears no relation to issuing a decision on the merits within a properly noticed adjudicatory proceeding. Here, the parties have proposed significant changes to prior approved energy efficiency plans, and the Commission's order is based on an adjudicative review and hearing on those proposed changes. To the extent that LISTEN's argument under RSA 365:28 can be read to dispute the Commission's interpretation of past orders, the result is the same as the analysis relating to the Joint Movants' arguments that the Commission misinterpreted legal standards, *infra*, and is unavailing. The Commission issued an order rejecting a new proposal based on its interpretation of the applicable standards, and no prior orders were modified or altered.

4) Application of Statutory Standards

We find the arguments relating to the application, interpretation, or perceived omission of statutory standards are unpersuasive and do not state good cause for rehearing. In the Order, although the Commission focused on those areas where it determined the Plan proponents did not meet their burden, it did not neglect to identify or consider any applicable statutory standards. With respect to the policy

statements raised by the Joint Movants (under RSA 378:37 and regarding the State's 10-year energy strategy), neither was functionally omitted because both are covered by the statutory standards contained in RSA 374-F:3, X ("Utility sponsored energy efficiency programs should target cost-effective opportunities….") and RSA 378:38, which specifically incorporates the policy contained in RSA 378:37, were cited to in the Order at 29. The Joint Movants also failed to show that they were prejudiced by a lack of citation to these sources because the Commission applied these same standards from another source. Moreover, even if prejudice were shown, the lack of supply side and renewable energy comparisons in the context of this proceeding make citation to the least cost planning subchapter of RSA 378 unavailing. *See* RSA 378:39. The second policy document cited by the Joint Movants merely reiterates that the policy of this state is to maximize cost-effective energy efficiency. Page 10 of the 2018 10 Year Energy Strategy at 12[4] sets a policy nearly identical to that contained in RSA 378:37, namely to "Maximize cost-effective energy savings." The citation to page 39 of the 10-year policy is unavailing, as it is followed on page 40 with a policy statement that "New Hampshire should continue to coordinate and develop energy efficiency programming to achieve cost effective savings." The Order does not disturb the current role of the Energy Efficiency & Sustainable Energy Board to coordinate energy efficiency programing, nor does it reduce the funding to the NHSaves programming over the course of the 2021–2023 Triennium when compared to the 2018–2020 Triennium. As shown by the Joint Utilities' budgetary filings on December 15, 2020, the rates established by the Order actually increase revenues for energy efficiency programming

[4] Available at https://www.nh.gov/osi/energy/programs/documents/2018-10-year-state-energy-strategy.pdf (last accessed Dec. 22, 2021).

by $4–8 million dollars during the 2021–2023 Triennium when compared to the 2018–2020 Triennium.

We also find no error in the Order's conclusion that, under *Appeal of Algonquin Gas Transmission*, 170 N.H. 763, 774 (2018), the overarching purpose of the statute here is met. (*See, e.g.,* RSA 374-F:1, I "The most compelling reason to restructure the New Hampshire electric utility industry is to reduce costs for all consumers of electricity by harnessing the power of competitive markets"). With respect to the various arguments that the Commission misapplied or failed to apply applicable least cost planning standards, we apply the same interpretation used in *Algonquin*, and conclude that RSA 378:37-40's overarching purpose is to meet energy needs at the "lowest reasonable cost."

We find the argument that the Commission invented a least-cost requirement in Order 25,932 to be misguided. The legal framework to establish and finance energy efficiency measures is premised in large part on the least-cost statutory framework. *See Order 25,932* at 47–49. Order 25,932 relied on evidence that compared the cost of energy efficiency to delivered energy, *id.* at 51, granted utilities authority to spend only to the extent that the Commission finds such spending to be just, reasonable, and least-cost, *id.* at 59, and contained only two ordering clauses, one of which related to least-cost planning and a supply side modeling study, *id.* at 65. We further note that in closing arguments on this matter, then Staff of the Commission explicitly argued that the Commission should issue an order that "better adheres to the concepts of least-cost planning and just and reasonable rates, as the statutes provide." Hearing Transcript of December 22, 2020 at 97. No party went on to argue that the Proposal was least-cost or refuted the argument that least-cost principles applied or were not properly balanced.

Simply put, the regulatory scheme does not require the Commission to approve programming or set rates as presented, without modification, and the Joint Movants' arguments do not make a showing that the Commission's rejection of the Plan and Settlement Agreement was unlawful or unreasonable.

5) Evidentiary Support

The various objections to the Order based on arguments that the Commission failed to adequately weigh the evidence are not persuasive and do not establish good reason for rehearing. The objections do not present new evidence, but rather restate evidence that the Commission weighed, and request a different result. Such arguments are not a basis to grant rehearing. *See Public Service Co. of N.H.*, Order No. 25,970, at 4–5.

6) Stay

Finally, the parties sought a stay of the Order pending the outcome of their motions before the Commission. Because this order resolves all pending motions, no stay is required. The motions for a stay of the Order are, therefore, denied as moot.

**ii. Clarification**

We have reviewed the motions and find various requests for clarification to be reasonable and appropriate. We address those requests as follows:

1) The Joint Movants request clarification relating to the definitions of "commensurate" and "equitable" benefits. Energy also requests clarification relating to the allocation of budgets between customer sectors and programs.

We clarify that unless specifically overruled by the Order, previous standards established by Commission order still apply. With respect to ensuring that equitable and commensurate benefits are available to all ratepayers under the rates established by the order, the Joint Utilities should focus on demonstrating that average customers

will see a long-term reduction in bills over the life of the energy efficiency measures they are paying for. Diminishing returns associated with increasing any incentive level should also be addressed in a meaningful way so that programming portfolio can be maximized and all ratepayers will see tangible benefits over the lifetime of the energy efficiency measures. The analysis relating to denial of rehearing based on the statutory standards discussed above should be considered together with this clarification.

2) Both the Joint Movants and Energy request clarification on the implementation of the benefit-cost tests.

We reiterate that the Total Resource Cost (TRC) test is to be performed in addition to the Granite State Test (GST) so that the results of the GST can be compared to the results of the TRC test. *See* Order at 47 (directing that programming proposals must include "a benefit/cost analysis using both [the Granite State] and [Total Resource Cost]" tests). The Commission will review the assumptions and results of both tests in order to validate the program choices.

3) The Joint Movants and Energy request clarification regarding the Commission directive that EM&V spending is to be "significantly reduced" in the program proposal, and to be completed by the end of 2022, with emphasis on EM&V activities being necessary to participate in the ISO New England forward capacity market.

The Order is unequivocal that EM&V shall be phased out by the end of 2022. However, we clarify that where verification activities are required to maintain funding streams and regulatory compliance, the Joint Utilities shall provide, for Commission review and approval, a plan that includes required tasks and costs for each such task. Reasonable, supported estimated consulting costs and contractor costs shall be provided, as well. This plan and analysis shall be provided no later than March 1, 2022.

4) The Joint Movants request clarification of the concept of "found revenues" as used in the order relating to Lost Base Revenue.

The Commission adopts the definition of "found revenues" as articulated by then Commission Staff in Exhibit 8 at Bates page 16, namely that "found revenues" are derived from measures that increase energy usage, such as with the energy optimization program.

5) The Joint Movants request clarification of how performance incentive budgets are to be "redirected" to energy efficiency programs.

No clarification is needed, this is an argument of semantics. The result of the Order is that no part of the budget going forward will be directed to performance incentives. As a result, the overall percentage of the budget going toward direct ratepayer benefits through energy efficiency measures will increase.

6) Joint Movants request clarification on what threshold criteria for programs or proposals would meet the just and reasonable standard.

The just and reasonable standard is broad and encompasses multiple factors, however a proposal consistent with the guidance and directives in the instant order, with the statutory requirements relating to low-income programming, and with the rates established in the Order, would meet the just and reasonable standard in this instance.

7) The Joint Movants request clarification as to whether the prior Commission requirement for the electric utilities to produce at least 55% of their savings as kWh savings still exists.

The Commission clarifies that the Order did not modify this requirement.

8) The Joint Movants state that non-electric and non-gas savings are not referenced in the Order, and that clarification is needed on how to value these savings, particularly in light of the concerns relating to benefit-cost testing.

The Commission clarifies that the GST and TRC tests both quantify non-electric and non-gas savings, and those tests should be used to demonstrate quantifiable

savings that are not a direct economic benefit to ratepayers. Direct economic benefits should be clearly separated and distinguished from non-direct economic benefits so that these are visible to the general public.

9) The Joint Movants request clarification as to what constitutes a program that would qualify under the Commission's definition of "not solely ratepayer funded".

The Plan proponents made no showing whatsoever that they pursued separate government funding, grant funding, non-profit partnerships or funding, voluntary tariff offerings, or any other conceivable source of funding other than the status quo of direct or indirect ratepayer funding. At the very least, the Plan proponents must show that they exhausted all practical options to procure funding from sources other than ratepayers. *See* Order No. 25,932 at 58 ("Private funding should continue to be used to the greatest extent possible to fund the EERS programs"); *see also* RSA 125-O-a, I(j) (the Energy Efficiency & Sustainable Energy Board shall "[i]nvestigate potential sources of funding for energy efficiency…").

10) The Joint Movants state that clarification is required as to the criteria to be applied to determine the lowest per-unit cost, and what criteria should be used in evaluating which programs will qualify as the lowest per-unit cost.

The Commission refers the Joint Movants to the previous clarifications regarding quantifiable economic benefits accruing to ratepayers. In addition, modeling that demonstrates that energy efficiency is a least-cost option compared to supply-side alternatives, including renewable energy sources, should be applied in the evaluation of programs for lowest per-unit costs. As in previous clarifications, the GST and TRC tests shall be applied in order to choose programs that have the best return on investment.

11) The Joint Movants state that the reference to "Dollar savings per unit of energy estimated to have been produced" is unclear with respect to whether this refers to the inverse of a utility's cost to save each unit of

energy or if it is something new. Energy also seeks clarification relating to the treatment of the 2021 Avoided Energy Supply Costs Study.

The Commission clarifies that "avoided" costs should be evaluated, as opposed to "produced." The Joint Utilities should use the updated 2021 AESC figures in the calculation of avoided costs in future proposals for programming.

12) The Joint Movants request clarification regarding the second portion of the requirement that savings be "broken out by participating and non-participating ratepayers, by ratepayer class."

The Joint Utilities shall continue to provide modeling similar to that provided in Exhibit 4 Attachment M to demonstrate savings broken out by participating and non-participating ratepayers, and by ratepayer class.

13) The Joint Movants seek clarification on what constitutes appropriate administrative and overhead costs in light of the Commission's concerns expressed in the order that more than 15 percent of program costs were allocated to administration and overhead.

The Order points out that $58.3 million in administration costs were included in the Proposal. The Commission would expect that the administration costs, implementation services, and marketing costs would be reduced proportionally from the initial Proposal to the updated programming proposal, with EM&V reduced much more significantly due to the phasing down of EM&V.

14) The Joint Movants seek clarification on the calculation of "gross savings" required by the order. Energy also requests clarification of the use of gross and net savings figures.

Although the Commission requires gross savings to be reported, we allow the Joint Utilities to choose between net or gross savings[5] when developing the Program Proposal, so long as assumptions are fully disclosed. The utilities are free to use EM&V and other tools for internal evaluation and to provide the Commission with

[5] In the context of the calculations requested, gross savings are the lifetime total savings in dollars, using a stated discounted cash flow. Net savings uses the gross savings in dollars and subtracts the discounted cash flow cost

useful information derived from these tools. The Commission will use GST and TRC tests for the program evaluation.

15) The Joint Movants seek clarification whether the carryforward requirement applies to HEA funds.

Unless statutorily authorized, the programs shall not carry forward fund balances year-to-year, as discussed herein.

16) The Joint Movants seek clarification whether 2021 carryforward balances should be calculated in the aggregate or that balances be shown for each sector.

The Commission clarifies that 2021 carryforward balances should be calculated in the aggregate for each utility by taking actual 2021 revenues and subtracting the actual 2021 spending.

17) The Joint Movants state that the Order's reference to RSA 125-O:23 is misplaced, and that further clarification is needed regarding whether the Commission intends for the NH Utilities to utilize RGGI funds in a manner that is different from the Proposed Plan.

The Commission clarifies that it does not intend for the Joint Utilities to utilize Regional Greenhouse Gas Initiative (RGGI) funds, as allocated by the Department of Energy, in a manner that is different from that contained in the Proposed Plan.

18) The Joint Movants seek clarification on how NHEC should treat overspent amounts, and Energy seeks clarification on the impacts of budgetary overspends and forecasted versus actual revenues.

Consistent with the determination on rehearing above, any overspending of budgets by the NHEC will trigger a filing requirement. Because the NHEC does not have shareholders and is not otherwise rate regulated, it is free to use an alternative rate mechanism to recoup overspent budgets without relying on system benefits charge (SBC) revenues.

With respect to Energy's request, overspending occurs when actual costs are greater than actual revenues, and underspending occurs when actual costs are less

than actual revenues. The Commission expects the utilities to closely monitor actual revenues across all sources, including FCM and RGGI, and adjust program budgets and costs throughout the year. The level of uncertainty in both revenues and costs decreases month by month, from January to December, as more revenues and costs are booked, allowing the utilities to tailor their spending profile to the actual revenues.

19) The Joint Movants state that the NH Utilities that have lost base revenue ("LBR") will require a hearing to set that rate, and the last approved LBR will remain in place until a hearing can be held, or an order nisi issued.

The Commission clarifies that the utilities that have LBR shall file any proposed rate change by March 31, 2022.

20) Finally, the Department of Energy requests clarification on the process for the parties' review of the new Program Proposal.

Although expeditious implementation of new programming is important, we agree that a revised schedule for the submission of the new Program Proposal is appropriate following the suspension of filing deadlines pursuant to Order No. 26,556 and the clarifications issued herein. We also acknowledge Energy's request to incorporate further process related to the development and filing of a new program proposal. We therefore direct the Joint Utilities to confer with the parties in this matter and file a proposed procedural schedule by January 21, 2022. The proposed procedural schedule should result in submission to the Commission of a Program Proposal for the remainder of the 2021–2023 triennium no later than March 31, 2022, for effect May 1, 2022 upon Commission approval. The Program Proposal filing shall include a detailed budget containing all program and cost items greater than $500,000 in live spreadsheets, and proposed spending by program and each program's corresponding benefit/cost calculations in live spreadsheets as outlined in the Order. If the proposed procedural schedule is not assented to by all parties, objections to the proposed procedural schedule shall be filed no later than January 28, 2022.

## VI. Conclusion

**Based upon the foregoing, it is hereby**

**ORDERED**, that the Joint Utilities' motion for a full commission and appointment of special commissioner(s) is GRANTED IN PART to the extent that a special commissioner has been requested to replace Commissioner Simpson, and otherwise DENIED; and it is

**FURTHER ORDERED**, that the Joint Movants' motion for rehearing, clarification, and stay of Order No. 26,553 is GRANTED IN PART to the extent the Commission has reheard issues relating to carryforwards and issued numerous clarifications, as discussed in the body of this order, and is otherwise DENIED; and it is

**FURTHER ORDERED**, that the Department of Energy's motion for rehearing and/or clarification of Order No. 26,553 is GRANTED IN PART to the extent the Commission has reheard issues relating to carryforwards and issued numerous clarifications, as discussed in the body of this order, and is otherwise DENIED; and it is

**FURTHER ORDERED**, LISTEN Community Service's motion for rehearing, clarification, and stay of Order No. 26,553 is GRANTED IN PART to the extent the Commission has reheard issues relating to carryforwards and issued numerous clarifications, as discussed in the body of this order, and is otherwise DENIED; and it is

**FURTHER ORDERED**, that the Joint Utilities shall file an EM&V proposal related to ongoing participation in the ISO-NE forward capacity market as discussed herein no later than March 1, 2022; and it is

**FURTHER ORDERED**, that the utilities collecting lost base revenue shall file for any necessary rate changes no later than March 31, 2022; and it is

**FURTHER ORDERED**, that the Joint Utilities shall file a procedural schedule relating to the submission and evaluation a new Programming Proposal by the deadlines established herein above, but in any case, a new Program Proposal shall be filed no later than March 31, 2022.

By order of the Public Utilities Commission of New Hampshire this seventh day of January, 2022.

Daniel C. Goldner
Chairman

Pradip K. Chattopadhyay
Commissioner

# Service List - Docket Related

**Docket# : 20-092**

Email Addresses

---

ClerksOffice@puc.nh.gov
asbury@unitil.com
kelly@cleanenergynh.org
brian.d.buckley@energy.nh.gov
rburke@nhla.org
john.butler@eversource.com
carroll@unitil.com
brandy.chambers@eversource.com
jessica.chiavara@eversource.com
rclouthier@snhs.org
gary.m.cronin@energy.nh.gov
kristi.davie@eversource.com
mdean@mdeanlaw.net
julianne.m.desmet@oca.nh.gov
paul.b.dexter@energy.nh.gov
downesm@unitil.com
kimberly.dragoo@libertyutilities.com
jay.e.dudley@energy.nh.gov
tracy.dyke-redmond@eversource.com
stephen.r.eckberg@energy.nh.gov
steven.elliott@eversource.com
maromilee.emerick@eversource.com
eemerson@primmer.com
erin.engstrom@eversource.com
sam@cleanenergynh.org
joseph.fontaine@des.nh.gov
thomas.c.frantz@energy.nh.gov
tomas.fuller@eversource.com
josie.gage@oca.nh.gov
sgeiger@orr-reno.com
genestj@unitil.com
gouldingc@unitil.com
dhill@energyfuturesgroup.com
jarvis@unitil.com
maureen.karpf@libertyutilities.com
nkrakoff@clf.org
donald.m.kreis@oca.nh.gov
clane@synapse-energy.com

marc.lemenager@eversource.com
elevin@veic.org
jmarks@acadiacenter.org
mcdonald@optenergy.com
nelson.medeiros@eversource.com
frank.melanson@eversource.com
erica.menard@eversource.com
Mosenthal@OptEnergy.com
elizabeth.r.nixon@energy.nh.gov
amanda.o.noonan@energy.nh.gov
ocalitigation@oca.nh.gov
rebecca.ohler@des.nh.gov
palma@unitil.com
katherine.peters@eversource.com
tina.poirier@libertyutilities.com
ralph.prahl@gmail.com
Maureen.l.reno@oca.nh.gov
bryant.robinson@eversource.com
Melissa.Samenfeld@libertyutilities.com
michael.sheehan@libertyutilities.com
david.simek@libertyutilities.com
karen.sinville@libertyutilities.com
chris@cleanenergynh.org
skumatz@serainc.com
eric.stanley@libertyutilities.com
atakasugi@synapse-energy.com
taylorp@unitil.com
heather.tebbetts@libertyutilities.com
stower@nhla.org
jacqueline.m.trottier@energy.nh.gov
jvanrossum@clf.org
david.k.wiesner@energy.nh.gov
kiersten.williams@eversource.com
wirtino@comcast.net
woodsca@nhec.com
twoolf@synapse-energy.com

**DR 96-150**

**ELECTRIC UTILITY RESTRUCTURING**

**Energy Efficiency Programs**

**Order Establishing Guidelines for Post-Competition Energy Efficiency Programs**

**O R D E R N O. 23,574**

**November 1, 2000**

## I. PROCEDURAL HISTORY

On February 28, 1997, the New Hampshire Public Utilities Commission issued its Restructuring New Hampshire's Electric Utility Industry: Final Plan (Plan), Order No. 22,514, 82 NHPUC 122 (1997). In that order, the Commission planned to phase out existing energy efficiency programs offered by utilities and funded by utility ratepayers within two years of the implementation of retail choice.

Subsequently, the Commission issued its Order on Requests for Rehearing, Reconsideration and Clarification, Order No. 22,875, 83 NHPUC 126 (1998) which affirmed in part and vacated in part its position in the Plan regarding utility sponsored energy efficiency programs. The Commission, acting in response to principles incorporated in RSA 374-F, recognized that the

> transition to market based programs may take longer than the two-year period we mandated in the Plan, though we continue to believe that such a transition period is an appropriate policy objective. We also

> recognized that there may be a place for utility sponsored energy efficiency programs beyond the transition period, but these programs should be limited to 'cost-effective opportunities that may otherwise be lost due to market barriers.' We believe that efforts during the transition toward market-based DSM programs should focus on creating an environment for energy efficiency programs and services that will survive without subsidies in the future.

*Id*. at 163. Further, the Commission directed interested stakeholders to form a working group to explore a wide range of issues pertaining to the future of ratepayer-funded energy efficiency activities in New Hampshire. The Commission requested that the working group address a number of issues relating to the following: standards for evaluating energy efficiency programs; the appropriate cost-effectiveness test for future program evaluation; market barriers; market transformation initiatives; appropriate funding for low-income energy efficiency programs; the effect of energy efficiency programs on rates and recovery of necessary revenues; and the contribution to funding of energy efficiency programs by large commercial and industrial customers, even if they do not participate in the programs or receive transition service. Interested parties were instructed to contact the Commission's Executive Director. The working group was further directed to take a fresh look at energy efficiency programs.

Several parties indicated their interest in participating in what became known as the New Hampshire Energy Efficiency Working Group (Working Group). The Working Group was comprised of Staff and a mix of stakeholders from utilities, governmental agencies, environmental groups, residential and business consumer advocacy groups and energy service providers.[1] The Working Group held its initial meeting in May 1998 and conducted numerous meetings thereafter for over a year. Most of the discussions were facilitated by a hired consultant, Jonathan Raab of Raab Associates. The culmination of the Working Group's efforts was filed with the Commission on July 6, 1999 with the submission of the *Report to the New Hampshire Public Utilities Commission on Ratepayer-Funded Energy Efficiency Issues in New Hampshire* (Report). A hearing on the Report was held on September 24, 1999 at which time Mr. Raab provided a summary of the Report and members of the Working Group provided individual comments.

On July 19, 2000, the Commission, through its General Counsel, issued a letter to the parties in DR 96-150 and DE 99-099 regarding the allocation of the System benefits

---

[1] A complete listing of Working Group participants is included in the Working Group Report submitted to the Commission on July 6, 1999.

Charge between low income programs and energy efficiency programs pursuant to Chapter 249, Laws of 2000 (effective June 12, 2000). The Commission’s decision concerning the allocation of the system benefits charge between low income programs and energy efficiency is contained in Order No. 23,575, October 31, 2000.

## II. FINAL REPORT OF THE NEW HAMPSHIRE ENERGY EFFICIENCY WORKING GROUP

The Working Group's recommendations, as detailed in the Report, can be summarized as follows:

1. Cost-Effectiveness Test: The Commission should adopt a New Hampshire cost-effectiveness test that includes the following:

   a) avoided generation, transmission & distribution costs for program participants;

   b) program costs (e.g., administration, monitoring, evaluation, etc.) for program participants;

   c) both the benefits and costs associated with market effects (e.g., spillover, post-program adoptions);

   d) quantifiable benefits and costs associated with other resources in addition to electricity (e.g., water, gas, oil);

   e) a 15% adder for additional non-quantified benefits (e.g., environmental and other benefits); and

   f) the cost of utility shareholder incentives, but applied to all programs together rather than to individual programs.

   The Group agrees that all programs including new market transformation initiatives should be screened using this new cost-effectiveness test, and that programs are expected to surpass a 1.0 benefit/cost ratio. Both low-

income programs and educational programs could still be approved by the Commission even if they do not surpass a 1.0 benefit/cost ratio given their additional hard-to-quantify benefits. The Group also agreed on numerous other methodological issues and assumptions, but is deferring on a recommendation with respect to the appropriate avoided costs pending some forthcoming research being done in the region that members wish to review. The Group also agrees to the use of multi-year analyses to judge the relative value of ratepayer-funded energy efficiency programs in the context of energy policy goals, the use of the Prime Rate, adjusted annually, on or around June 1 so that projected costs and benefits can be stated in present value terms; and a preferred but not required use of coordinated evaluation and cost-effectiveness analysis for programs that are implemented on a coordinate or joint basis or which use the same program designs, procedures and implementation strategies, so as to reduce evaluation costs and increase consistency.

2. Formation of an Energy Efficiency Committee: The Group agrees that New Hampshire utilities could continue to be the primary program administrators, at least over the next few years (i.e., during the period when transition service is offered). However, the Group recommends the formation of a New Hampshire Energy Efficiency Committee to improve program consistency and reduce program administration and implementation costs through closer cooperation among utilities and other stakeholders. The mission of the Committee would be to develop a consistent set of statewide core programs for New Hampshire ratepayers. The Group recommends broad stakeholder involvement in the Committee and the development of an annual report to the Commission. Recommended membership includes representatives from all of the jurisdictional electric utilities, key state agencies (Governor's Office of Energy and Community Services, Department of Environmental Services, Office of the Consumer Advocate), and other stakeholders groups (consumer, environmental, suppliers/energy service companies).

3. Energy Efficiency Funding: The Group agrees that as is implicit in the restructuring legislation, after 70% of the State has gone to retail competition, each jurisdictional electric utility shall budget 1 mill per kilowatt-hour (kWh) in the first year and 1.5 mills per kWh in the second year for energy efficiency, with the option for an individual utility to exceed that level if

the company, other parties, or both so choose and the Commission approves. The Group did not reach agreement on funding rates after the second year, with some members believing that it is premature to do so and others believing that funding rates in the range of 2.5-3.2 mills per kWh are appropriate. The Group also acknowledges and accepts the Commission's recent decision that low-income funding for energy efficiency should come directly from the energy efficiency fund rather than the low-income electric bill assistance portion of the system benefits charge (SBC). However, the Group agrees that once the electric assistance program (EAP) is fully operational, the Commission should review the EAP program to determine if any EAP funds can be made available for low-income energy efficiency programs. The Group has not developed detailed budgets by distribution company, by rate class, or by program type. However, the Group did agree that energy efficiency program funds should be allocated to the residential and commercial and industrial (C/I) sectors in approximate proportion to their contributions to the fund. Additionally, the Group agreed that low-income programs should be funded by all customers. Also, the Group, with the exception of two utilities and Staff, agreed that under- and over-expenditures on energy efficiency programs should be carried into the subsequent year for purposes of calculating energy efficiency budgets.

4. Shareholder Incentives and Lost Fixed Cost Recovery: The Group recommends that utilities be entitled to earn shareholder incentives. The shareholder incentive approach agreed to by the Group is based on the performance of the programs measured in terms of their actual cost-effectiveness and energy savings relative to the projected cost-effectiveness and energy saving savings, respectively. Separate target incentives are proposed for the residential and C/I sectors set at 8% of the total program and evaluation budgets for each sector. Superior performance could be rewarded by up to 12% of the planned sector budgets. The Group, with the exception of two utility members, agreed that there should be no recovery of lost revenues for measures installed post-Implementation Date. The two utilities who did not agree assert that they should be entitled to recover lost revenues for future programs until ratemaking changes diminish the need for recovery. The Group agreed that issues associated with historic lost revenues should be dealt with on a utility-specific basis by the Commission.

5. Market Framework: The Group spent substantial time trying to forge a framework for determining when particular markets should be eligible for ratepayer funding. The Group wrestled with different perspectives among its members about the definition of a “market barrier” and whether particular market conditions justified consideration for targeted programs. For instance, Group members could not agree whether: 1) lack of awareness about an energy efficient technology or practice; 2) lack of availability; or 3) lack of widespread utilization are indicative of market barriers or market failures; are normal for new products and services, or both. Despite its lack of consensus on definitions and thresholds, the Group worked hard to develop potential tools to use in assessing the eligibility of a given energy efficiency technology or practice for funding. These tools include a detailed framework in matrix form located in Appendix 2A and another narrative framework located in Appendix 2B. Some members prefer one over the other. Nevertheless, the entire Group agreed that these frameworks have many similarities, are not mutually exclusive and are not yet fully fleshed-out. Still, the Group recommends them to the Commission and the proposed Energy Efficiency Committee for potential refinement and use.

6. Program Design:

The Group agrees that a proposal for a program in a market eligible for ratepayer funding should identify:

a) the reasons for addressing this market;
b) the general approach or approaches that could best address those conditions;
c) the evaluation metrics and exit strategy;
d) budget;
e) program administration; and
f) cost-effectiveness.

The Group further agrees that in designing programs, administrators and others should adhere to certain principles including, but not limited to:

a) maximize opportunities for market transformation such that long-term impacts continue to occur after the program has concluded, thus creating permanent market changes;

b) assure that ratepayer-funded efficiency programs are designed in a manner such that they complement and do not hinder the development of private sector efficiency products, services, and programs and that they encourage the development of private sector products, services and programs whenever possible, with the ultimate goal of achieving energy efficiency markets that operate effectively without ratepayer funding;

c) assure that existing program delivery mechanisms are continued where they provide benefits (e.g., from existing expertise, infrastructure, etc.), do not compete with private sector alternatives, and are cost-effective. Consider and recommend to the Commission alternative delivery mechanisms where appropriate; and

d) assure that there are well-constructed exit or market transitioning strategies for technologies and practices. Implementation of these transitioning strategies should not wait until reaching exit thresholds, but should begin as you approach them — i.e., as the market matures. Such strategies may include such things as increasing customer contributions of measure cost, using financing mechanisms over rebates, and retail-focused programs over utility catalogs.

7. Low Income Energy Efficiency Program:

The Group provided a basic program design recommendation for a low-income program for New Hampshire which includes a statewide coordinated program, comprehensive energy efficiency products, services, and education that could save 1000 kWh per year per household on average, and funding and infrastructure to ultimately serve approximately 2,500 low-income customers per year. The Group recommended funding in the first year of $1.5 million and $2.5 million funding level by program year three. The Group does not believe that sufficient funding exists in the low-income system benefits charge to sustain both low-income affordability and energy efficiency activities are this time. The Group recommends adopting a hybrid program delivery which would provide for a centralized integrated approach while maintaining the option for utility specific programs. The Group believes

a market exit strategy should not be instituted for the low-income residential sector at this time.

## III. COMMISSION ANALYSIS

The Commission wishes to thank the members of the Working Group for their time and efforts to provide the Commission with the Report and the recommendations contained therein. The diligence shown by the members attests to their desire to provide the Commission with a framework that will facilitate the delivery of cost effective energy efficiency in New Hampshire.

The Commission has considered the Report and the statements provided at the September 24, 1999 hearing, in addition to prepared statements and comments provided previously in this proceeding and other DSM dockets. We have evaluated our policy on energy efficiency in a post-restructured electric industry in light of those comments, the Report and the passage of Chapter 249, Laws of 2000 as well as the comments we received in response to the July 19, 2000 letter from the Commission soliciting comments on the division of the system benefits charge between low income programs and energy efficiency/conservation programs.

The best way to proceed is to establish guidelines that assist the utilities and interested stakeholders in the design and implementation of future energy efficiency

programs. Although the Commission adopts portions of the recommendations made by the Working Group in the Report, the Report itself is not considered a part of this Order nor are all of the recommendations and conclusions stated in the Energy Efficiency Working Group Report being adopted.

**A. <u>Legislative Intent; Commission Policy and Goal</u>**

The Commission's policy and goal for energy efficiency were defined in response to the relevant policy principle articulated in the Restructuring Act:

> Restructuring should be designed to reduce market barriers to investments in energy efficiency and provide incentives for appropriate demand-side management and not reduce cost-effective customer conservation. Utility sponsored energy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers.

RSA 374-F:3, X.

The Commission defined its policy for energy efficiency in Order No. 22,875 as follows:

> The most appropriate policy is to stimulate, where needed, the development of market-based, not utility sponsored and ratepayer funded, energy efficiency programs, a principle that the Legislature incorporated into RSA 374-F.

Our goal for energy efficiency programs was also clearly delineated in Order No. 22,875:

> We believe that efforts during the transition toward market-based DSM programs should focus on creating an environment for energy efficiency programs and services that will survive without subsidies in the future.

> .. We can not emphasize enough our belief that these programs must complement the new energy markets, and not hinder their development.

We continue to embrace that overarching goal. The benefits of a retail electric market will not be fulfilled without a competitive wholesale market and a vibrant, unsubsidized energy efficiency market.

**B. <u>Time Frame</u>**

In the Plan, we stated that we would cap the then-current utility DSM program expenditures at their latest approved levels. We also put the utilities on notice that ratepayer funded DSM programs would be phased out over a two-year period beginning with the implementation of retail choice.

We believe the transition service time frame delineated in Chapter 249, Laws of 2000 provides a sound starting point for all utility sponsored DSM programs. Transition service for PSNH's residential customers, street lighting customers, and general delivery Rate G customers is available for 24 months after initial transition service ends,

a total of 33 months. RSA 369-B:3, IV(b)(1)(B)(i).[2] To ensure some consistency and enhance market transformation, this time frame will apply to the DSM programs of all electric utilities even though transition service for some may terminate before PSNH's transition service terminates. The Commission will evaluate whether it is appropriate to extend the time frame or what other changes are needed as the end of PSNH's transition period nears.

**C. <u>Energy Efficiency Committee</u>**

We appreciate the Group's proposal to form an Energy Efficiency Committee to look at market transformation. However, we have a number of concerns about the proposed committee. We are concerned that the committee will continue to develop and sponsor traditional programs that have been offered in the past. Further, we believe that the committee will not streamline the review process. It is an understandable objective; however, there will continue to be opposing positions and parties and we view the hearing

---

[2] In the relevant provisions of Chapter 249, codified as RSA 369-B:3, IV, the Legislature did not establish any requirements outright. Rather, it set out certain determinations that the Commission was required to make, and conditions the Commission was required to impose on PSNH, in any finance order approving the securitization of PSNH stranded costs. The Commission did so in Order No. 23,550 (September 8, 2000).

process as an important and necessary forum that will continue to provide us insight from several viewpoints. Additionally, we believe that it is important for us to hear from those companies currently providing energy efficiency services in the marketplace and the impacts our policies have on their business. The committee as proposed seems too large to be effective and embraces a governance that would, at least based on the transition periods discussed earlier, utilize resources that could better be devoted to program design, implementation and measurement. Moreover, we do not believe it is appropriate to use ratepayer funding for the committee.

We believe that a better way to proceed than with the formal creation of the committee is to request that the utilities work together during program design to ensure that a set of “core” programs being offered have the same eligibility requirements, design, etc. to ensure consistency among the utilities. Any utility requesting to design a program different from the other utilities should provide written testimony in its energy efficiency filing explaining its proposed deviation from the core program. An informal committee process to look at market transformation and to comment on utility core program offerings is acceptable and encouraged. If an informal committee is formed, we would

encourage greater representation and participation of businesses currently providing energy efficiency products and services in New Hampshire and New England.

**D. Cost-Effectiveness Test**

We will accept the cost-effectiveness test as proposed in the Working Group's Report. We do so recognizing that the thresholds of a benefit-cost ratio have changed, and that the test itself now includes spillover benefits and costs not previously included in the cost-effectiveness test, as well as a 15 percent adder to represent environmental and other benefits of energy efficiency/conservation programs. Although the Commission has not previously authorized the use of adders, we will do so here and permit such a mechanism until some material change occurs that would warrant our reconsideration of the adder or its magnitude.

Of greater concern for now is what avoided generation costs should be used in the cost-effectiveness test. The Report is silent on this topic, but mentions the study done on this subject for DSM screening in Massachusetts by the Avoided-Energy- Supply-Components Study Group. The Study Group developed generation values based on a region-wide cost simulation model. Although we and the Working Group have not reviewed the Study Group's analysis, absent better avoided

generation price estimates we will direct the utilities to use the consensus values contained in that report as part of the filing of the core programs on January 1, 2001. If the January 1, 2001 filings contain avoided generation prices that are different from those in the Study Group report, the filings should contain a detailed explanation of how the avoided generation prices were calculated as well as why the change was made. Those utilities not restructured or those, such as PSNH, still supplying power from their own generation portfolio in the near-term, should use the avoided generation supply cost of their portfolio in the near-term and the avoided supply prices contained in the Massachusetts report for those years when the utility no longer expects to have its own generation. Each utility will, of course, continue to use its own avoided transmission and distribution costs.

**E. Least Cost Fixed Revenues (LCFR)**

Consistent with Order No. 22,875, we continue to believe that it is appropriate to move as quickly as possible from the payment of lost revenues as part of any energy efficiency programs and will deny recovery of lost revenues on a forward-going basis. The largest portion of the component of lost revenues that was and is currently recovered by utilities is for recovery of fixed costs associated with

generation assets and/or wholesale power contracts, although we recognize that DSM programs will continue to have an effect on base rate revenue recovery. This effect on base rate revenue does not exist in isolation, however. Numerous policies of the Commission and practices of the utility affect base rate revenue recovery. For that reason, we will not isolate the on-going effect of one program, such as DSM, and ascribe revenue effects to it and not to others. Rather, we will continue to move away from lost fixed cost recovery and toward a limited incentive program.

Where the Commission has dealt with the recovery of generating assets and wholesale contracts through stranded costs recovery, the only costs left to be recovered through lost revenues relate to transmission and distribution. Should a utility find that the energy efficiency programs offered in their service territories significantly reduce sales to an extent that affects its profitability, the utility has the right to file a rate case with the Commission.

As part of PSNH’s restructuring settlement agreement approved by the Commission in DE 99-099, PSNH relinquishes recovery of any historic LFCR. Lost revenues that are currently carried on the books of Concord Electric Company, Exeter & Hampton Electric Company or Connecticut Valley

Electric Company (CVEC) because of past or existing programs will be considered on a case-by-case basis.

**F. <u>Program Designs</u>**

Post retail choice energy efficiency programs should demonstrate a movement towards consistency in both program offering and program design. These programs need to meet the Legislature's directive that "[e]nergy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers." RSA 374-F:3, X.

As we have stated above, we expect each utility to file programs that are part of a state-wide set of core programs. The principles listed on page 9 of the Report are appropriate for the design of post retail choice DSM programs: the reasons for funding the program, the state of the market, the general approach that will be used to transform the market for that particular product or service, the specific metrics used to evaluate transformational effects, an exit strategy, the budget including program administration costs, and the cost-effectiveness of the measure. Each utility filing, whether for the core programs or its individual programs, should also include a thorough description of the steps it intends to take to determine which programs or measures will be offered, how the programs or measures will be delivered,

the time frame for delivery, the estimated cost of delivery, the expected benefits of the programs and other pertinent filing components.

As we have stated previously, and as we state in a concurrent order being issued today, low income energy efficiency programs will be funded out of the general energy efficiency budget of the electric utilities. Low income energy efficiency programs should reflect an agreed-upon set of core programs. This is an area where we believe well-designed, statewide programs could help to alleviate the apparent persistence of "undesirable market conditions," to use the language of the Group, characteristic of this group of customers.

**G. <u>Pay As You Save</u>**

The Commission believes that there are many benefits that might be gained from moving energy efficiency programs from exclusive reliance on direct subsidies to greater participant funding of conservation measures. A properly designed Pay As You Save (PAYS) program, as described in *Public Service Company of New Hampshire*, 84 NH PUC 185, 191 (1999), could potentially unleash pent-up consumer demand for efficiency measures. Under a PAYS model, utility or other funding is used to finance the purchase of approved efficiency

measures from vendors, and the measure cost is repaid on the bill over time, such that bill savings exceed measure cost payments in the near term. Variants include payments running with the meter for high-cost, long-lived measures such as insulation. If successful, PAYS could directly transform the market for efficiency by providing customers a way to purchase efficiency measures that are cost effective from the participants perspective today, but that are not purchased in the volumes that would be expected given that fact. PAYS would eliminate up-front costs, overcome split incentives and provide assured savings to participating customers.

Towards this end, the Commission directs the utilities to cooperate with GOECS and implement a pilot PAYS Program, beginning with PSNH and the New Hampshire Electric Cooperative (NHEC). We direct PSNH and NHEC, in consultation with GOECS, to file a proposed PAYS pilot design by February 1, 2000 for Commission review. To the extent possible, we would expect the filing to be made jointly by PSNH and NHEC. The amount budgeted for the PAYS pilot should be sufficient to support a useful pilot, but should not exceed 10 percent of the DSM budget for the two utilities combined. After reviewing the experience of PSNH and NHEC with the PAYS concept, we will determine any changes that are necessary in

the PAYS program design and consider its extension to the balance of electric utilities in the state.

**H. Incentives**

We will accept the incentive mechanism proposed by the Working Group. The Working Group recommended a formula to calculate incentives to give utilities an opportunity to provide, at least for now, utility-sponsored programs that would either not be provided by the market or programs that will help the transition to non-subsidized energy efficiency programs. The utility must demonstrate that the program for which it seeks incentive payments offers customers extraordinary benefits and will enhance the move toward either non-subsidized DSM programs or market-based energy efficiency. These benefits should be over and above what would accrue to ratepayers with prudent utility management.

Because the incentive mechanism is new, we will closely scrutinize the utility DSM filings to evaluate whether it fairly balances the interests of shareholders and customers.

**I. Monitoring and Evaluation**

The Working Group recognized the need to conduct a review of the ratepayer-funded energy efficiency programs. The Working Group recommends multi-year analyses that includes

short and long-term savings, market transformation, and recognition of energy policy goals. The Report does not state who will conduct the analyses, but mentions the preference for a cost-effective and coordinated review. The Working Group has provided as attachments to its Report two frameworks for the Commission to consider in our evaluation of whether and when certain energy efficiency products or measures should no longer receive ratepayer support.

The importance of a thoughtful and thorough monitoring and evaluation program cannot be overstated. As proposed in the Report, an assessment of energy efficiency programs and measures should analyze the effects of the programs and measures on removing and reducing market barriers or transforming the market for those products. However, monitoring and evaluation should include more than the market assessment framework contained in Appendix 2 to the Report. Impact and process evaluations are important, as well.

The attachments provided by the Working Group should prove helpful in our future determination of market transformation progress for the measures we approve during the time frame we discussed earlier. We will approve the use of both frameworks set out in Appendix 2 for such a market

transformation assessment. We note that Appendix 2A is the more robust of the alternative frameworks.

In addition to the market transformation assessment, we expect that an independent impact analysis for the core and non-core programs will be performed as appropriate. Such an impact analysis would focus on how well the programs that are implemented are providing the net benefits that are forecasted. The January 1, 2001 core program filing should include detail on how such independent impact analyses will be conducted as well as a proposed time frame in which they will be conducted. The January 1, 2001 filing should also include any proposals for process evaluations of new or continued programs.

**J. Administration of Programs**

As recommended in the Final Report, we will allow the utilities to continue to administer energy efficiency programs; however, as discussed above, we direct the utilities to join efforts and coalesce their individual program offerings into a set of core programs that meet the market transformation goals we have reiterated above. We expect the utilities and other interested stakeholders to meet and try to agree on a diverse, but limited set of core programs that would be filed at the same time by all the electric utilities.

If ratepayer-funded energy efficiency programs continue beyond the time frame we outlined above, we will re-evaluate whether those programs should be administered by a third party or should be continued under the current framework of utility administration. One factor we will use in that determination is which format moves toward market transformation in the most cost-effective and efficient way.

**K. Applicability of Order to Gas Utilities**

We defer the decision whether to impose the guidelines issued in this order on New Hampshire's gas utilities. We understand that although Northern Utilities, Inc. participated in the Working Group's meetings, EnergyNorth Natural Gas, Inc., the utility serving approximately 75 percent of New Hampshire's natural gas customers, did not. In addition, we believe that all parties should have the opportunity to comment on the applicability of this order to gas utilities. Comments on the applicability of this order to gas utilities should be submitted within 60 days from the issuance date of this order.

**L. Utility Filings**

In order to facilitate the thorough review of core program offerings, we will give utilities and other parties 60 days to agree upon a set of core programs. The core programs

should be filed on or about January 1, 2001. Our focus will be on the efficacy of the core programs. Individual utilities may file other energy efficiency programs based on the specific objectives of that utility so long as they conform with the goals and objectives we stated above. The Commission will stagger the submission of specific utility energy efficiency program filings as follows:

| ***Utility*** | ***Filing date*** | ***Effective Date*** |
|---|---|---|
| Concord Electric Company &<br>Exeter & Hampton Electric Company | June 1, 2001 | Sept. 1, 2001 |
| Connecticut Valley Electric Company | June 1, 2001 | Sept. 1, 2001 |
| Granite State Electric Company | March 1, 2001 | June 1, 2001 |
| New Hampshire Electric Cooperative | June 1, 2001 | Sept. 1, 2001 |
| Public Service Company of New Hampshire | March 1, 2000 | June 1, 2001 |

Should any utility anticipate difficulty in meeting the above filing requirements, that utility shall file a request for extension with the Commission within thirty (30) days from the date of this order.

**M. Recovery and Interest**

The Working Group has recommended that the energy efficiency charge be paid by all customers. That recommendation is consistent with RSA 374-F:3, VI, which authorizes the imposition of a non-bypassable and competitively neutral system benefits charge to fund, among other things, energy efficiency programs. Accordingly, we accept the Working Group's recommendation. We note, as we determined in Order No. 22, 999, 83 NHPUC 432 and Order No. 23, 172 (March 25, 1999), that energy efficiency costs should be recovered through the separate system benefits charge and displayed in an unbundled fashion on customer bills.

Unless otherwise noted, the funding for energy efficiency programs shall continue to be fully reconciling and any monthly over- or under-collections shall accrue interest at the prime rate as reported on the first business day of the month applicable as reported in the Wall Street Journal.

**N. Energy Efficiency Portion of System Benefits Charge**

Chapter 249, Laws of 2000, more specifically RSA 369-B:3, IV(b))6), provides for a total system benefits charge, including both energy efficiency and low income assistance programs, of $0.002 per kilowatt-hour for 33 months from competition day for PSNH. In addition, this Commission

has further decided (in the companion order issued on this same day, Order No. 23,575) that the split between these two programs insofar as PSNH is concerned should be resolved by apportioning $0.0012 per kWh to low income assistance and $0.0008 per kWh for energy efficiency. The amount of the surcharge that may be collected by the other electric utilities as part of the SBC to fund energy efficiency programs is subject to the provisions of RSA 374-F. RSA 374-F: 4,VIII(b) provides that the total SBC for both energy efficiency and low income assistance shall not exceed $0.0025 per kWh for any utility whose rates are at or above the regional average during the first year after which competition is certified to exist and $0.0030 per kWh during the second year after competition. The result of this law, Order No.23,575, and RSA 374-F:4, VIII (g) which makes the low income portion of the SBC uniform for all utilities, is that a utility other than PSNH that is at or above the regional rate average may not exceed $0.0013 per kWh for the energy efficiency portion of the SBC during the first year after competition and $0.0018 per kWh during the second year. A utility that is below the regional average is not subject to these limitations for energy efficiency, though it is clearly still subject to Commission review and approval. In addition

NHEC, by virtue of RSA 374-F:4,VIII(d), is not subject to the limitations on the energy efficiency portion of the SBC.

**Based upon the foregoing, it is hereby**

**ORDERED,** that except as specifically noted above, the Commission adopts the recommendations of the New Hampshire Energy Efficiency Working Group Report; and it is

**FURTHER ORDERED,** that the utilities shall file their core programs on or about January 1, 2001; and it is

**FURTHER ORDERED**, that any comments on the applicability of this order to gas utilities shall be submitted to the Commission within 60 days of this order.

By order of the Public Utilities Commission of New Hampshire this first day of November, 2000.

| Douglas L. Patch<br>Chairman | Susan S. Geiger<br>Commissioner | Nancy Brockway<br>Commissioner |
|---|---|---|

Attested by:

Claire D. DiCicco
Assistant Secretary

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 15-137**

**GAS AND ELECTRIC UTILITIES**

**Energy Efficiency Resource Standard**

**Order Approving Settlement Agreement**

**O R D E R N O. 25,932**

**August 2, 2016**

**APPEARANCES:** Matthew J. Fossum, Esq., for Public Service Company of New Hampshire d/b/a Eversource Energy; Susan S. Geiger, Esq., of Orr & Reno, P.A., for Northern Utilities, Inc., and Unitil Energy Systems, Inc.; Michael J. Sheehan, Esq., for Liberty Utilities Corp. (Granite State Electric) d/b/a Liberty Utilities, Inc., and for Liberty Utilities Corp. (EnergyNorth Natural Gas) d/b/a Liberty Utilities; Mark W. Dean, Esq., for New Hampshire Electric Cooperative; Dennis Labbe, Esq., of the New Hampshire Legal Assistance, for The Way Home; Ryan Clouthier for the New Hampshire Community Action Agencies' Southern New Hampshire Services, Inc., and the Belknap-Merrimack Counties, Inc.; Melissa Birchard, Esq., for Conservation Law Foundation NH; Laura Richardson for The Jordan Institute; Kate Epsen for the NH Sustainable Energy Association; Joseph Harrison for the Community Development Finance Association; Ellen Hawes for the Acadia Center; Tom Rooney for TRC Energy Services; Rep. Robert Backus, *pro se*; Meredith A. Hatfield, Esq., for the New Hampshire Office of Energy and Planning; Rebecca Ohler for the New Hampshire Department of Environmental Services; Donald M. Kreis, Esq., of the Office of the Consumer Advocate, on behalf of residential ratepayers; and Rorie E. Patterson, Esq., for Staff of the New Hampshire Public Utilities Commission.

In this order, the Commission approves a Settlement Agreement supported by all parties, extending the 2014-2016 Core program an additional year (through 2017) and establishing an Energy Efficiency Resource Standard (EERS). The EERS is a framework within which the Commission's energy efficiency programs shall be implemented, and the effective date for implementation is January 1, 2018. The framework consists of three-year planning periods and savings goals as well as a long-term goal of achieving all cost-effective energy efficiency. The electric and gas utilities will be administrators of the EERS programs to achieve specific

statewide savings goals for the 2017 Core program and for the first three-year period of the EERS. Specific programs will be subject to Commission approval and such approval will require a demonstration that they are cost effective in subsequent proceedings before the Commission. This order also establishes a recovery mechanism to compensate the utilities for lost-revenue related to the EERS programs, and approves the performance incentives and the processes described in the Settlement Agreement for stakeholder involvement, evaluation, measurement and verification, and our oversight of the EERS programs.

## I. BACKGROUND

On May 8, 2015, the Commission opened this proceeding to establish an Energy Efficiency Resource Standard. An EERS is a policy that sets specific targets or goals for energy savings, which utility companies serving New Hampshire ratepayers must meet. The Commission indicated that the EERS would include long- and short-term, energy-type-specific savings goals based on sales volumes for 2014. In addition, the Commission defined the scope of the proceeding to include consideration of funding requirements, program-cost recovery, lost-revenue recovery, performance-based incentives, program administration, evaluation, measurement, and verification (EM&V), and ways to transition from the existing energy efficiency paradigm to the EERS. The Order of Notice and subsequent docket filings, other than any information for which confidential treatment is requested of or granted by the Commission, are posted on the Commission's website at: http://puc.nh.gov/Regulatory/Docketbk/2015/15-137.html.

Until now, the Commission has implemented energy efficiency primarily through the Core programs, which has evolved in the last 15 years into a statewide system used by electric and natural gas utilities to deliver energy efficiency products and services to their customers or

members.[1] Since 2001, the Systems Benefits Charge funding for Commission-regulated energy efficiency has remained at $0.0018 per kWh level. The programs have been designed to deliver as much energy efficiency savings as possible within the bounds of that funding, plus additional funding in recent years from the Regional Greenhouse Gas Initiative (RGGI) and the Independent System Operator-New England's (ISO-NE) Forward Capacity Market (FCM). Establishing an EERS presents an opportunity to set savings goals based on savings potential in addition to consideration of the funding level.

Several New Hampshire specific studies of energy efficiency potential have been conducted in the last decade, and all suggested that additional opportunities for cost-effective energy efficiency exist beyond those attained through the Core program.[2] In September 2014, the Governor's Office of Energy and Planning released a 10-year State Energy Strategy, which recognized the need for an EERS:

> In order to reduce energy costs by implementing more cost-effective efficiency programs, the State must set specific efficiency goals and metrics to measure progress. The Public Utilities Commission should open a proceeding that directs the utilities, in collaboration with other interested parties, to develop efficiency savings goals based on the efficiency potential of the State, aimed at achieving all cost effective efficiency over a reasonable time frame.

2014 New Hampshire State Energy Strategy, Executive Summary at ii.

On February 3, 2015, Commission Staff filed a report entitled "Energy Efficiency Resource Standard: A Straw Proposal for New Hampshire." Staff's report concluded a

---

[1] All of the New Hampshire electric and gas utilities except the New Hampshire Electric Cooperative (NHEC) have customers. NHEC supplies electricity to its members. Subsequent references herein to customers shall include NHEC members unless otherwise stated.

[2] *Additional Opportunities for Energy Efficiency in New Hampshire, Final Report* (January 2009), prepared for the Commission by GDS Associates Inc. (GDS), RLW Analytics, and Research Into Action; *Independent Study of Energy Policy Issues* (2011), prepared for the Commission by Vermont Energy Investment Corporation (VEIC); and *Increasing Energy Efficiency in New Hampshire: Realizing Our Potential* (November 2013), prepared by VEIC, GDS, and Jeffrey H. Taylor & Associates.

months-long endeavor to solicit and capture feedback on establishing an EERS. Staff's report included information about other jurisdictions, input from New Hampshire efficiency stakeholders, questions for additional consideration, and a series of preliminary recommendations.

On March 13, 2015, the Commission opened an investigative docket, IR 15-072, to receive written comments on several threshold recommendations within Staff's report. Written comments were submitted by numerous stakeholders including all of the electric and gas utilities (Joint Utilities),[3] the Office of the Consumer Advocate (OCA), the Governor's Office of Energy and Planning (OEP), and the Department of Environmental Services (DES). The comments reflected unanimous support for the Commission's establishment of an EERS at that time, under existing statutory authority, to advance a policy of energy efficiency as a least-cost supply resource for customers of the Joint Utilities. Some support for an EERS, however, was qualified by requests to consider the universe of EERS issues, and to engage expert assistance at the time of its development. Based on those comments and the recommendations contained in Staff's Straw Proposal report, the Commission opened this proceeding to establish an EERS and to examine the issues related to a successful launch of this important and timely policy.

## II. PROCEDURAL HISTORY

The Commission named the Joint Utilities as mandatory parties, and received appearances from each. In addition, the OCA notified the Commission of its participation by statutory right on behalf of residential ratepayers. RSA 363:28, II.

[3] Liberty Utilities Corp. (Granite State Electric) d/b/a Liberty Utilities (Liberty) and Liberty Utilities Corp. (EnergyNorth Natural Gas) d/b/a Liberty Utilities (jointly, Liberty); Unitil Energy Systems, Inc., and Northern Utilities, Inc. (jointly, UES); Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource); and NHEC. Although the order refers to NHEC as one of the Joint Utilities, we recognize that our jurisdiction over NHEC is limited by law. RSA 362:2.

Petitions to intervene were filed by DES; OEP; Conservation Law Foundation (CLF); New Hampshire Community Action Agencies' Southern New Hampshire Services, Inc., and Belknap-Merrimack Counties, Inc.(CAA); The Jordan Institute (Jordan); The Way Home (TWH); New Hampshire Sustainable Energy Association (NHSEA); the New Hampshire Community Development Finance Authority (CDFA); the New England Clean Energy Council (NECEC); TRC Energy Services (TRC); the Acadia Center (Acadia); Representative Robert A. Backus, *pro se*; Henry Herndon, *pro se*; and MCR Performance Solutions, LLC (MCR). The Commission denied Mr. Herndon's and MCR's intervention since neither party has any "rights, duties, privileges, immunities or other substantial interests that may be affected by the proceeding," and both could participate without being made a party since they have access to docketed materials on the Commission's website and may make comments at hearing or in writing pursuant to N.H. Code of Admin. Rules Puc 202.06.

The Commission held a prehearing conference on June 3, 2015, and, afterwards, the parties met in a technical session to develop a proposed procedural schedule and determine other procedural requirements for managing the docket. On June 10, 2015, Staff filed a report of the technical session and a request, on behalf of the parties, for additional time to develop the procedural schedule, which the Commission approved. The Parties and Staff met again on June 29, 2015, to develop a procedural schedule, which included multiple technical sessions each focused on a specific topic or issue identified by the Commission in its Order. The well-attended technical sessions featured presentations from the Joint Utilities as well as New England regional experts. The presentations included information about how other New England states have structured and administered their EERS programs and the Joint Utilities' experience with those programs.

Following the technical sessions, NHSEA along with CLF, Jordan, and NECEC (collectively, the Sustainable Energy Group)[4], Staff, and the Joint Utilities filed EERS proposals supported by testimony. Also, TRC and Acadia filed comments at that time. After those filings, a period of discovery occurred, and responsive testimony was filed by the OCA, the Sustainable Energy Group, and the Joint Utilities. Also, the Acadia Center and TWH filed reply comments.

Settlement negotiations followed, and, on April 27, 2016, a Settlement Agreement was filed by Staff on behalf of all parties except Rep. Backus. A hearing on the Settlement Agreement took place on May 2, 2016. At that hearing, the Settling Parties spoke strongly in favor of approving the agreement, and Rep. Backus supported those positions.

## III. ORIGINAL AND SETTLEMENT POSITIONS OF THE PARTIES

The full EERS proposals and comments covered topics studied by the parties in the technical sessions as well as others, including: program administration; savings targets; funding; cost recovery; recovery of lost revenue; performance incentives; stakeholder involvement; evaluation, measurement and verification (EM&V); regulatory process; and implementation date. The parties included energy efficiency stakeholders who have participated for years in the Commission's programs and represented a broad spectrum of interests. The filings unanimously supported the creation of an EERS and featured many commonalities. Differences between the parties' original positions related primarily to the recommended savings targets, lost-revenue recovery, and the implementation date. The Settlement Agreement resolved all issues as described below.

[4] The Nature Conservancy join in this filing but was not a party to this proceeding.

### A. Guiding Principles

#### 1. Staff

Staff described several principles that should guide the EERS development. According to Staff, the EERS should build on the Commission's existing energy efficiency policy and experience with the Core programs. The EERS should respond to the recommendations in the 10-year State Energy Strategy and should be consistent with State law and industry best practices. Also, the EERS should include challenging but achievable statewide savings targets that are consistent with targets in other jurisdictions and the targets suggested in New Hampshire specific studies.

#### 2. Joint Utilities

The guiding principles recommended by the Joint Utilities included establishing savings targets with a long-term goal of all achievable cost-effective energy efficiency within the context of available, sustainable funding; using at least a three-year, short-term planning period; considering rate impacts on customers in setting short-term goals; focusing primarily on comprehensive electric and gas programs with secondary focus on fuel neutral programs; continuing joint coordination of programs by the electric and gas utilities; driving innovation in technology, outreach, and regulation to accelerate energy efficiency gains; leveraging the private financing market; and increasing public awareness of the benefits of energy efficiency. According to the Joint Utilities, those guiding principles are consistent with the Commission's existing energy efficiency policy, which supports the award-winning, innovative, Core programs that have had a significant, positive impact on utility customers across the state. The Joint Utilities' support the creation of an EERS, because they believe an EERS will also provide significant benefits for New Hampshire utility customers.

### 3. The Way Home

TWH supported the guiding principle espoused by the Joint Utilities that energy efficiency programs be available to all customers, including low-income residential customers. TWH defined low income as at or below 200 percent of the federal poverty guidelines.[5] According to TWH, approximately 20 percent of New Hampshire residents are considered low income by this standard.

## B. Program Administration

### 1. Staff

Staff discussed the use of independent third-party administrators in other jurisdictions and noted the benefits of such a structure. Staff observed, however, that the Joint Utilities have effectively administered the Core programs. Consequently, Staff recommended that the Joint Utilities administer the EERS programs at this time.

### 2. Joint Utilities

The Joint Utilities recommend that they administer the EERS programs based on their years of successful experience as administrator of the Core programs and their commitment to energy efficiency's success. According to the Joint Utilities, they have the knowledge, infrastructure, and relationships in place to scale up and transition the Core programs quickly to EERS programs. In support, the Joint Utilities noted their deep understanding of customer usage, their established and widespread vendor networks, their access to expertise from other jurisdictions, and the findings of several studies that customers consider utilities as trusted advisors on energy efficiency. The Joint Utilities also provided recent examples of their ability to scale up Core programs quickly and effectively beyond planned program budgets.

---

[5] For a household of one, 200 percent of the federal poverty guidelines is $23,450 in annual income. For a household of two, low-income eligibility is capped at a total household annual income of $31,860.

**3. Sustainable Energy Group**

The Sustainable Energy Group opined that the Joint Utilities are capable of serving as administrator of the EERS programs. Nonetheless, the Sustainable Energy Group recommended that the Commission consider the benefits of transitioning over time some or all of program delivery to a non-utility statewide program administrator. Competitively bidding out the entire portfolio or individual pieces of the EERS may maximize private funding and deliver savings in a manner that allows for all potential administrators, utilities, and third parties alike, to offer comprehensive, least-cost savings. According to the Sustainable Energy Group, important conditions for successful administration include the right incentives, oversight, underlying procurement and resource acquisition policies, clarity of the purpose for pursuing efficiency, consistency of policy over time, and consensus among stakeholders.

**4. TRC**

TRC recommended programs that leverage consumer engagement efforts from multiple sources including the Joint Utilities and third-party administrators.

**5. The Way Home**

TWH supported the Joint Utilities' administration of EERS programs, at least in the short term. According to TWH, with appropriate performance incentives, rate structures, and program oversight in place, the Joint Utilities should have the incentive and initiative to continue implementing robust energy efficiency programs effectively, to the mutual benefit of ratepayers, shareholders, and the natural environment of the state.

**6. Settlement Agreement**

The Settlement Agreement provides for the Joint Utilities' administration of the EERS programs, at least for the first three years. In addition, the Settling Parties recommend that no

changes to the Joint Utilities' administrative role may be proposed prior to January 1, 2020, or be effective prior to January 1, 2021.

### C. Savings Targets and Planning Periods

#### 1. Staff

Staff proposed two sets of statewide, three-year, short-term savings targets and ten-year, "notional" long-term targets, referred to as Plan A and Plan B. Staff's targets, as well as all other parties' target recommendations, were expressed as a percent of actual 2014 kilowatt-hour (kWh) or one million British thermal units (MMBtu) sales. Staff noted that its annual year-over-year targets for gas savings were lower than its annual year-over-year electric savings targets, because the gas utilities have reached a higher level of savings historically relative to 2014 actual MMBtu usage.

Staff's Plan A sets the initial short-term cumulative targets at 1.82 percent for electric savings and 2.14 percent for gas savings over a three-year period. Both of the Plan A short-term targets are higher than current Core savings targets but lower than Plan B levels. Plan B's initial three-year cumulative targets are 2.04 percent for electric and 2.39 percent for gas. Staff estimated that using Plan B's short-term savings targets would result in cumulative kWh savings of approximately 220 million kWh by the end of the first three-year period, and lifetime kWh savings of approximately 3.1 billion kWh.[6] Staff's ten-year long-term targets for Plan A were 9.74 percent for electric and 10.20 percent for gas. Staff's long-term targets for Plan B were 14.48 percent for electric and 13.96 percent for gas. Staff referred to its long-term target as a "guidepost" and recommended that it be refined during the first three-year period of the EERS.

[6] Based on average life of 14.3 years – *i.e.*, cumulative kWh savings of 220 million kWh x 14.3 years average life = lifetime kWh savings of 3.146 billion kWh.

Staff asserted that both Plan A and Plan B targets are consistent with the Commission's energy efficiency policies; the State's 10-Year Energy Strategy; RSA 378:37, as well as a recent change in the Least Cost Integrated Resource Planning (IRP) law; and RSA 378:38, which requires utilities to maximize the use of cost-effective energy efficiency. Staff also stated that it developed its proposed savings targets to meet the criteria for an EERS as established by the American Council for an Energy-Efficient Economy (ACEEE), including creating a framework that promotes market stability. Further, according to Staff, its savings target recommendations are comparable to savings targets in other New England states and numerous Midwestern states, as well as to the potential savings identified in New Hampshire specific studies conducted during the last decade. Describing them as reasonable and achievable, Staff recommended the Commission's adoption of Plan B savings targets.

**2. Joint Utilities**

Similar to Staff, the Joint Utilities recommended a framework that includes short-term planning periods of at least three years. According to the Joint Utilities, transitioning from the Core's two-year planning period to a three-year planning period will provide more stability and continuity in program delivery, which will assist customers and other stakeholders in planning and investment decisions. The Joint Utilities contended that three-year periods would allow flexibility to adjust specific savings targets in response to changes in market conditions and to New Hampshire specific information such as results from evaluation and technical potential studies. A three-year planning period is also consistent with the EERS planning periods used in neighboring states and with the ACEEE's definition of an EERS.

Under the Joint Utilities' framework, the Commission would set annual kWh and MMBtu sales reduction targets, customized for each utility to account for different market

conditions and opportunities in different service territories and for different classes of customers. The Joint Utilities cautioned against setting targets based solely on aligning New Hampshire with neighboring jurisdictions. According to the Joint Utilities, savings targets should come from demonstrated savings potential in New Hampshire, although little weight should be given to prior studies, which are outdated at this point. The Joint Utilities recommended that savings goals should only apply to regulated fuels, but savings related to unregulated fuels should be identified and tracked so that associated benefits are captured and reported. The costs to achieve the savings targets should be fully funded and, in setting the targets, the Commission should be mindful of the impacts of such funding on customers. Citing the ACEEE, the Joint Utilities argued that the EERS long-term goal should be all achievable cost-effective energy efficiency.

**3. Sustainable Energy Group**

The Sustainable Energy Group recommended setting explicit quantitative short-term goals, preferably expressed as a cumulative goal over a three-year term as well as measured reductions in peak demand. Short-term targets, stated the Sustainable Energy Group, allow for greater flexibility and consideration of emerging and changing technology. Specifically, the Sustainable Energy Group recommended as reasonable and achievable, cumulative short-term goals of 3.1 percent for electric savings and 2.25 percent for gas energy savings for the 2017-2019 period.[7] The Sustainable Energy Group also recommended nominal interim annual targets of 0.8 percent, 1.0 percent, and 1.3 percent for electric savings and 0.7 percent, 0.75 percent, and

[7] The Sustainable Energy Group noted that their recommended targets are based on net savings (*i.e.*, not including "free rider" participants and including "spill over" participants) and do not include savings from updated codes and standards, self-direct customers, and before-the-meter projects. A "free rider" participant is one whose savings is counted in the program but who would have made the efficiency investment even in the absence of the program. A "spill over" participant is one who made efficiency investments but who did not participate in the program and was therefore not counted. Should gross or other savings be counted, the Group recommended that the Commission set even higher savings targets.

0.8 percent for gas savings. The Sustainable Energy Group described their recommended targets as well below actual achievement and near-term goals in most New England states.

According to the Sustainable Energy Group, longer-term goals may also be appropriate and are valuable, both as aspirational metrics and to express a commitment to efficiency in the future. The changing landscape of energy and efficiency, however, suggests that these may be best expressed in qualitative terms, such as all cost-effective energy efficiency. The Sustainable Energy Group opined that such a qualitative long-term goal can be quantified based on periodic revising of what is cost-effective given conditions at the time. A goal of all cost-effective energy efficiency, the Sustainable Energy Group stated, is consistent with New Hampshire's 10-year State Energy Strategy, RSA 378:37, and the Commission's objective of ensuring just and reasonable rates. In addition, to provide the confidence that businesses need to enter the efficiency market and invest for future growth, the Sustainable Energy Group recommended that long-term goals should not be used as a ceiling or an arbitrary maximum if and when greater investments in efficiency are justified. To achieve all cost-effective energy efficiency over the long term, the Sustainable Energy Group recommended mid-term annual goals of 2 percent and 1 percent, for electric and gas, respectively, by 2021.

For electric utilities, the Sustainable Energy Group also recommended a peak demand reduction target, because peak demand growth drives electricity prices by creating the need for additional generation, transmission, and distribution capacity requirements, and by driving up wholesale energy prices. According to the Sustainable Energy Group, that target should be set at a minimum of the expected peak demand reduction from a comprehensive efficiency portfolio designed to reach the electric savings target.

The Sustainable Energy Group opined that increasing energy efficiency targets can mean lower customer bills, improved customer choice, enhanced system reliability, and increased economic activity statewide. According to the Sustainable Energy Group, those objectives are consistent with New Hampshire's Electric Utility Restructuring law, RSA 374-F:3, X, prioritizing the reduction of market barriers to investments in energy efficiency, not reducing cost-effective customer conservation, and targeting cost-effective efficiency opportunities that may otherwise be lost due to market barriers. Energy efficiency resources are particularly critical, the Sustainable Energy Group argued, given the current regional landscape of retiring generation, decreased supply diversity, and the need to meet significant environmental goals. To meet increased savings goals, the Sustainable Energy Group recommended statewide delivery of some efficiency services, which can provide consistency in program offerings and brand recognition as well as economies of scale in terms of marketing, vendor management, and other administrative needs.

**4. Acadia**

Acadia provided information and recommendations concerning savings targets. All New England states, according to Acadia, far exceed existing New Hampshire savings goals. For example, compared to the Core electric savings goals for 2016 of 0.68 percent, Rhode Island's electric savings goal is 2.55 percent, and compared to the Core gas savings goal for 2016 of 0.62 percent, Rhode Island's gas savings goal is 1.05 percent.

Acadia recommended that savings targets be approved on three-year cycles. Specifically, Acadia recommended ramping up New Hampshire's savings goals during the first three years of the EERS to 2.5 percent cumulative electric savings and 1.25 percent cumulative gas savings.

**5. TRC**

TRC recommended aggressive energy savings mandates to drive increased investments in energy efficiency. TRC suggested long-term savings targets that will lead to all cost-effective energy efficiency as well as energy savings that are on par with other New England states. TRC also provided information about the energy efficiency markets in California, New York, and New Jersey, which it described as robust and mature. TRC suggested that the Commission look to those jurisdictions for best practices to launch an EERS effectively and efficiently.

**6. The Way Home**

TWH agreed with the Joint Utilities' recommendation to establish specific, short-term savings goals with an ultimate savings target of all achievable cost-effective energy efficiency. TWH similarly noted that such a long-term target is consistent with New Hampshire's energy policy, which recognizes efficiency as a first-priority, least-cost resource. TWH strongly recommended that energy efficiency services to low-income residential customers, such as the Core Home Energy Assistance (HEA) program, continue. According to TWH, without such services, efficiency is not available to all customers, and the goal of achieving all cost-effective energy efficiency is undermined.

TWH supported a three-year planning cycle and cumulative targets, along with annual implementation plans and annual interim nominal targets. TWH suggested that shorter-term targets should be quantified as electric kWh and gas MMBtu annual sales reductions based on demonstrated savings potential and should apply only to regulated fuels. Energy savings from unregulated fuels, according to TWH, should be counted towards quantifying the benefits of energy efficiency measures in the cost-benefit tests by which all programs are screened.

#### 7. Settlement Agreement

The Settlement Agreement provides deadlines for the Joint Utilities' filing of a 2017 Core plan as well as the Settling Parties' expectations for that plan, including statewide savings goals of 0.60 percent for electric savings and 0.66 percent for gas savings, using 2014 delivered sales as the baseline figure. The Settlement Agreement also defines the savings targets for the first three-year period of the EERS, 2018-2020, and describes the collaborative process by which the plan for that period shall be developed within the proposed framework. The cumulative electric savings goal is 3.1 percent of delivered 2014 kWh sales, with interim annual savings goals of 0.80 percent, 1.0 percent, and 1.3 percent. The cumulative gas savings goal is 2.25 percent of delivered MMBtu 2014 sales, with interim annual savings goals of 0.70 percent, 0.75 percent, and 0.80 percent. The Settling parties agree that future goals will be determined in the planning processes related to the second and any subsequent three-year EERS periods, with the intent of attaining the goal of achieving all cost-effective energy efficiency.

### D. Costs and Funding

#### 1. Staff

Staff recommended that the utilities recover the just, reasonable, and prudent costs incurred in developing, promoting, and delivering the EERS programs. To the extent possible, Staff also recommended allocating program spending based on class-specific sales volumes, which is consistent with long-standing Commission policy.

For the first triennium, Staff recommended funding most of the utilities' cost recovery with increases to the System Benefits Charge (SBC) and the Local Distribution Adjustment Charge (LDAC). The remaining costs, according to Staff, would be covered by existing funding from RGGI and the ISO-NE FCM. Staff observed that, recently, federal funding has been

available and used to support on-bill and third-party financing options for certain Core programs, but that funding is only available for a limited period of time and its future is uncertain.

To supplement public funding, Staff recommended exploring and developing private funding options, which could include loan portfolio sales and asset-backed securitization. According to Staff, private funding supplementation is necessary to achieve all cost-effective energy efficiency, but requires market growth, as well as stability and benefits from standardization of products, processes, and the availability of accurate risk and performance data.

Staff estimated the costs of Plan B for the first triennium, including the costs of lost revenues, performance incentives, several resources for an EERS advisory board, and inflation, as approximately $108 million for electric and $32 million for gas. To recover those amounts, the SBC would need to be increased from $0.0018 per kWh to rates within the range of $0.0022 to $0.0036 per kWh, and the energy efficiency portion of the LDAC would need to be increased from $0.0291 per therm to rates within the range of $0.0340 to $0.0450 per therm. Staff estimated the monthly bill impact of the SBC increase under Plan B for the first triennium on an average residential electric customer, with monthly usage of 700 kWh per month, as an increase of $0.25 to $1.27 per month. Staff estimated the monthly bill impact of Plan B on a General Service customer using 7,000 kWh per month as an increase of $2.53 to $ 12.70 per month. Staff's calculation of SBC bill impacts alone, did not attempt to estimate any of the additional customer savings resulting from the increased energy efficiency measures. Staff did not calculate monthly bill impacts of the LDAC increases associated with Plan B, because the LDAC is utility- and customer-class specific.

**2. Joint Utilities**

Like Staff, the Joint Utilities recommend funding the EERS with the SBC and LDAC. According to the Joint Utilities, customers are the most reliable and practical sources for funding energy efficiency programs. As the primary beneficiaries of the energy efficiency measures installed, utility customers are more likely to participate by partially funding the programs. Because the SBC and LDAC are variable rates (*i.e.*, applied on a per kWh and per therm basis) and are set according to consumption, using them to fund the EERS will impact customers according to their usage and send an enhanced price signal for using energy more efficiently, which is consistent with the goal of an EERS.

The Joint Utilities observed that the Commission has the authority to raise the SBC or the LDAC to levels it deems just and reasonable, and, because they are already the primary methods of funding the Core programs, changes to those rates can be readily accomplished. Also, funding the EERS primarily through the SBC and LDAC is consistent with how other jurisdictions have funded their EERS programs. In addition, the Joint Utilities opined that third-party financing alone is not as stable or reliable a source of funding as the SBC and LDAC, and will not support the goal of an EERS to significantly increase energy efficiency activity.

The Joint Utilities provided examples of bill impacts to a typical residential electric customer at the current rate and rates based on two increased funding levels. With no change to the SBC, there would be no change to customer bills. Estimated savings, based on 2014 delivery sales at current SBC rate, would be between 0.36 percent and 0.48 percent. With a 50 percent increase to the SBC, from $0.0018 per kWh to $0.0027 per kWh, estimated savings would be between 0.52 percent and 0.68 percent of 2014 delivery sales, and funding would increase by nearly $10 million, increasing a typical residential customer's bill by $0.56 per month. If the

SBC were doubled to $0.0036 per kWh, estimated savings would be between 0.67 percent and 0.87 percent of 2014 delivery sales, and the increase would provide nearly $20 million of additional funding, increasing a typical residential customer's bill by $1.13 per month. The Joint Utilities did not recommend approval of any specific savings level but stated that, regardless of the level set by the Commission, a uniform rate per kWh should apply to all electric utilities. The Joint Utilities also did not estimate the costs or bill impact of changes to the LDAC.

**3. Sustainable Energy Group**

According to the Sustainable Energy Group, the existing level of funding for efficiency in New Hampshire is below the amount that is economically efficient, and current funding is insufficient to achieve the Group's recommended targets. In setting funding levels, the Sustainable Energy Group recommended that the Commission address three areas of cost: the recovery of program costs; a mechanism to recover efficiency-related lost revenues; and performance incentives.

The Sustainable Energy Group argued that the utilities or program administrators should be able to collect 100 percent of actual efficiency program costs prudently expended, with any associated carrying costs, in addition to its efficiency-related lost revenues and performance incentives. To the extent practicable, the Sustainable Energy Group recommended that, to eliminate cross-subsidization across customer classes, each customer class (*i.e.*, residential, commercial, and industrial) should contribute to program costs in proportion to spending on programs for the customer class. The Sustainable Energy Group noted that the one exception to linking cost recovery to program expenditures is the low-income program budgets, which should be allocated first, with the remaining budgets allocated proportionally to remaining customer classes.

The Sustainable Energy Group recommended that all ratepayers contribute to efficiency programs, because all customers benefit from them. In terms of how funding is collected, the Sustainable Energy Group recommended that, in order to protect customers and ensure that efficiency spending is generating benefits, efficiency costs should not be included in base rates. Amortizing program implementation costs over a short period of time, however, may be an option if the utilities are allowed to recover carrying costs. The Sustainable Energy Group estimated that by saving 3.1 percent of retail energy sales, New Hampshire ratepayers will save $45 million and thousands of jobs will be created.

The Sustainable Energy Group acknowledged that rate impacts will result from the implementation of efficiency programs regardless of the source of funding, because the utility's fixed costs will be collected over lower billing units. Nonetheless, cost-effective efficiency programs result in lower total bills for ratepayers even if per unit energy rates increase. According to the Sustainable Energy Group, bill impacts do not represent increased societal or ratepayer costs, but rather a shift in the allocation and recovery of sunk fixed costs among ratepayers. Despite those shifts, the Sustainable Energy Group contends that using public funds to invest in energy efficiency results in a more rational and efficient allocation of resources and increases total net economic benefits for the state. To the extent that the Commission considers rate impacts of efficiency funding, it should do so in the larger context of comparative costs for all resource acquisition and their impacts on ratepayers, including the risk of stranded costs and other large fixed capital costs that must be amortized through rates over multiple years, if not decades.

The Sustainable Energy Group recommended that the Commission view "buying" energy efficiency as akin to paying for any prudent acquisition of an energy resource. According to the

Sustainable Energy Group, energy efficiency is widely considered the lowest cost energy resource, meaning that a unit of energy saved through efficiency is less expensive than the total lifetime cost of a unit of energy from other resources such as traditional fossil fuel generation and renewable energy sources, when compared on a consistent and fair basis. This is true, the Sustainable Energy Group argued, even when no economic value is placed on the environmental, health, and economic impacts that are not currently monetized in our economy. In addition, not increasing energy efficiency at this time could disadvantage New Hampshire utility customers in terms of mandatory, socialized regional costs of transmission and distribution expansion due to peak demand. Because other states are investing more in efficiency and distributed generation, their share of the ISO-NE peak load is decreasing and, without more efficiency in New Hampshire, its ratepayers' share of load, and the associated costs, will be proportionately higher.

The Sustainable Energy Group opined that private funding is not a replacement for public funding, in part because numerous barriers exist, including uncertainty and lack of knowledge on the part of investors, the up-front investment required from the customer, and a relatively immature market for efficiency services. According to the Sustainable Energy Group, the barriers to increased private funding may be best addressed by focusing initially on ratepayer-funded energy efficiency to build the knowledge, understanding, trust, and infrastructure that can later support private funding.

**4. Acadia**

Acadia recommended that the Commission fund the EERS through increases to the SBC and the LDAC. According to Acadia, private financing should not be considered a standalone funding option, because it generally will not have substantial uptake in the absence of ratepayer-funded programs, and it will not capture all cost-effective energy efficiency.

Acadia provided information about the many benefits of increased energy efficiency investment that should be considered against the impacts of associated rate increases. For example, to illustrate that energy efficiency is cheaper than other supply resources, Acadia stated that New Hampshire spent $4.5 billion on fossil fuel imports, at an average cost of $0.14 per kWh, when the average cost of energy efficiency was $0.0226 per kWh. Citing a 2009 study to demonstrate benefits enjoyed by all ratepayers regardless of participation in efficiency programs, Acadia stated that increasing efficiency investments to a level needed to capture all cost-effective electric efficiency over 15 years, or $1.4 billion, would increase economic activity by $14 billion (in 2008 dollars). Likewise, increasing gas efficiency by $219 million over 15 years would increase state economic activity by $4.1 billion. In addition, according to Acadia, all ratepayers benefit from decreases in the cost of generation, because less demand means lower prices in the regional forward capacity market and lower wholesale electricity prices.

**5. TRC**

TRC described the SBC, LDAC, and other existing mechanisms used to fund energy efficiency in New Hampshire as a solid foundation for structuring an EERS market. TRC's recommendations for funding, however, focused on the proceeds from RGGI auctions, most of which are not available for efficiency by statute.

**6. The Way Home**

TWH urged the Commission to increase public funding to the extent needed to meet the EERS targets it sets and to maintain the existing percentage allocations of program resources among customer sectors pursuant to the Core plan. According to TWH, without a commensurate increase in funding to accompany more aggressive savings goals, existing programs are put at risk.

TWH described an increase in the SBC and LDAC as the easiest and most equitable means of increasing funding to support an EERS. TWH recommended that the Commission continue its Core practice of first allocating low-income program budgets and then allocating program budgets for remaining customers. In addition, TWH recommended that the Commission consider increasing the low-income allocation above the existing 15.5 percent if private funding of efficiency is expanded under an EERS. According to TWH, allocating more public funding to low-income efficiency measures is consistent with the statutory requirement to "target cost-effective opportunities that may otherwise be lost due to market barriers." RSA 374-F:3, X.

**7. Settlement Agreement**

To achieve the recommended targets for the 2017 Core extension and the first three-year period of the EERS, the Settling Parties recommend that the Commission increase the SBC and LDAC. Illustrations of the estimated costs of funding the recommended savings goals associated with those periods of time are shown in attachments to the Settlement Agreement. The Settling Parties agree that the costs to fund the EERS include the costs associated with, (1) an independent expert to assist in refining the framework, planning and implementation of the EERS; (2) an independent expert to assist with the oversight and execution of EM&V activities; and, (3) independent experts to conduct the EM&V activities of the individual programs.

In addition, the Settlement Agreement provides for an increase in the minimum low-income share of the overall energy efficiency budget from 15.5 percent to 17 percent. As proposed, the increase would take effect on January 1, 2017, and remain in effect through the first three-year period of the EERS. During that time, the Settling Parties will explore additional funding sources to augment ratepayer funding.

### E. Recovery of Lost Revenues

#### 1. Staff

According to Staff, a targeted lost revenue adjustment mechanism (LRAM) or decoupling may be used to compensate utilities for lost revenues associated with energy efficiency. LRAMs limit the recovery to sales revenue lost on account of energy efficiency activity, while decoupling permits the utility to recover the difference between its actual revenues and its authorized revenue requirement no matter the reason. With an LRAM, under certain conditions, a utility may actually earn more than its authorized revenue requirement. With decoupling, the utility would refund to customers any amount that exceeds its authorized revenue requirement. Decoupling also addresses the throughput incentive that traditional ratemaking creates (*i.e.*, higher sales equals higher revenues). Because of Commission policy requiring the consideration of decoupling only within the context of a rate case, Staff recommended the adoption of an LRAM for the initial three-year period, to be replaced thereafter by a decoupling mechanism.

Staff's LRAM included several adjustments: (1) an adjustment that would allow for the recovery of lost revenues through the LRAM only above a specific threshold level to reflect historical Core energy efficiency investment; (2) an adjustment that would reduce the lost revenues recovered through the LRAM by savings associated with the retirement of measures installed in the past; and, (3) for gas utilities only, a fuel-switching adjustment that would reduce the recovery of lost revenues through the LRAM by the amount of new gas revenues associated with program participants who convert from other fuels to high-efficiency natural gas for heating. Staff also recommended that the annual recovery of lost revenues through the LRAM be capped at 0.50 percent of sales revenue and that the costs associated with the LRAM be included in the benefit/cost test used to screen energy efficiency programs. For the first

three-year period of the EERS, Staff estimated that its LRAM would increase the costs of energy efficiency by approximately $2 million for the electric utilities and $0 for the gas utilities. Staff recommended recovery of lost revenues determined by the LRAM through the SBC and LDAC.

**2. Joint Utilities**

The Joint Utilities[8] recommended that the EERS allow for recovery of lost distribution revenues associated with energy efficiency savings, because revenue for all components of service is reduced by implementing energy efficiency measures. That reduced revenue is a consequence of the way utility distribution rates are set, based on an approved revenue requirement, designed using assumptions of a set level of customers, demand, and consumption for each rate class, and collected, in part, through a volumetric charge. Also, between rate cases, there is no reconciliation of actual revenues to the approved revenue requirement. The Joint Utilities contended that the recovery of lost revenues would restore the assumed relationship between sales levels and revenue requirements used in setting rates through historic test year ratemaking. According to the Joint Utilities, costs increase between rate cases, and the loss of sales does not necessarily equate to a similar decrease in the fixed costs used to set rates. Therefore, without recovery of energy efficiency related lost revenues, the utility collects less than its approved revenue requirement.

The Joint Utilities proposed that each recover lost distribution revenues through a Lost Base Revenue Adjustment (LBR Adjustment). The Joint Utilities proposed a formula to calculate the LBR Adjustment for future periods:

[8] For the purpose of this section, references to the Joint Utilities do not include the NHEC. NHEC does not seek recovery of lost revenues, because lost revenue mechanisms primarily address revenue recovery issues associated with distribution rate regulatory processes that apply to investor-owned utilities. Because NHEC is a deregulated, member-owned rural electric cooperative, it is not subject to the same regulation as the other electric utilities.

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

Lost Revenue Rate = Total Lost Revenues / Projected Kilowatt Hours

Under their proposal, the LBR Adjustment would be a factor in setting the SBC and LDAC, and lost base revenues would be reconciled annually, when the LBR Adjustment factor is set for the upcoming period. Because each utility's lost revenues may be different, each utility's SBC or LDAC may be different. The Joint Utilities opposed, and described as confiscatory, Staff's recommendations to cap or adjust lost revenues. The Joint Utilities also opposed Staff's recommendation to include lost revenues as a cost within the cost/benefit test for the purpose of screening efficiency programs.

The Joint Utilities contended that the SBC and LDAC are transparent, efficient mechanisms that can be readily implemented to recover lost revenues (as well as to fund the costs of the EERS programs). According to the Joint Utilities, the LBR Adjustment can be established without the need for a distribution rate case and would implement lost revenue recovery coincident with implementation of savings measures. In contrast, a mechanism such as decoupling would require a distribution rate case entailing a lengthy process that requires extensive resources from each utility, Commission Staff, and interested parties. Such a case, the Joint Utilities argued, would consider more than the revenue impacts of energy efficiency in determining the revenue requirement and appropriate rate mechanisms; all aspects of the revenue requirement would come into play, including issues associated with distribution capital investments, operating and maintenance costs, and rate of return. The Joint Utilities opposed implementing decoupling, contending that an LBR Adjustment leaves a utility in the financial position contemplated by its last rate case (*i.e.*, equal to where it would have been absent

efficiency activities), no better or worse, and only a lost revenue recovery mechanism isolates the effect on utility revenue of efficiency.

**3. Sustainable Energy Group**

The Sustainable Energy Group recommended a mechanism to permit recovery of lost revenue resulting from lower energy sales due to efficiency. According to the Sustainable Energy Group, and contrary to the Staff, lost revenue is not a cost of efficiency programs, because lost revenues would have been collected from customers even in the absence of efficiency programs. Instead, recovery of lost revenue from efficiency is simply a shift in how those authorized revenues are recovered from ratepayers.

The Sustainable Energy Group described lost revenue recovery mechanisms as designed to quantify the lost net revenue that can be recovered by the utility. To develop accurate estimates of lost revenue, the Sustainable Energy Group argued that precise evaluation, measurement, and verification are required. Best practices include independent third-party review, frequent rate cases to avoid the "pancake effect" of lost revenue recovery costs accumulating over time, and combining lost revenue recovery with performance incentives sufficient to promote increased utility investment in energy efficiency. The Sustainable Energy Group also suggested that, with an LRAM, performance incentives can be focused solely on exemplary performance. In addition, the Sustainable Energy Group noted that an LRAM allows a utility's earnings to increase with increased sales and, consequently, it is possible for a utility with an LRAM to have sales in excess of the test year used to set rates (even with reductions from efficiency programs) and earn excess profit as well as collect lost revenues.

The Sustainable Energy Group contrasted an LRAM with decoupling, which seeks to remove the direct connection between sales and revenue, such that the utility's fixed costs are

covered regardless of total energy sales. According to the Sustainable Energy Group, decoupling generally includes a price adjustment to "true up" revenues when sales are different than those forecasted in the rate setting process. The correction of variances should take place at least annually, the Sustainable Energy Group argued, and should accrue to the utility, or credit back to the ratepayers. With decoupling, throughput is fully decoupled from revenue, meaning it accounts for all sales fluctuations not just those related to energy efficiency. The Sustainable Energy Group noted that this could translate into benefits for customers in cases where sales increase.

In the Sustainable Energy Group's opinion, the symmetrical treatment of revenue requirement recovery using decoupling results in, along with other benefits, the potential for both customer surcharges and refunds, rather than just surcharges, and makes full decoupling preferable to an efficiency specific LRAM. Other benefits include simplifying future rate cases and reducing the volatility of utility revenues. Consequently, the Sustainable Energy Group recommended that the Commission consider moving towards full decoupling, even if LRAM is used as an interim step. Should an LRAM be implemented first, the Sustainable Energy Group opposed incorporating the cap and adjustments that Staff recommended, and the Sustainable Energy Group recommended that the LRAM be reconciled annually.

**4. Acadia**

Acadia recommended that the Commission establish decoupling for the Joint Utilities in their next rate cases. Under decoupling, customers would pay two charges: one for the energy they use; and the other for the costs of the distribution system used to deliver the energy. Distribution charges would be adjusted annually so that the utility does not collect more or less

than it is allowed by the Commission. According to Acadia, decoupling complements performance incentives.

Acadia discussed Staff's recommendation of an LRAM for the initial three-year period, to be transitioned into decoupling. Acadia agreed with that approach but opposed Staff's retirement and fuel-switching adjustments. In addition, Acadia urged Staff to support decoupling in the next rate case for each utility.

**5. The Way Home**

TWH supported the Joint Utilities' general parameters for recovery of lost distribution revenue associated with higher levels of energy efficiency savings, and it supported the implementation of a lost revenue adjustment mechanism in the short term. TWH indicated it would take a position on Staff's recommendation to transition such a mechanism to decoupling, when a more comprehensive decoupling rate structure is proposed.

TWH agreed with the Sustainable Energy Group's (and the Joint Utilities') recommendation that lost net revenue recovery not be treated as a cost in the cost/benefit test used for efficiency programs. Doing so, TWH stated, might make it difficult to achieve energy efficiency savings comparable to neighboring states and could result in the low-income Home Energy Assistance program, and perhaps other efficiency programs, being mistakenly labeled as cost ineffective in the future.

TWH also agreed with the Sustainable Energy Group that the most equitable way of recovering lost revenue is through increases to the volumetric charges, not the fixed charges, on customer bills. According to TWH, increasing the fixed charges disproportionately harms low-income ratepayers least able to absorb them, and acts as a disincentive to customer conservation efforts and energy efficiency program participation.

#### 6. Settlement Agreement

The Settling Parties recommend that the Commission implement an LRAM for effect January 1, 2017 and that the LRAM continue after implementation of the EERS. The LRAM will be designed and implemented consistent with the Joint Utilities' proposal, the details of which are summarized above. In addition, the Settlement Agreement requires total recovery through the LRAM to be capped at 110 percent of planned annual savings; savings to be adjusted to account for the actual month the measures are installed within the year of installation and for the results of EM&V studies.[9] The Settlement defines the rate used to calculate LRAM recovery (*i.e.*, the "Utility Distribution Rate" in the Joint Utilities' proposed formula) to be an average distribution rate excluding customer charges.

The Settling Parties recommend, for each utility's rate cases following the implementation of the LRAM, that the savings used to calculate the utility's lost revenue be reset to zero. They also recommend that in each utility's first rate case following the first three-year period of the EERS, the utility seek approval of a new decoupling mechanism as an alternative to the LRAM, and that the LRAM cease when the new mechanism is implemented.

### F. Performance Incentives

#### 1. Staff

Staff recommended including performance incentives (PI) in the EERS framework to incent the Joint Utilities' investment in energy efficiency. According to Staff, performance incentives place energy efficiency and supply-side investments on a relatively equal financial footing and enables utility shareholders to earn a comparable return on either investment. Staff also noted the vital role of PI in the success of the Core programs.

---

[9] The Settlement Agreement does not incorporate Staff's proposed threshold, retirement, and fuel-switching adjustments to the LRAM, or Staff's recommendation to include lost revenues as a cost for the purpose of determining the cost/benefit ratio of the 2017 Core and EERS programs.

Staff recommended 10 percent of annual budgets as an appropriate PI cap for both the electric and gas utilities. The 10 percent cap is the same as the existing Core PI cap for electric utilities, and it is 2 percent less than the existing 12 percent Core PI cap for gas utilities. Staff asserted that the PI cap for electric and gas utilities should be the same, because the Commission's energy efficiency programs are statewide. Staff further supported the reduction to the gas PI cap by considering it in relation to the PI caps in other New England states, which are all lower than 10 percent. To calculate PI, Staff recommended continuation of the existing (*i.e.*, Core program) cap on actual spending at 5 percent of budgeted spending. In addition, Staff recommended that the Commission review the PI level after the first triennium of the EERS, when it has data on the impact of the LRAM on the Joint Utilities' energy efficiency activities.

**2. Joint Utilities**

The Joint Utilities proposed that the Commission maintain the current Core PI mechanism and levels. Under their proposal, the Joint Utilities' performance would continue to be evaluated against both the achievement of the defined savings and the cost-effectiveness targets. The methodology would be based on actual program expenditures with threshold and maximum performance payout levels. The Joint Utilities contend that the existing mechanism is easy for stakeholders to understand, effectively tracks performance, and appropriately focuses on the primary factors that are most pertinent to rewarding performance. In response to the Order of Notice, the Joint Utilities opposed incorporating penalties into the EERS framework, contending that the failure to earn PI constitutes sufficient financial detriment.

**3. Sustainable Energy Group**

The Sustainable Energy Group recommended that the EERS provide performance incentives to allow the Joint Utilities a reasonable incentive to pursue exemplary performance

and to make efficiency investments attractive relative to other available investment opportunities. The design of the incentive mechanism, the Sustainable Energy Group stated, should ensure that ratepayers are protected from providing excessive earnings levels beyond those necessary to create that incentive and equal footing. PI should be commensurate with the lower risk of investing in efficiency as compared to supply-side investments, and to the extent existing PI levels include compensation for lost revenues, they should be reduced.

The Sustainable Energy Group discussed several PI models used in other jurisdictions and noted that New Hampshire already uses one model for the Core programs, a performance target incentive. Regardless of the model used in the EERS, it should include clearly articulated earnings and/or penalties, based on tangible, measurable performance that is under some control of the utility or program administrator. Also, the Sustainable Energy Group recommended that the performance incentive metrics be defined in a way that achieves efficiency policy objectives and guards against perverse incentives that could lead to undesirable policy outcomes. The Sustainable Energy Group noted that incentive designs where multiple parameters can be rewarded or penalized, are one way to protect against perverse effects.

**4. Acadia**

Acadia described PI as essential to maximizing investment in efficiency and demand-side resources. Acadia linked decoupling with PI, suggesting that decoupling enhances the effect of PI. Acadia opposed the PI levels recommended by Staff, contending that if a lost revenue recovery mechanism is approved for the EERS, PI should be more in line with neighboring states, or between 2 percent and 8 percent.

#### 5. The Way Home

TWH supported providing the opportunity to the Joint Utilities (or other program administrator) to earn performance incentives when the Core programs transition to an EERS, because the incorporation of a reasonable PI is consistent with the policy of treating energy efficiency as a supply resource. TWH suggested, however, that if a lost revenue recovery mechanism is implemented, the Commission may want to consider reducing the current Core levels of PI, because such a mechanism shifts risk away from the utility to the ratepayer by guaranteeing the recovery of certain revenues.

#### 6. Settlement Agreement

The Settlement Agreement recommends PI for the Joint Utilities at a target level of 5.5 percent and a maximum level of 6.875 percent of spending. Those PI levels should be effective when the LRAM is implemented, or January 1, 2017, and should remain unchanged at least through the first three-year period of the EERS. In addition, prior to the filing of the first EERS plan, the Settling Parties would review the existing PI formula and consider the way it values achievements of low-income programs. The Settling Parties agree that any recommendations for modifications to the PI formula may be included in that filing or proposed during the Commission's review of that filing.

### G. Stakeholder Involvement

#### 1. Staff

Staff recommended the creation of a permanent EERS Advisory Council made up of a broad group of stakeholders representing a variety of interests. Staff asserted that other jurisdictions use stakeholder groups to develop consensus and energy efficiency policy recommendations. According to Staff, the Advisory Council should include representatives from

the utilities, the Commission and DES, the OCA, environmental groups, customers, energy efficiency program providers, and consultants. Staff recommended that the Commission designate the existing Energy Efficiency and Sustainable Energy (EESE) Board as the Advisory Council and authorize the recovery of funds through the SBC and LDAC for its administrative and technical support. Specifically, Staff recommended the use of an independent consultant to facilitate the Advisory Council's work and expert consultants as necessary. Staff envisioned the Advisory Council's work as including annual reports on energy efficiency achievements, coordination of studies, and development of a Technical Resource Manual (TRM). The TRM, according to Staff, would include New Hampshire specific EM&V protocols and reporting forms.

**2. Joint Utilities**

The Joint Utilities recognized the wide range of stakeholders who work with them to plan, deliver, and evaluate the Core programs. Stakeholders include retailers, manufacturers, equipment distributors, contractors, builders, architects, engineers, trade associations, non-profit organizations, policy makers, program evaluation vendors, and customers. According to the Joint Utilities, the stakeholders' contributions are essential to the success of the programs. Under an EERS, the Joint Utilities, like Staff, recommended that the EESE Board function as an energy efficiency stakeholder board. The Joint Utilities view the roles, responsibilities, and membership of the EESE Board as very similar to the EERS stakeholder boards in other states. EESE Board membership includes energy efficiency and sustainable energy stakeholders, state policy makers, representatives of the business community, and utility program administrators.

Similar to Staff, the Joint Utilities recommended additional resources for the EESE Board in its new role as EERS advisor. Specifically, the Joint Utilities suggested the dedication and

funding of an administrative employee and the engagement of specialized organizations such as Northeast Energy Efficiency Partnerships (NEEP) and Regulatory Assistance Project (RAP).

**3. Sustainable Energy Group**

To oversee and guide efforts to implement the requirements of an EERS, the Sustainable Energy Group also recommended an advisory body with sufficient resources and authority to ensure robust stakeholder involvement and to assist the Commission. According to the Sustainable Energy Group, Commission proceedings are too cumbersome to provide a forum where inclusive, informed discussions and decisions necessary to implement best practice energy efficiency programs can be conducted.

The Sustainable Energy Group recommended that the advisory body's membership include a wide range of stakeholders to ensure a balance of interests in efficiency oversight. Stakeholders should include all customer classes (individually represented), state environmental policy staff, Commission staff, consumer protection agencies, advocacy groups in the energy and environmental fields, and the energy efficiency industry. According to the Sustainable Energy Group, the Joint Utilities should be active participants in the advisory body but should not have voting privileges.

The Sustainable Energy Group noted that the EESE Board includes some features important to a robust advisory body (*e.g.*, diverse membership), but it currently has little authority and no staff or funding. To be effective, the EESE Board will need guidance from experts in energy efficiency planning, evaluation, program design, and implementation. In addition, because the members will likely have full-time jobs and will only serve in a voluntary capacity, administrative and technical support is needed to manage and conduct the basic

operations and analysis of the group. According to the Sustainable Energy Group, some jurisdictions contract for administrative support and expert resources.

**4. Acadia**

Consistent with the positions of others, Acadia also recommended that the Commission supplement the adjudicative process it uses for energy efficiency with a stakeholder council or board to oversee planning and administration of statewide programs through a collaborative process. Doing so ensures that the programs enjoy a broad base of support and reduces the duration and complexity of the approval process at the Commission. Acadia stated that in other states in the Northeast, stakeholder boards may spend six months or more in a collaborative plan development process with the utilities before filing plans for approval. According to Acadia, using a stakeholder body to guide efficiency investment will also reinforce high standards for programs, because the stakeholders are end users. Acadia also recommended that the advisory body have access to expert resources to balance the utilities' access to information and expertise. The EESE Board, Acadia stated, could be transitioned into an advisory body role if adequate funding is made available for such resources.

**5. The Way Home**

TWH echoed the recommendation of others that the EESE Board be used as an advisor to the Commission in its implementation of an EERS. TWH also observed the EESE Board's limited statutory authority and need for resources, but suggested that those limitations may be overcome by the Commission specifically designating the EESE Board's role in its order approving the EERS.

#### 6. Settlement Agreement

The Settlement Agreement specifically provides opportunities for the EESE Board to actively participate in the development of the EERS programs within the proposed EERS framework, and in the Commission-supervised EM&V activities under the EERS. The Settlement Agreement also recommends EESE Board access to the independent planning and EM&V oversight experts.

### H. Evaluation, Measurement and Verification

#### 1. Staff

Staff considers EM&V a vital part of a successful EERS program, for program transparency and credibility. Staff described evaluation as the performance of studies and activities aimed at determining the effects of an energy efficiency program or portfolio. Measurement and verification, according to Staff, constitutes data collection, monitoring, and analysis associated with the calculation of savings from individual projects. EM&V according to Staff, ensures that the Joint Utilities are actually meeting the savings targets and spending ratepayer funds in a just and reasonable manner, and that energy efficiency programs are cost effective. Currently, the Joint Utilities administer EM&V to monitor and manage the Core programs.

To enhance EM&V under an EERS framework, Staff recommended that funding be set aside for independent consultants and for the development of a New Hampshire technical resource manual. Staff noted recent efforts in New England to develop consistent protocols and reporting for EM&V, which could be adopted where feasible. In addition, Staff recommended that the EESE Board in its role as an EERS Advisory Council guide EM&V, and that the results of EM&V impact studies be used to update savings assumptions and program design.

**2. Joint Utilities**

The Joint Utilities described EM&V practices for the Core programs, which include stringent and transparent reporting regarding their achievement of planned savings, participation, and cost-effectiveness goals, verification of results, onsite inspections, independent third-party market assessments, program process and impact evaluations, and annual financial audits. According to the Joint Utilities, the existing practices hold them to high standards of accountability and verification, which includes several layers of quality control.

For an EERS with increased savings goals, the Joint Utilities, like Staff, recommended that the Commission hire an independent consultant to help guide energy efficiency evaluation activities. Accordingly, the consultant would create an implementation plan and review and adjust evaluation priorities. The Joint Utilities suggested that the consultant's review could include consideration of the Environmental Protection Agency's Clean Power Plan as well as the standardization of EM&V reporting forms.

The Joint Utilities proposed that they manage the evaluation activities under the Commission's oversight. In support of their proposal, the Joint Utilities cited their procurement and contract management capabilities, which allow them to act efficiently and cost effectively. Citing a recent example, the Joint Utilities contended that their existing relationships with EM&V consultants and colleague counterparts from among their affiliates in other states will help them coordinate evaluation activities and identify best practices, current challenges, and opportunities.

**3. Sustainable Energy Group**

The Sustainable Energy Group opined that the success of an EERS can only be measured by assessing the extent to which energy reduction targets are actually realized. The key concepts

and requirements of EM&V, according to the Sustainable Energy Group, include rigor, transparency, and independent third-party verification, to ensure consistent and fair assessment of program performance. The Sustainable Energy Group recommended that the achievement of savings targets and earning of performance incentives be evaluated on the same basis for the sake of efficiency and fairness. In addition, the Commission and its advisory body should oversee EM&V services.

#### 4. The Way Home

TWH generally concurred with the EM&V recommendations of other parties. In addition, TWH noted the one measurement consideration specific to low-income residential ratepayers, which is that low-income programs may fall below a benefit cost ratio of 1.0 under the Total Resource Cost test and still be approved by the Commission.

#### 5. Settlement Agreement

The Settlement Agreement requires EM&V studies to be conducted by independent third parties retained and supervised by the Commission with the advice and participation of the Settling Parties and the EESE Board. If requested, an independent expert, separate from the independent planning expert required by the Settlement Agreement, would facilitate the Settling Parties' and the EESE Board's participation in, and provide oversight of, the EM&V study activities. One specific deliverable of the EM&V expert will be assisting with the development of a New Hampshire-specific technical resource manual by the end of the first EERS triennium.

### I. Regulatory Process

#### 1. Staff

Staff recommended leveraging the exiting Core mechanisms to transition to an EERS framework. According to Staff, the Joint Utilities, as administrators, would prepare the triennial

EERS plans in collaboration with stakeholders and the EESE Board as Advisory Council, for review and approval by the Commission. Staff also recommended annual reviews during the three-year EERS periods. Those reviews, according to Staff, should include updating savings assumptions based on the results of EM&V studies. In addition, Staff recommended continuing practices developed for the Core program, including the processes for budget transfers and carrying forward unspent funds.

**2. Joint Utilities**

The Joint Utilities proposed developing savings targets for the EERS through a comprehensive process that validates savings targets feasibility and provides a detailed plan for specific programs. Savings target development, however, would follow an annual determination by the Commission of the funding levels. According to the Joint Utilities, the Commission uses such a process currently to set the LDAC rate for gas utilities.

The Joint Utilities proposed that, each year of the EERS, they prepare and submit to the EESE Board a draft energy efficiency plan for its review before a final plan is filed with the Commission for approval. That process would allow collaboration between the EESE Board and the Joint Utilities in a non-adjudicative setting, which the Joint Utilities believe could result in a more efficient Commission proceeding. According to the Joint Utilities, the Commission's regulatory role of overseeing the state's energy efficiency programs would continue in its current form. The Commission would determine if the final plans submitted by the Joint Utilities are in the public interest, including the program budgets and program cost effectiveness. In addition, the Commission would continue to oversee ongoing reporting and implementation and results of the programs.

The Joint Utilities propose that each utility, except NHEC, file its own request for recovery of EERS-related lost revenues, which will vary by utility each year and that the Commission adjudicate the requests individually. According to the Joint Utilities, the LBR Adjustment process would be separate from the three-year planning process used to set savings targets and to establish specific programs to meet those goals.

**3. The Way Home**

TWH recommended regular review of the efficiency programs during the three-year EERS planning periods, perhaps quarterly as is currently done for the Core programs. TWH also recommended an annual planning process.

**4. Settlement Agreement**

The Settling Parties recommend that they work collaboratively to refine a draft plan for the first triennium of the EERS, which will be filed for Commission review and approval by September 1, 2017. An independent consultant would be hired by the Commission, with a budget not to exceed $95,000 annually, to assist in the development of the initial and subsequent EERS plans. The consultant would serve as a resource to the EESE Board and other stakeholders as requested and deemed appropriate by the Commission.

The Settlement Agreement requires the filing of annual updates during the three-year EERS plan periods, for Commission review and approval. The review process would be akin to the process currently used to review mid-period submissions in the Core dockets. Such annual update filings will serve as an opportunity to adjust programs and targets and address any other issues that may arise from changes or advancements, including evaluation results, state energy code changes, and federal standard improvements.

The Settlement Agreement and the Joint Utilities' proposal provide specific detail about the processes to be followed with regard to lost revenue recovery, including the annual setting of a rate for the next year and the reconciliation of the prior year's rate and revenue recovery. The Settlement Agreement also requires actual savings and costs to be audited by an independent third party.

**J. Implementation Date**

**1. Staff**

Staff recommended an EERS implementation date of January 1, 2017.

**2. Joint Utilities**

The Joint Utilities recommended that the EERS be implemented beginning January 1, 2018. According to the Joint Utilities, adequate time is needed for thorough program development and a more comprehensive stakeholder review process than is typically used for the Core programs. Under their proposal, the Joint Utilities would present a draft three-year plan to the EESE Board on April 1, 2017, and allow two months for EESE Board's review. Then, the Joint Utilities would file the final plan with the Commission by September 30, 2017, for approval by December 31, 2017. Also before implementation of the EERS, the Commission would determine the SBC and LDAC funding rates.

In the meantime, the Joint Utilities proposed to file, on or before September 30, 2016, an interim, one-year Core plan for 2017. Also by that date, the Joint Utilities would file testimony regarding the implementation of their LBR Adjustment.

#### 3. Sustainable Energy Group

The Sustainable Energy Group did not specifically recommend an implementation date. In discussing savings targets, however, the Group referred to the first three-year period of the EERS as 2017-2019.

#### 4. Settlement Agreement

The Settlement Agreement proposes the implementation of an EERS beginning January 1, 2018. During 2017, the Core programs will continue, and the Settling Parties, in collaboration with the EESE Board, will prepare for EERS implementation.

### K. Beyond Implementation

#### 1. Staff

Staff described energy efficiency programs and products that are available in other jurisdictions, but not New Hampshire. Staff suggested that some or all of those offerings could be used to enhance an EERS. According to Staff, the Joint Utilities could use the integrated resource planning process to identify new opportunities for energy efficiency. In addition, demand-side management and grid modernization tie well with energy efficiency programs.

#### 2. Joint Utilities

The Joint Utilities described their vision for the future of the EERS and provided examples of expanded program services, new initiatives, and innovative implementation strategies. The examples included piloting emerging technologies, offering incentives for combined heat and power projects, and incorporating the use of midstream and upstream program delivery models, which allow for energy efficiency equipment incentives at the retailer and manufacturer level.

The Joint Utilities also discussed potential sources of funding for the EERS other than the SBC and LDAC, including the Commercial Property Assessed Clean Energy (C-PACE) program. According to the Utilities, C-PACE falls under third-party financing, specifically for commercial buildings, and allows building owners to finance cash-positive energy efficiency and renewable energy projects, tying the financing to the property through a voluntary, municipal special assessment/lien. The Joint Utilities argued that C-PACE could work in combination with the programs under an EERS.

**3. Sustainable Energy Group**

To ensure that the benefits of peak demand reduction are realized for all ratepayers, the Sustainable Energy Group recommended that the Commission consider establishing cost-effective peak shaving demand reduction programs.

**4. TRC**

TRC recommended that the EERS broaden the customer base that is reached by the existing efficiency programs and provide the opportunity for all contributors to program funding to receive program benefits. TRC recommended that the EERS include hybrid programs that effectively address both electricity and fuel savings, because they introduce building owners to deeper energy savings projects.

**5. OCA**

The OCA recommended that all residential ratepayers participate in a single, statewide customer engagement technology platform (CETP) akin to the platform being developed by Eversource and partially funded through the Core budget. According to the OCA, a CETP is a web-based, data-diagnostic tool that utilities can use in many ways including to educate customers about energy efficiency, target marketing efforts, institute customer behavioral

programs, and offer customers online self-service options. The OCA contended that the outcome of using a CETP statewide would be uniform delivery and reduced costs of efficiency services; broader customer participation in efficiency; and greater energy savings for all customers. In addition, a CETP will be needed in the future should the Commission implement programs such as net metering and time-of-use pricing.

#### 6. The Way Home

TWH recommended that the Commission consider quantifying, for the purpose of the cost/benefit test used for efficiency programs, additional non-energy benefits or societal benefits derived from low-income efficiency programs, which are not currently accounted for under that test. According to TWH, a 2008 New Zealand study confirmed benefits such as reduced hospitalizations, and lost days of work and school, and the states of Vermont and Ohio use adders in their cost-benefit tests to quantify non-energy benefits including greater comfort, improved health, enhanced productivity, and other societal benefits.

## IV. COMMISSION ANALYSIS

### A. Legal Authority

RSA 4-E:1 became effective on July 24, 2013, and spurred the opening of this docket. That statute required the Governor's Office of Energy and Planning (OEP) to prepare a 10-year energy strategy for the State. RSA 4-E:1. The Legislature required the state energy strategy to include "consideration of the extent to which demand-side measures including efficiency … can cost-effectively meet the state's energy needs, and proposals to increase the use of such demand resources to reduce energy costs and increase economic benefits to the state." RSA 4-E:1, II. As detailed in Section I above, OEP prepared the 2014 New Hampshire State Energy Strategy in response to that legislative mandate. The Energy Strategy final report recommended that the

Commission open a proceeding to establish "energy efficiency savings goals based on the efficiency potential of the State, aimed at achieving all cost-effective efficiency over a reasonable time frame." 2014 New Hampshire State Energy Strategy, Executive Summary at ii.

Although RSA 4-E:1 and the 2014 New Hampshire State Energy Strategy served as catalysts for this docket, the Commission has a long history of regulating the demand-side measures of the State's electric and gas utilities. The Commission has historically regulated demand-side measures, including energy efficiency programs, pursuant to its general authority under RSA 374:3 (general supervision of all public utilities) and RSA Chapter 378 (rates and charges). In 1988, pursuant to both its general authority and its authority under the New Hampshire Limited Electric Energy Producers Act, RSA Chapter 362-A, the Commission required that electric utilities engage in least cost integrated resource planning (LCIRP). In *Public Service Company of New Hampshire, et al.,* 73 NH PUC 117 (1988), the Commission required electric utilities to "file an integrated least cost resource plan in conjunction with an updated forecast of avoided costs in order that the commission may reasonably review each utility's planning process, resultant plans, and avoided cost forecast." *Id.* at 126.

Shortly thereafter in 1990, the Legislature enacted the LCIRP statute, RSA 378:37-39, and declared least cost integrated resource planning for electric utilities to be the energy policy of the state. As originally enacted, RSA 378:37 provided that:

> The general court declares that it shall be the energy policy of this state to meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost while providing for the reliability and diversity of energy sources; the protection of the safety and health of the citizens, the physical environment of the state, and the future supplies of nonrenewable resources; and consideration of the financial stability of the state's utilities.

RSA 378:37 (West 2009).

Although the LCIRP statute has always required our review of utility demand-side programs, including energy efficiency, the Legislature amended the LCIRP statute in 2014 to place a greater emphasis on evaluation of energy efficiency programs. *See* Laws of 2014 ch. 129; *compare* RSA 378:38, II (West 2009) *with* :38, II (West Supp. 2015). In the 2014 amendment, the Legislature declared it the energy policy of the state "to maximize the use of cost effective energy efficiency and other demand side resources." RSA 378:37 (West Supp. 2015). The 2014 amendment increased the emphasis on energy efficiency programs by providing that the Commission's evaluation of utility plans should be guided by certain energy policy priorities, energy efficiency being first and foremost among them. RSA 378:39 (West Supp. 2015).

In addition, the electric restructuring policy principles, enacted in 1996, guide the Commission in the exercise of its general authority over electric utilities. *See* RSA 374-F:3, X (restructured electric market required to "reduce market barriers to investments in energy efficiency and provide incentives for appropriate demand-side management and not reduce cost-effective customer conservation" and "utility sponsored energy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers"); RSA 374-F:4, VIII(e) (Commission authorized to approve a utility's inclusion in its distribution charge of the costs of energy efficiency "that are part of a strategy to minimize distribution costs"). Specifically, RSA 374-F:3, VI authorized the creation of a "nonbypassable and competitively neutral system benefits charge applied to the use of the distribution system" for the support of, among other things, energy efficiency programs.

The Commission has reviewed gas utility demand-side measures pursuant to its general authority since at least 1992. *See, e.g., EnergyNorth Natural Gas, Inc.*, 77 NH PUC 802 (1992);

*Northern Utilities, Inc*., 77 NH PUC 803 (1992); *see also Northern Utilities, Inc*., 78 NH PUC 310 (1993) (approving pilot DSM program); *EnergyNorth Natural Gas, Inc.,* 79 NH PUC 605 (1994) (same); *EnergyNorth Natural Gas, Inc. et al.,* Order No. 24,109 at 1 (December 31, 2002) (approving gas utility energy efficiency programs following gas industry restructuring). The 2014 amendment to the LCIRP statute has since made that statute's energy efficiency requirements applicable to gas utilities. *See* RSA 378:38.

While nothing prohibits electric utilities from funding energy efficiency programs through their distribution rates as approved by the Commission under its general rate making authority, *see* RSA 374-F:4, VIII(e), electric utilities fund energy efficiency measures primarily through the SBC, pursuant to the Commission's authority under RSA 374-F:3, VI. Gas utilities continue to fund energy efficiency programs primarily through the LDAC as approved by the Commission pursuant to the Commission's general supervisory and rate making authority. *See EnergyNorth Natural Gas, Inc., and Northern Utilities, Inc*., Order No. 24,109, at 9 (December 31, 2002). In addition, limited proceeds from the RGGI, pursuant to RSA 125-O:23, and the ISO-NE Forward Capacity Market, are used to fund energy efficiency. In recent years, the Commission has approved the use of third-party private financing options to fund energy efficiency measures. *See* Order No. 25,747 at 9 (describing third-party financing proposals approved by the order).

Electric and gas utility programs are currently reviewed jointly as part of the Core Energy Efficiency Program. *See Electric and Gas Utilities*, Order No. 25,747 (December 31, 2014) (approving 2015-2016 Core programs); *Electric and Gas Utilities,* Order No. 25,462 (February 1, 2013) (approving 2013-2014 Core programs); *Electric and Gas Utilities*, Order No. 25,189 (December 30, 2010) (approving the 2011-2012 Core programs and listing, at

page 21, the Commission's energy efficiency orders from 2001 through 2009). As detailed in Section I, above, however, several studies have concluded that additional opportunities for cost-effective energy efficiency exist beyond those attained through the Core program. Accordingly, we opened this docket to consider ways to transition from the Core program to an EERS. The Commission's general supervisory and ratemaking authority, historic energy efficiency program management, and legislative policy pronouncements, provide an adequate legal framework for the creation and financing of the next generation of energy efficiency measures.

**B. Settlement Agreement**

Pursuant to RSA 541-A:31, V(a), informal disposition may be made of a contested case at any time prior to the entry of a final decision or order, by stipulation, agreed settlement, consent order, or default. We encourage parties to settle issues through negotiation and compromise because it is an opportunity for creative problem solving, allows the parties to reach a result in line with their expectations, and is often a better alternative to litigation. *Granite State Electric Co.*, Order No. 23,966 at 10 (May 8, 2002); *see* RSA 541-A:31, V(a) ("informal disposition may be made of any contested case … by stipulation [or] agreed settlement"). Even when all parties join a settlement, however, we must independently determine that the result comports with "applicable standards." *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH,* Order No. 24,972 at 48 (May 29, 2009). We analyze settlements to ensure that a just and reasonable result has been reached. *Id.*; *see* N.H. Code Admin. Rules Puc 203.20(b) ("The commission shall approve a disposition of any contested case by stipulation [or] settlement … if it determines that the result is just and reasonable and serves the public interest.").

Based on the record, the terms of the Settlement Agreement appear to be consistent with applicable law, because they will reduce market barriers to investment in cost-effective energy

efficiency investment, provide incentives for appropriate demand-side management, and not reduce cost-effective consumer conservation. *See Electric Utility Restructuring,* Order No. 23,574 (Nov. 1, 2000) at 10 (citing the requirements of RSA 374-F:3, X).

The record supports a finding that cost-effective energy efficiency is a lower cost resource than other energy supply.[10] In addition, over the past 14 years the Commission has used a cost effectiveness, or cost benefit, test for energy efficiency measures in the Core energy efficiency programs. The cost benefit test calculates the cost of acquiring and installing an energy efficiency measure, spread over the expected useful life of the measure, and compares that cost to the cost of the energy saved, or the energy supply avoided, over the expected useful life of the measure. Using the cost benefit test in the Core programs, the Commission has approved numerous Core energy efficiency measures where the cost of the measure is less than the cost of the avoided energy supply.

For avoided costs of supply, we rely on the *Avoided Energy Supply Costs in New England: 2015 Study* (March 27, 2015, revised April 3, 2015) prepared by TCR Group for the Avoided Energy Supply Component (AESC) Study Group (AESC 2015 study) and used in the Core programs to evaluate cost effectiveness.[11] The AESC 2015 study indicates that direct avoided retail electric costs are approximately $0.11 per kWh on a 15-year levelized basis. *See* *2016 New Hampshire Statewide Core Energy Efficiency Plan,* Docket No. DE 14-216, Hearing Exhibit 5 at 20 (December 15, 2015). For the costs of energy efficiency, we use both the utilities' and the customers' costs. The Joint Utilities calculated the utilities' costs of energy efficiency to be $0.030 per kWh saved over the life of the measure. *See* Exh. 3 Joint Utilities at

[10] *See* Exh. 2 Sustainable Energy Group at 5 and Attachment 1; Exh. 3 Joint Utilities at 32; and Exh. 5 Acadia Center at 1.

[11] The Commission takes administrative notice of this analytical tool used in the Core Docket, DE 14-216 pursuant to Puc 203.27 (a)(2) (notice of relevant portion of the record in other proceedings).

32. The customer costs are currently estimated in the Core programs as $0.02 per kWh saved over the life of the measure.[12] Based on the experience with the Core programs, even with the customer costs added to the utilities' costs of energy efficiency, the total costs of energy efficiency are less than the costs of supply. *See id.* at 22, 30, 35 and 40.

As discussed above, the Commission has consistently imposed a cost-effectiveness test before including energy efficiency measures in the Core Programs. Cost effectiveness is a statutory requirement for least cost planning. We will continue to require that all measures used to achieve an EERS meet cost-effectiveness tests. By ensuring that EERS measures are cost effective, we remain consistent with the Legislature's mandate that the Commission prioritize energy efficiency and demand-side supply resources in order to provide the lowest reasonable cost energy supply to customers, RSA 378:37 and :39, and with New Hampshire's Energy Policy, as well as the requirement to set just and reasonable rates, RSA 378:7.

The parties asserted that energy efficiency has a multitude of customer benefits, including lower utility bills now and in the future, improvements in comfort, health, and safety, more customer control and understanding of energy use, increased reliability of the grid and avoidance of new generation capacity, and job creation and reduced pollution. *See* Exh. 5 Acadia Center at 1; Exh. 2 Sustainable Energy Group, Attachment at 1; Exh. 3 Joint Utilities at 38 and 46; Exh. 4 Staff at 14; Exh. 8 Sustainable Energy Group at 8; and Exh. 11 The Way Home at 9. While those benefits have not yet been quantified by the Commission for New Hampshire, we will monitor the cost effectiveness of the energy efficiency measures installed under the EERS and will review the results of the EERS over time to determine its effect on customers.

[12] The estimated customer costs include kilowatt-hour savings for electric programs, and MMBtu savings – converted to kilowatt-hour-equivalent savings – for gas programs.

In addition to the cost effectiveness of the EERS measures, we must consider the impact on customers of funding the EERS through the SBC and LDAC. The Settlement quantifies the increases to the SBC for each electric utility. It also estimates the corresponding bill impacts for average users. The bill impact calculations do not take into account customer savings due to energy efficiency programs. The SBC and bill impact estimates are as follows.

- The SBC for Eversource will increase from the current rate per kWh of $0.00330 to $0.00383 in 2017, $0.00488 in 2018, $0.00631 in 2019, and $0.00850 in 2020. Exh. 1 at 22. The impact of those increases on an average residential customer using 625 kWh per month[13] will be $0.33 in 2017, $0.65 in 2018, $0.90 in 2019, and $1.37 in 2020. *Id*. The impact of those increases on an average General Service customer using 10,000 kWh per month will be $5.34 in 2017, $10.41 in 2018, $14.34 in 2019, and $21.88 in 2020. *Id*.
- The SBC for Liberty electric customers will increase from $0.00330 to $0.00381 in 2017, $0.00480 in 2018, $0.00615 in 2019, and $0.00825 in 2020. Exh. 1 at 23. The impact of those increases on an average residential customer using 625 kWh per month will be $0.32 in 2017, $0.61 in 2018, $0.85 in 2019, and $1.31 in 2020.[14] *Id*. The impact of those increases on an average Liberty General Service customer using 10,000 kWh per month will be $5.13 in 2017, $9.83 in 2018, $13.58 in 2019, and $20.94 in 2020. *Id*.
- The SBC for UES will increase from $0.00330 to $0.00384 in 2017, $0.00486 in 2018, $0.00626 in 2019, and $0.00841 in 2020. Exh. 1 at 24. The impact of those increases on an average residential customer using 625 kWh per month will be $0.34 in 2017, $0.64 in

[13] We recognize that the Settlement calculates bill impacts using 625 kWh per month for Residential customer usage and 10,000 kWh per month for General Service customer usage, and the Staff used different average usage to calculate the bill impacts in their proposal. Staff used 700 kWh per month for residential usage and 7,000 for commercial/industrial usage. *See* Exh. 4 Staff at 45-46. We note that the Joint Utilities used the same usage that we use in this order to calculate bill impacts. *See* Exh. 3 Joint Utilities Attachment 1, at 70.

[14] Settlement Electric Attachment A, revised page 7 of 10 (Bates page 23), *also* Liberty's response to Record Request 1 (July 27, 2016).

2018, $0.88 in 2019, and $1.34 in 2020. *Id*. The impact of those increases on an average UES General Service customer using 10,000 kWh per month will be $5.41 in 2017, $10.17 in 2018, $14.01 in 2019, and $21.51 in 2020. *Id*.

- The SBC for NHEC will increase slightly less than the SBC increases for the other electric utilities, because NHEC will not recover lost revenues. Specifically, NHEC's SBC will increase from $0.00330 to $0.00376 in 2017, $0.00459 in 2018, $0.00575 in 2019, and $0.00759 in 2020. Exh. 1 at 25. The impact of those increases on an average residential customer using 625 kWh per month will be $0.29 in 2017, $0.52 in 2018, $0.72 in 2019, and $1.15 in 2020. *Id*. The impact of those increases on an average NHEC General Service customer using 10,000 kWh per month will be $4.60 in 2017, $8.30 in 2018, $11.60 in 2019, and $18.40 in 2020. *Id*.

The Settlement also quantifies the increases to the LDAC by utility as follows.

- The LDAC for Liberty gas will increase from $0.0585 to $0.0643 in 2017, $0.0724 in 2018, $0.0817 in 2019, and $0.0907 in 2020. Exh. 1 at 27. The monthly impact of those increases on an average residential customer using 783 therms per month will be $0.38 for 2017, $0.53 for 2018, $0.60 for 2019, and $0.59 for 2020. *Id*. For an average Commercial and Industrial customer using 8,773 therms, the monthly impact will be $2.22 for 2017, $2.98 for 2018, $3.42 for 2019, and $3.30 for 2020. *Id*.
- The LDAC for Northern will increase from $0.0297 to $0.0347 in 2017, $0.0405 in 2018, $0.0466 in 2019, and $0.0576 in 2020. *Id*. The monthly impact of those increases on an average residential customer using 783 therms per month will be $0.33 for 2017, $0.38 for 2018, $0.40 for 2019, and $0.72 for 2020. *Id*. For an average Commercial and

Industrial customer using 8,773 therms, the monthly impact will be $0.96 for 2017, $1.13 for 2018, $1.18 for 2019, and $2.12 for 2020. *Id*.

In approving the EERS as proposed, we are mindful of and do not take lightly the short-term increases in customer rates. When considered in the context of the benefits of increased energy efficiency, participating electric and gas customers will spend less on energy usage and, in the long run, all customers will spend less on energy supply. As suggested by the parties, other benefits could result from increased energy efficiency, but our decision does not rest on that possibility. Instead, our approval of the Settlement Agreement's rate increases is based on a record developed over the course of a year following a year-long investigation by the Staff of EERS potential, both of which were contributed to by numerous experienced and knowledgeable stakeholders and experts. Also, we note in making our decision, the support of the Settlement Agreement by the diverse parties, including the Consumer Advocate, The Way Home, and others. The record and support by parties with diverse interests, along with the customer-protection measures built into the EERS framework, as described below, give us confidence that any short-term rate impacts will be outweighed by the benefits to customers, the grid, and the New Hampshire economy. In addition, we note that our approval of the Settlement Agreement is only the beginning of the EERS; the Commission will oversee the development of the specific EERS programs and their subsequent implementation to ensure that the energy efficiency programs funded by customers are indeed the least-cost resource available to the Joint Utilities' customers.

**1. Program Administration**

The Joint Utilities have direct relationships with their customers, who may need help and support in making efficiency investment decisions, and the Joint Utilities have direct access to

customer consumption data and technical resources in New Hampshire and neighboring jurisdictions. In addition, the Joint Utilities have demonstrated a commitment to energy efficiency and have a history of award-winning management and delivery of the Core programs. They also have infrastructure and market-participant relationships in place to quickly scale up programs to meet increased savings goals. Consequently, at least for the first triennium, the Joint Utilities are a logical choice for the role of administrator within an EERS framework.

**2. Savings Targets and Planning Periods**

In the last decade, several New Hampshire specific studies have identified energy efficiency savings potential. Although those studies are somewhat dated,[15] based on the record, we find that they provide a reasonable sense of the achievable, cost-effective efficiency savings potential in New Hampshire, for the purpose of approving the EERS framework. *See* Exh. 4 Staff at 15; and Exh. 8 Sustainable Energy Group at 15-16. The short-term savings goals recommended by the Settlement Agreement are reasonably consistent with those studies and also fall within the range of savings recommended by the various parties in this proceeding, who represented diverse interests. In addition, setting a long-term qualitative goal of ultimately achieving all cost-effective efficiency savings as recommended by the Settlement Agreement follows the recommendations of the New Hampshire specific studies and allows flexibility to set that goal in the context of the market conditions that develop over time within the EERS structure.

Consequently, we approve the proposed EERS savings goals for the first triennium of the EERS as a percentage of 2014 statewide delivered sales: 0.80% for electric and 0.70% for gas in 2018; an additional 1.0% for electric and 0.75% for gas in 2019; and an additional 1.3% for electric and 0.80% for gas in 2020. Those statewide savings goals are cumulative and are

[15] GDS Report (January 2009) and the VEIC Report (November 2013)

intended to reach overall savings of 3.1% of electric sales and 2.25% of gas sales, relative to the baseline year of 2014, by the end of 2020. We also approve the recommendation to continue the Core programs in 2017, with adjustments to funding and savings goals as provided in the Settlement Agreement, in order to allow adequate time for careful and thoughtful planning for implementation of the first EERS triennium. Specifically, the 2017 Core-extension savings goals shall be 0.60% of 2014 statewide delivered sales for electric and 0.66% of 2014 statewide delivered sales for gas.

We agree with and approve the Settling Parties' recommendation to use three-year planning periods instead of the two-year periods used in Core. Three years is long enough to afford more stability and continuity in program delivery, which will help customers and other stakeholders plan their efficiency investments, but not so long as to limit the Commission's flexibility to adjust savings targets in response to changes in market conditions or other developments during that time Also, using three-year periods aligns the EERS with industry practice and is consistent with the planning periods used previously for the gas efficiency programs. *See*, *e.g.*, *Northern Utilities, Inc.*, Order No. 24,630 at 7 (June 8, 2006) (order approving a three-year plan refers to the prior three year program cycle).

**3. Costs and Funding**

The proposed costs of achieving the short-term goals recommended by the Settlement Agreement appear to be just and reasonable as well as consistent with the recent legislative mandate to consider energy efficiency a first-priority supply resource. We take note of the Settling Parties' proposal to increase the low-income program budget. At a time of uncertainty about the future of energy supply in the New England region and consistent with legislative directive in RSA 374-F:3, V (Commission shall "enable residential customers with low incomes

to manage and afford essential electricity requirements"), we find this proposal to be appropriate. Moreover, increasing low-income efficiency funding and activities should free up some of the low-income financial assistance also collected through the SBC and LDAC, because those customers' energy consumption will decrease.

While rates may increase slightly for all customers in the short-term in order to recover the costs of an EERS, customer bills will decrease when their energy consumption decreases as well as when the impact of consumption decreases are reflected in reduced grid and power procurement costs. *See*, *e.g.*, Exh. 2, Sustainable Energy Group Attachment at 2 and at 3-4. While the cost benefit tests ensure benefits to all customers, it is true that those who participate in efficiency programs are likely to benefit most. They will receive immediate benefits from bill reductions, improved comfort, and higher home or business value. Those advantages are in addition to the utility system benefits enjoyed by all customers. In return, however, customer participants must invest time and take full advantage of financial incentives or technical assistance, and they often must pay additional out-of-pocket expenses. Non-participating customers enjoy the benefits from load and system improvements. *See Granite State Electric Company*, Order No. 20,362, 76 NH PUC 820, 823 (1991). In addition, the efficiency programs will reduce emissions and may reduce utility revenue requirements through reduced operation and maintenance (O&M) expenses. Further, the availability of the direct benefits from participation, coupled with broad-based programs, should send a signal to all customers and encourage broad participation in the programs.

The record supports our finding that the EERS, and the energy efficiency market needed to support it, requires stable funding to grow and function optimally. *See* Exh. 3 Joint Utilities Petition at 48; and Exh. 2, Sustainable Energy Group Attachment at 2. The SBC and the LDAC

are stable sources of revenue, and using ratepayer funds to achieve the public benefits of cost-effective energy efficiency is just and reasonable. Although the total funding collected under the RGGI program could cover a good portion of the incremental costs associated with EERS' increased savings goals, at this time, access to those funds for energy efficiency is limited by statute. *See* RSA 125-O:23.

Also at this time, private funding is limited and not as stable and reliable as the SBC and LDAC, and private funding alternatives have not been adequately investigated. *See* Exh. 3 Joint Utilities Petition at 6, 48, and 51-52; and Sustainable Energy Group Exh. 2, Attachment at 11-12; Exh. 5 Acadia Center at 7; and Transcript at 83-84 *see also* 2015-2016 Core Plan (DE 14-216) (includes a few new and relatively-new private financing programs). As seen in other jurisdictions, private funding increases following increased public funding of an EERS.[16] We note the Settling Parties' commitment to continue the work started in the Core programs to nurture and expand private funding options. Private funding should continue to be used to the greatest extent possible to fund the EERS programs. We will look to the plan for the first EERS triennium to describe those efforts and any new private funding proposed or under consideration for the future.

The SBC was established by the Legislature as part of electric restructuring. *See* RSA 374-F:4, VIII. The Commission has not increased the SBC since the inception of the Core programs in 2001. *Id*. Failing to increase the funding to support higher savings goals at this time not only fails to provide the Joint Utilities' customers with viable and proven options for energy

[16] Exh. 2 Sustainable Energy Group at 11 "Studies of financing programs have concluded that combining financing with traditional rebates and incentives leverages deeper savings and broader participation" (citations omitted), Exh. 4 Staff at 86. "In some markets program administrators have begun to tap secondary markets and a number of transactions have taken place representing a total volume of $400 million" and at 89 "Observers believe that when these conditions are met, lower cost capital may become available which will result in lower interest rates for customers.")

at least cost, but also fails to capture other benefits for customers. The Commission's oversight, and the requirement that all programs meet a cost-effectiveness test that projects greater benefits than costs over the life of the measures, ensures that the programs and spending of ratepayer funds are just, reasonable, and least cost. Therefore, we approve the proposal to fund the EERS through increases to the SBC and LDAC as proposed in the Settlement Agreement. We note that, when the three-year EERS plans are filed, we will review in advance and approve that spending only to the extent that it is just, reasonable, and least cost.

**4. Recovery of Lost Revenues**

With increased energy savings comes decreased utility revenues due to standard rate design, which recovers costs through a variable, or consumption-based, rate. The lost revenue adjustment mechanism (LRAM) recommended by the Settlement Agreement enables the Joint Utilities (except NHEC) to recover the portion of their authorized revenue requirement lost due to energy efficiency activities. The LRAM is not designed to increase the revenues recovered by the utilities, and lost revenues are not considered a cost for the purpose of the cost/benefit test used to assess efficiency programs in the Core or within the EERS. Specifically, without the LRAM, or a change in the way rates are designed today, the utilities may lose revenue that the Commission has already determined in the utility's rate case is just and reasonable for them to recover. Consequently, we approve the LRAM as proposed.

Nonetheless, we are mindful that, with an LRAM, the utilities' revenues can increase above their authorized revenue requirements from increased sales, and, for that reason and others, some parties prefer decoupling. This is because decoupling provides a reconciliation to the last-approved revenue requirement (*i.e.*, in the case of a utility collecting more revenue than its last-approved revenue requirement, the utility would be required to prospectively credit

customers for any such over-collection). We note that our approval of the LRAM does not limit our subsequent consideration and approval at any time of a different lost revenue recovery mechanism, and that the Joint Utilities (except NHEC) are required to seek approval of a decoupling or other lost-revenue recovery mechanism as an alternate to the LRAM in their first distribution rate cases after the first EERS triennium, if not before.

**5. Performance Incentives**

The Commission has used performance incentives successfully in the Core programs to encourage utility investment in energy efficiency. In light of the addition of an LRAM, we agree with the Settling Parties' recommendation to reduce the level of performance incentives available to the Joint Utilities under an EERS. The recommended levels are sufficient to provide a reasonable incentive to pursue exemplary performance in program administration and delivery and to put efficiency investment on an equal footing with other earnings opportunities available to the Joint Utilities.

In addition, the recommended performance incentive level is less likely to provide excessive earnings and is more commensurate with the lower risk of investing in efficiency.

**6. Stakeholder Involvement**

Involving energy service stakeholders in the development and implementation of the EERS is important, because they are directly connected to the provision of energy and efficiency services. The active participation in the EERS of Settling Parties, who include representatives of the Joint Utilities, Commission Staff, DES, consumer advocates like the OCA and NHLA, efficiency experts and service providers, brings different knowledge, experience, and perspectives. New Hampshire is fortunate to have so many stakeholders who are invested in the success of energy efficiency and the EERS; their contributions and collaboration in this

proceeding produced a more robust result. As economy wide involvement in energy efficiency measures will yield the best results, we encourage fuller participation of the New Hampshire business community going forward.

We appreciate the Joint Utilities' access to counterparts and expertise in other jurisdictions that lead the nation in the provision of energy efficiency services and encourage further interactions. To enable the well-informed contribution of the non-utility stakeholders in work required in the future to assure success of the framework we establish today, we approve the Settling Parties recommendations related to the retaining and funding of a planning consultant, an EM&V oversight consultant, and the EM&V studies consultants.

The EESE Board is a collection of diverse energy stakeholders, and its involvement in the EERS planning and implementation, as recommended by the Settling Parties, is appropriate. To fulfill that advisory role, the EESE Board requires technical resources consistent with the Settlement.

**7. Evaluation, Measurement and Verification**

We approve the EM&V proposals contained within the Settlement Agreement. Rigorous and transparent EM&V is essential to a successful EERS, to ensure that the efficiency programs actually achieve planned savings in a cost-effective manner. The addition of the EESE Board and additional expert resources to the EM&V proposed for the EERS will protect customers through consistent and fair assessment of program performance and cost effectiveness. Moreover, a Technical Resource Manual that meets New Hampshire needs, as proposed by the Settlement, will enable EM&V transparency, consistency, and accuracy.

**8. Regulatory Process**

We approve the Settling Parties' recommendations for an EERS process, including the pre-filing collaborative preparation of a plan for the first triennium with the assistance of a planning expert. We agree that such a process will likely result in a more efficient and less adversarial adjudicative proceeding following the plan's filing for Commission review and approval. An abbreviated annual plan update process during the trienniums, like the process we currently use for the Core dockets, is appropriate and will enable the stakeholders some flexibility to respond to developments in the energy efficiency market during that time.

In addition, we approve the annual process proposed for setting and reconciling the LRAM as described in the Settlement Agreement and the Joint Utilities EERS proposal. In calculating lost revenue, savings shall be adjusted to account for retirements, the actual timing of efficiency-measure installation, and the results of EM&V studies. Total lost revenues shall be capped at 110 percent of planned annual savings, audited by an independent third party, and recovered through an adjustment to the SBC or LDAC, depending on the utility.

**9. Implementation Date**

We approve the Settling Parties' recommendation to begin implementation of the EERS on January 1, 2018.[17] We recognize the Settling Parties' significant investment of time and resources during the last two years to reach this point in the development of an EERS framework, and we appreciate their willingness to continue their work to carefully and thoughtfully prepare a specific and detailed plan within that structure.

[17] An implementation date of January 1, 2018 for an EERS complies with the Legislative directive in HB 2 that, "[f]or the biennium ending June 30, 2017, the public utilities commission shall not expend any funding on the implementation of an energy efficiency resource standard without prior approval of the fiscal committee of the general court." N.H. Laws of 2015 ch. 276:223..

### 10. Beyond Implementation

We appreciate the foresight of the various parties who offered recommendations for the future of the EERS. Nonetheless, we defer any judgment on the merits until such time as specific proposals are presented for our review and approval.

Although not covered in the Settlement Agreement, Integrated Resource Plans are a critical component to the success of an EERS. IRPs are planning studies produced by electric and gas utilities to determine resource needs over a given planning period. The planning period is generally between 10 and 20 years. Methodologies used in the studies vary, but are intended to produce the least-cost, least-risk resource balance. Typically, the utility performs a number of studies as part of an IRP including a customer energy and peak demand forecast. To plan for achieving the EERS savings goals and confirm that its efficiency programs are least cost, the IRP should also include an energy efficiency market potential study and should model the inclusion of energy efficiency on a similar basis to supply-side resources or market purchases. Within six months of this order, Staff and the utilities shall meet to discuss and refine the IRP requirements.

## V. CONCLUSION

Our establishment today of Energy Efficiency Resource Standards for electricity and gas is both routine and remarkable. It is routine, as we have long required our utilities to help their customers save money by using less electricity and gas. The State's 10-year energy strategy, developed under RSA 4-E:1 and crafted with the input of consumer groups, environmental advocacy organizations, utilities, and others, also calls for increased energy efficiency throughout all sectors of the economy. The Core energy efficiency programs have given the utilities 14 years of experience with developing and implementing cost-effective programs and the EERS will build on that foundation.

At the same time, the establishment of an EERS is remarkable as it is based on the setting of savings targets, not dollars spent. It is the product of extensive investigation by Staff and collaboration between and among diverse groups of stakeholders. The framework that they developed together and that we approve in this Order will move the State forward, toward specific annual savings goals to achieve objectives set out in the 10-year State Energy Strategy consistent with Legislative directives.

Energy prices have been the subject of public discussion and debate for many years. The EERS is a significant step toward addressing the business community's concerns about remaining competitive in today's economy. The development of specific, cost-effective programs to implement this framework will require the robust participation of stakeholders, including those in the commercial and industrial sectors. Those who choose to participate in the energy efficiency programs that will be developed to meet the EERS targets will see reduced gas and electric bills, and all utility customers should see reduced costs for electric and gas supply in the long run.

We recognize that low income customers face greater hurdles to investment in energy efficiency than other customer. We have therefore approved increased funding for low income energy efficiency programs as recommended by the settling parties. We agree that these changes are appropriate in order to comply with legislative directives and to reduce energy consumption for those customers who need it most.

**Based upon the foregoing, it is hereby**

**ORDERED**, that the Settlement Agreement is approved; and it is

**FURTHER ORDERED**, that the Joint Utilities, except NHEC, shall include in their future IRPs an energy efficiency market potential study and shall model the inclusion of energy efficiency on a similar basis to supply-side resources or market purchases.

By order of the Public Utilities Commission of New Hampshire this second day of August, 2016.

| | | |
|---|---|---|
| Martin P. Honigberg<br>Chairman | Robert R. Scott<br>Commissioner | Kathryn M. Bailey<br>Commissioner |

Attested by:

Lori A. Davis
Assistant Secretary

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 17-136**

**GAS AND ELECTRIC UTILITIES**

**2018-2020 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN**

**Order Approving Settlement Agreement**

**O R D E R N O. 26.095**

**January 2, 2018**

**APPEARANCES:** Matthew J. Fossum, Esq., for Public Service Company of New Hampshire d/b/a Eversource Energy; Pierce Atwood LLP by Liam J. Paskvan, Esq., and Patrick Taylor, Esq., for Northern Utilities, Inc., and Unitil Energy Systems; Michael J. Sheehan, Esq., for Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities, Inc., and for Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities; Mark W. Dean, Esq., for New Hampshire Electric Cooperative; New Hampshire Legal Assistance by Alan Linder, Esq., and Raymond Burke, Esq., for The Way Home; Rebecca Ohler for the New Hampshire Department of Environmental Services; Melissa E. Birchard, Esq., for Conservation Law Foundation; Kate Epsen for the New Hampshire Sustainable Energy Association; Ellen Hawes, for Acadia Center; Consumer Advocate D. Maurice Kreis, for residential ratepayers; and Paul B. Dexter, Esq., for the Staff of the Public Utilities Commission.

In this order, the Commission approves the implementation of a three-year energy efficiency plan for 2018 through 2020 for the state's gas and electric utilities. The plan meets the Energy Efficiency Resource Standard (EERS) established by the Commission in Order No. 25,932 (August 2, 2016) ("2016 EERS Order"). Implementation will begin January 1, 2018. This order also approves rates for the utilities to allow them to recover program costs, performance incentives, and lost base revenues. The plan approved in this order was arrived at by a settlement agreement that included all of parties to this docket. The plan calls for the establishment of stakeholder working groups to further analyze key issues including: evaluation, measurement and verification of the approved energy efficiency programs; alternate sources of funding and financing of programs; the benefit/cost test used to screen energy efficiency

programs; potential changes to the calculation of performance incentives; and the calculation of demand savings in connection with lost base revenues.

## I. PROCEDURAL HISTORY

The parties to the settlement approved in the 2016 EERS Order agreed to "work collaboratively to refine a draft plan for the first triennium of the EERS, which [would] be filed for Commission review and approval by September 1, 2017." 2016 EERS Order at 41. Those parties proposed an implementation date of January 1, 2018, for the EERS. *Id.* at 43. The gas and electric utilities (collectively referred to as the "Utilities") that agreed to file the EERS plan were: Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities ("Granite State Electric"), the New Hampshire Electric Cooperative, Inc. ("NHEC"), Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"), and Unitil Energy Systems, Inc. ("Unitil") (collectively, the "Electric Utilities"); and Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities ("EnergyNorth") and Northern Utilities, Inc. d/b/a Unitil ("Northern") (collectively, the "Gas Utilities"). The Utilities filed for approval of their 2018-2020 Energy Efficiency Plan ("Three-Year Plan") on September 1, 2017. Exhibit 2. The Three-Year Plan was developed in consultation and collaboration with a variety of stakeholders, including, the Energy Efficiency and Sustainable Energy ("EESE") Board.

On September 21, 2017, the Commission issued an Order of Notice scheduling a pre-hearing conference for October 4, 2017. At that conference, the Commission granted petitions to intervene by New Hampshire Department of Environmental Services, New Hampshire Sustainable Energy Association, The Way Home, Conservation Law Foundation, and Acadia Center. The Office of the Consumer Advocate ("OCA") participated in the proceeding under RSA 363:28.

In accordance with the procedural schedule, Commission Staff ("Staff") and the parties engaged in discovery and met in a technical session. On November 1, Staff, the OCA, and The Way Home filed direct testimony. Exhibits 3-8. Acadia Center submitted comments. Exhibit 9. On December 8, the parties filed a Settlement Agreement ("Settlement Agreement"), signed by all parties to this proceeding, which called for approval of the Three-Year Plan with some modifications. Exhibit 1. The Commission held a hearing on the Settlement Agreement on December 13.

This order and prior docket filings, other than any information for which confidential treatment is requested of or granted by the Commission, are posted to the Commission's website at http://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136.html.

## II. SUMMARY OF THE THREE-YEAR PLAN

The Three-Year Plan significantly expands the energy efficiency ("EE") programs implemented for the past several years, known as the Core Programs, to meet the EERS goals established in the 2016 EERS Order. It presents EE programs for 2018, 2019, and 2020, but calls for annual plan updates, which are subject to review and approval by the Commission.

### A. Program Funding

1. Electric Program Funding

The proposed EE programs are funded through three main sources: (1) a portion of the System Benefits Charge ("SBC"), which is included on the electric bills of customers receiving delivery service from an electric utility under RSA 374-F: 3, VI and RSA 374-F:4, VIII; (2) a portion of the Regional Greenhouse Gas Initiative ("RGGI") auction proceeds subject to certain conditions; and (3) proceeds obtained by the Electric Utilities from their participation in the

regional Forward Capacity Market ("FCM"). In addition, any unspent funds from prior program years are carried forward to future years, including interest at the prime rate.

The three-year level of funding for the electric programs is $154,142,000. Exhibit 2 at 31, Table 4.9. The 2018 funding level is $38,635,000; the 2019 funding level is $49,488,000; and the 2020 funding level is 66,019,000. *Id.*

The Electric Utilities propose an EE program SBC rate of $0.00275 per kWh, which is lower than the SBC rate of $0.00309 projected for 2018 when the EERS was adopted. The current SBC rate for the 2017 Core programs is $0.00198. Exhibit 2 at 30-31. Also, consistent with the 2016 EERS Order, each Electric Utility (except for NHEC) proposed an additional SBC component to recover Lost Base Revenues (LBR). Exhibit 2 at 434[1].

2. Gas Program Funding

The gas EE programs are proposed to be funded by a portion of the Local Delivery Adjustment Clause ("LDAC"), which is included on the bills of all gas utility customers. This is how the Core gas programs have historically been funded. Like the electric programs, any unspent funds from a prior gas program year are carried forward to future years, including interest earned at the prime rate.

The three-year level of funding for the gas programs is $31,397,000. Exhibit 2 at 32. The 2018 funding level is $9,457,000; the 2019 funding level is $10,508,000; and the 2020 funding level is $11,432,000. *Id.* Also, consistent with the 2016 EERS Order, each Gas Utility proposed an additional LDAC component to recover the Lost Revenue Rate. Exhibit 2 at 435-436.

[1] Exhibit 2 includes six documents: (1) The Three-Year Plan is Bates pages 1-369; (2) Direct Testimony of David Simek starting on Bates page 370; (3) Attachments of David Simek starting on Bates page 386; (4) Joint Testimony of Asbury, Goulding, Tebbetts and Woods starting on Bates page 426; (5) Direct Testimony of Goldman starts on page 438; and (6) Attachments of Goldman starting on Bates page 449.

**B. Program Budgets**[2]

1. Electric Program Budget

The total three-year electric program budget is $146,115,000. Exhibit 2 at 32. It is allocated across the various sectors. The Commercial & Industrial and Municipal sectors are allocated 52 percent of the budget, Residential 31 percent, and Income Eligible 17 percent. *Id.* at 33.

2. Gas Program Budget

The total three-year gas program budget is $30,089,000. Exhibit 2 at 33. It is allocated across the various sectors. The Commercial & Industrial and Municipal sectors are allocated 50 percent of the budget, Residential 33 percent, and Income Eligible 17 percent. *Id*. at 34.

**C. Summary of Residential Programs**

The Three-Year Plan includes six residential energy efficiency programs. The annual budget for each program is included in the Appendix at the end of this order.

1. Home Energy Assistance (HEA)

The Home Energy Assistance program provides an array of energy efficiency services to income eligible residents with no co-pay. Services include door and window sealing; attic, basement, and wall insulation; efficient lighting; heating and cooling system replacement; and appliance replacement. The Utilities partner with community action agencies for customer intake and program delivery. In addition, this program is closely coordinated with the New Hampshire Electric Assistance Program and New Hampshire Fuel Assistance Program. The three-year budget for HEA is $24,839,404 for electric and $5,115,139 for gas. Exhibit 2 at 52.

[2] The electric and gas program budget amounts are less than the funding levels stated above because the budget amounts do not include the performance incentive, which is included in a separate provision of the budget.

2. Home Performance with ENERGY STAR (HPwES)

The Home Performance with Energy Star program is designed to improve home energy performance, reduce dependence on fossil fuels, and reduce consumer energy costs. It serves single- and multi-family residential customers by providing rebates for weatherization, certain appliance replacements, heating and hot water saving measures, and lighting upgrades. The standard rebate under the HPwES program equals 50 percent of the cost of the services, up to a $4,000 cap. The program also offers low interest loans through third-party (non-utility) lenders. The three-year electric budget is $16,122,095. The three-year gas budget is 3,116,820. Exhibit 2 at 62.

3. ENERGY STAR Homes

Under the ENERGY STAR Homes program, the Utilities work with builders and new home buyers to construct highly efficient single- and multi-family homes. In some cases, complete retrofits of existing homes are eligible. Incentives are provided to make homes 15-30 percent more efficient than standard code-built homes. Measures include insulation, high performance windows, high efficiency heating and cooling equipment, and ENERGY STAR lighting and appliances. ENERGY STAR Homes is a national program and the Utilities coordinate with the US Environmental Protection Agency to ensure that the New Hampshire program meets minimum national standards. The three-year electric budget is $8,796,480. The three-year gas budget is $1,289,729. Exhibit 2 at 73.

4. ENERGY STAR Products

The Energy Star program encourages customers to purchase ENERGY STAR certified lighting, appliances, space/water heating, and cooling products through mail-in and on-line incentives and point of purchase markdowns. The program also provides easy access recycling

options for certain, old inefficient appliances. Program delivery involves a large network of partners including more than 200 retail locations, equipment suppliers, distributors, and installation contractors. The three-year electric budget is $15,238,116. The three-year gas budget is $4,480,624. Exhibit 2 at 82.

5. Home Energy Reports

Home Energy Reports encourage customers to recognize the value of the ENERGY STAR label, to purchase more efficient products, and to adjust thermostat settings through the use of reports that compare customers' energy usage with their neighbors' usage. The three-year electric budget is $3,966,846, and the three-year gas budget is $1,173,059. Exhibit 2 at 90.

6. Customer Engagement Platform (CEP)

The CEP is offered only by Eversource to its electric customers. It is an interactive tool that provides customers targeted and customized energy efficiency recommendations based on each customer's current usage. Customers can compare their usage with similar customers and track energy use over time. The three-year budget is $1,851,109. Exhibit 2 at 97.

**D. Summary of Commercial and Industrial Programs**

The Three-Year Plan includes three statewide programs for commercial and industrial customers. Eversource offers an Energy Rewards RFP Program, while Unitil and Liberty offer a combined heat and power program. Small businesses, large commercial and industrial buildings, and municipal customers account for approximately 78 percent of the Electric Utilities' planned savings, and 70 percent of the Gas Utilities' planned savings. *Id.* at 29. The annual budget for each program is included in the Appendix at the end of this order.

1. Large Business Energy Solutions

Under the large business energy solutions program, utilities offer prescriptive efficiency measures including lighting, programmable and Wi-Fi thermostats, HVAC equipment, air compressors, and motors. Custom measures offered include large chillers and boilers, pumps, compressors, weatherization and energy management systems. Financial incentives are offered to reduce the cost to participants. The program serves both retrofits and new equipment and construction. The Utilities work with customers, contractors, and in some cases energy service companies to deliver the program. The three-year electric budget is $38,226,056. The three-year gas budget is $8,401,456. Exhibit 2 at 103.

2. Small Business Energy Solutions

The small business energy solutions program offers a similar array of products, but is targeted to small- and medium-sized customers. There are two common barriers to participation by small businesses: limited energy expertise and time to complete projects. To overcome those barriers, this program offers a turnkey option which delivers full service energy savings solutions. The three-year electric budget is $24,379,127. The three-year gas budget is $6,209,761. Exhibit 2 at 113.

3. Municipal Program

The municipal program is offered by the Electric Utilities to overcome the unique barriers faced by cities and towns.[3] Municipal customers include city and town buildings such as schools, police and fire stations, offices, and warehouses. The program offers municipal customers similar services as the Large and Small Business Energy Solutions programs. To broaden participation, turnkey services are offered. Municipal customers can self-install

[3] Municipal natural gas customers are served through the Small and Large Business Energy Solutions programs.

measures with follow-up verification made by their utility. The three-year budget is $6,000,707. Exhibit 2 at 121.

4. Unitil and Liberty Combined Heat and Power

This program, offered by Unitil and Granite State Electric, is intended for customers with large thermal requirements. Likely candidates are hotels, nursing homes, hospitals, and manufacturers, and gymnasiums and schools with swimming pools. Combined Heat and Power customers use waste heat from a generator for heating needs. This program is administered through the Large and Small Business Energy Solutions program, or Municipal program and has no budget of its own.

5. Eversource Energy Rewards Request for Proposals (RFP)

This program is offered by Eversource to large customers with over 200 kW demand and an estimated annual energy savings of 100,000 kWh, that are undertaking large retrofit projects estimated at over $150,000. Typically, such customers have significant technical expertise in energy efficiency. The customers submit bids to Eversource identifying the measures they seek to implement. Eversource selects the participants from the bids submitted, based on projected energy savings, incentive price, and non-price variables. The three-year budget is $3,901,549. Exhibit 2 at 130.

**E. Program Financing**

The Three-Year Plan proposes to continue several financing options currently available to participants. Through the Residential Energy Efficiency Loan Program, the Utilities will continue to offer residential customers reduced rate financing (at two percent) through five New Hampshire lending partners. In addition, several electric utilities will continue to offer zero percent on-bill financing for loans up to $2,000. All the Utilities offer financing to municipal

and business participants, allowing those customers to use the energy savings realized to help pay back the loans.

**F. Benefit/Cost Screening**

As in past years, the Utilities screened the proposed EE programs for cost effectiveness using the Total Resource Cost (TRC) test, which compares the present value of the lifetime benefits of the programs to the Utilities' cost to implement the programs, plus any participant out-of- pocket costs. The energy benefits are evaluated using an Avoided Energy Supply Cost (AESC) study which is performed on a New England-wide basis and is updated regularly. In this case, the 2016 AESC update was used to screen the Three-Year Plan programs.

The 2016 AESC update included values for Demand Reduction Induced Price Effect (DRIPE), to capture the impact EE programs will have on wholesale energy prices. It also included a ten percent savings adder as an estimate for Non-Energy Impacts (NEIs) resulting from the EE programs. NEIs include reduced utility bill arrearages, reduced bill collection costs, reduced maintenance costs for participants, and improved health benefits for participants.

In addition, the 2016 AESC update of avoided electric costs included a nine percent risk premium adder to reflect the additional risk of retail electric prices versus wholesale prices. The 2016 AESC Update also included a natural gas retail adder to capture the benefits of reduced delivery across gas utilities' distribution systems due to EE programs.

As proposed, all the programs across the Three-Year Plan, when aggregated for all utilities, show a benefit/cost ratio of greater than 1.0 for each year of the Plan. *Id.* at 148-149.[4]

[4]The 2018 Home Energy Reports Program for Unitil and the 2020 HER Program for Northern Utilities fall below the 1.0 ratio, due to program start-up costs. Nonetheless, overall benefit/cost for the aggregate programs exceeds the 1.0 ratio.

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

EM&V efforts are proposed by the utilities with the objective of verifying energy savings, estimating future savings, and identifying ways to improve program delivery and results. The basic framework of EM&V activities for the Three-Year Plan was detailed in the 2016 EERS Order. It includes hiring an independent expert to assist in EM&V efforts, including the development of a New Hampshire-specific technical resource manual by 2020. The Three-Year Plan proposes that utilities perform impact evaluations of the following programs: Small Business Energy Solutions (lighting portion), Municipal (lighting portion), residential lighting and appliance measures, residential Home Energy Assistance Program and the residential Home Performance with Energy Star Program. *Id*. at 162. Several other evaluations are also planned. *Id.* at 172.

**H. Performance Incentive**

The Three-Year Plan proposes to implement the performance incentive approved in the 2016 EERS Order. The plan offers utilities an incentive to invest in energy efficiency rather than traditional infrastructure. Utilities can earn up to 6.875 percent of actual program expenditures by surpassing certain minimum performance thresholds, when actual measured (*i.e*, after the fact) program cost effectiveness and realized energy savings are greater than predicted cost effectiveness and savings.

**I. Lost Base Revenue**

The Electric Utilities propose that the system benefits charge include collection for revenue lost from decreased electricity sales resulting from the programs, consistent with the framework laid out in the 2016 EERS Order. The Gas Utilities proposed rates for LBR recovery

in their individual cost of gas dockets. *See* Order No. 26,066 (October 31, 2017) (EnergyNorth); Order No. 26,068 (October 31, 2017) (Northern).

## III. PRE-SETTLEMENT POSITIONS OF THE PARTIES

### A. Commission Staff

Commission Staff filed the testimony of James Cunningham, Elizabeth Nixon, Leszek Stachow, and Jay Dudley on November 1, 2017, that supported the Three-Year Plan with several recommendations. Staff suggested formation of a stakeholder working group to examine different threshold criteria for calculating the performance incentive. Staff proposed a refinement of the average distribution rate used in the calculation of Lost Base Revenue. Staff also recommended adoption of the Utilities' proposal regarding reporting of inter-program budget transfers and recommended that notice of any changes be provided in quarterly reports the Utilities file; and that the annual cap on future year commitments in multi-year programs be raised from 40 percent of a program's budget to 50 percent. Exhibit 5.

Staff supported the Utilities' proposed ten percent NEI benefits adder for 2018 and 2019. In 2020, however, the adder would be replaced by the results of New Hampshire-specific studies. Staff also recommended New Hampshire intrastate DRIPE be included in the benefit/cost screening analysis rather than Rest of Pool DRIPE. Staff supported implementation of Unitil's and Northern's Home Energy Report Programs despite the single-year benefit/cost ratios below 1.0, suggesting the programs be closely monitored and modified if needed, and recommended a comparison of planned and actual savings be provided with each Plan update. Exhibit 7.

Staff also advocated for establishment of a loan loss reserve and a revolving loan fund as a mechanism to continue EE programs using non-ratepayer funds. Staff suggested the EM&V timetable proposed by the utilities be accelerated. Finally, Staff noted that customer

participation in Eversource's Customer Engagement Platform is lagging behind other states and that perhaps the cost should be shared by ratepayers and Eversource. Exhibits 6 and 8.

**B. The Office of the Consumer Advocate**

The OCA submitted the testimony of Jeffrey Loiter, who recommended that the Commission approve the programs, budgets, and savings targets as filed, including the ten percent NEI adder used for program screening until New Hampshire-specific studies can be completed. Mr. Loiter recommended that the Utilities provide additional information regarding financing for residential participants, strive for greater participation in the residential retrofit programs, and consider expanding deployment of smart thermostats to reduce peak energy demand. He also recommended that the Utilities consider a performance incentive metric that fosters reduced peak demand, for effect in 2020. Finally, Mr. Loiter recommended that, in 2019, stakeholders begin to explore whether changing the delivery model for EE programs is warranted, and to implement any such change in 2021. Exhibit 4.

**C. The Way Home**

The Way Home sponsored the testimony of Roger D. Colton. Mr. Colton recommended that the Commission adopt an NEI adder equal to 100 percent of a program's energy savings. Further, Mr. Colton recommended that the Commission approve an adder for programs directed at low income customers equal to 2 times whatever adder is adopted for non-low income customers. Exhibit 3.

**D. Acadia Center**

The Acadia Center submitted comments recommending adoption of the Three-Year Plan as submitted (including the 10 percent NEI adder), but with a few changes. Acadia Center stated that performance incentives should be based on budget levels rather than actual spending levels;

that changes to existing performance thresholds should be considered; and that a metric measuring peak demand reduction should be used. In addition, Acadia Center requested that the participation in the EM&V working group be expanded, or the group report quarterly or bi-annually to the EESE Board. Exhibit 9.

## IV. SETTLEMENT AGREEMENT

On December 8, 2017, all the parties to this docket filed a comprehensive Settlement Agreement calling for approval of the Three-Year Plan with some modifications, and otherwise addressing all issues in this case. Exhibit 1. At the hearing held on December 13 to consider the Settlement Agreement, all parties recommended that the Commission approve the Settlement Agreement as filed. Staff and utility witnesses testified that the EE programs to be implemented pursuant to the Settlement Agreement were just and reasonable.

Concerning NEI's, the Settlement Agreement incorporates the 10 percent adder originally proposed by the Utilities, but states a goal of replacing the adder with New Hampshire based study results by 2020. The Settlement Agreement provides for the use of New Hampshire intrastate DRIPE in measuring program benefits, but excludes Rest of Pool DRIPE. The Settlement Agreement recognizes that exclusion of Rest of Pool DRIPE may cause the Benefit/Cost ratios of some programs to fall below 1.0, but requests permission to continue such programs as contemplated in the Three-Year Plan. Exhibit 1 at 5. At the hearing, the witnesses testifying in favor of the Settlement Agreement confirmed that the continuation of such programs after 2018 would have to be the subject of a subsequent filing for 2019 and beyond. Transcript of December 13, 2017, hearing at 47-48. Both NEIs and DRIPES will be studied by a Benefit/Cost Working Group that will further examine cost-effectiveness, including the use of NEI adders, whether a specific NEI adder should be applied to programs available to income

eligible participants, and whether Rest of Pool DRIPE should be considered when evaluating programs.

The Settlement Agreement continues the current performance incentive mechanism, as proposed by the Utilities in the Three-Year Plan, and provides for a working group to review the performance incentive calculation beginning in 2018 (including consideration of metrics for income eligible participation and peak load reductions) with the goal of implementing any changes to the performance incentive calculation by 2020.

Concerning Lost Base Revenue, the Settlement adopts the method of calculating the average distribution rate proposed by the Utilities (where the average distribution rate used in the calculation blends the kW and kWh rate components) for energy efficiency upgrades installed in 2017 and 2018. For upgrades installed in 2019 and thereafter, the method proposed by Staff will be used (where the average distribution rate is disaggregated into kW and kWh components). The kW values to be used in that calculation will be examined by an LBR working group in 2018 to determine the impact of customer peak load and demand charge ratchets on those kW values.

The Settlement Agreement approves the continuation of Eversource's Customer Engagement Platform, but allows parties to recommend different strategies for this program if participation does not increase to levels achieved by Eversource in Connecticut and Massachusetts within six months. Also, the Settlement Agreement puts limits on per year spending on multi-year projects and sets out reporting requirements for multi-year projects as well as for inter-program transfers and changes in program incentives.

The Settlement Agreement approves the accelerated and expanded EM&V framework put forth in the Three-year Plan, calls for the EM&V working group established in DE 15-137 to include a representative of the EESE Board, and for this working group to provide periodic

progress updates. In addition, the Settlement Agreement calls for the formation of a working group in 2018 to study alternative means for funding and financing the EE programs to reduce ratepayer burden. This group has the goal of testing and implementing such options as soon as they are viable.

Like the settlement approved in the 2016 EERS Order, this Settlement Agreement provides for an independent planning expert to assist, beginning in late 2019, with the development of the next three-year plan (covering program years 2021-2023). The next plan will be developed through an enhanced stakeholder process, as was the case for the Three-Year Plan presented in this case. The Settlement Agreement provides that the Utilities will monitor peak demand reduction demonstrations being tested elsewhere in New England, and will report to stakeholders about progress and discuss possible applicability to New Hampshire.

Finally, the Settlement Agreement adopts Staff's recommendations specifying additional data to be provided in upcoming plan updates to assist in evaluating program cost effectiveness and to help track actual versus budgeted spending and savings.

## V. COMMISSION ANALYSIS

We encourage parties to settle issues through negotiation and compromise because it is an opportunity for creative problem solving, allows the parties to reach a result in line with their expectations, and is often a better alternative to litigation. *Granite State Electric Co.*, Order No. 23,966 at 10 (May 8, 2002); *see* RSA 541-A:31, V(a) ("informal disposition may be made of any contested case … by stipulation [or] agreed settlement"). Even when all parties join a settlement, however, we must independently determine that the result comports with "applicable standards." *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH,* Order No. 24,972 at 48 (May 29, 2009). We analyze settlements to ensure that a just and reasonable result has been

reached. *Id.*; *see* N.H. Code Admin. Rules Puc 203.20(b) ("The commission shall approve a disposition of any contested case by stipulation [or] settlement … if it determines that the result is just and reasonable and serves the public interest.").

In this case, we review the Three-Year Plan for conformity with the 2016 EERS Order and the law underlying the establishment of an EERS. The Commission's authority to review the Three-Year Plan and related rates arises out of laws governing energy efficiency funding as well as utility rates and long-term resource planning. *See* RSA 374:2 (public utilities to provide reasonably safe and adequate service at just and reasonable rates); RSA 378:7 (Commission required to determine and fix the utility's just and reasonable or lawful rates); RSA 378:28 (permanent utility rates shall only include a just and reasonable return on plant, equipment, or capital improvements which the PUC finds are prudent, used, and useful); RSA 374:1 and RSA 374:4 (Commission required to keep informed of utilities' operations and their provision of safe and adequate service); RSA 374-F:3, X (restructured electric market required to "reduce market barriers to investments in energy efficiency and provide incentives for appropriate demand-side management and not reduce cost-effective customer conservation" and "utility sponsored energy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers"); RSA 378:38 (electric and natural gas utilities are required to file least cost integrated resource plans); RSA 378:39 (utilities required to prioritize energy efficiency and other demand-side management resources when supply or resource options have equivalent financial costs).

The EE programs included in the Three-Year Plan are funded through several sources, including the SBC, the LDAC, RGGI auction proceeds, and FCM revenue. The SBC is a "nonbypassable and competitively neutral … charge" collected through electric customer rates

and "used to fund public benefits related to the provision of electricity." RSA 374-F: 3, VI. The LDAC is a reconciling surcharge imposed on gas customers, which includes a per-therm conservation charge to recover the costs of gas energy efficiency programs.

Staff and the Utilities testified that the Three-Year Plan, as amended by the Settlement Agreement, is just and reasonable and should be approved by the Commission. Tr. at 36-37, 40-41. All parties to this case signed the Settlement Agreement. The parties acknowledge that the Three-Year Plan includes a comprehensive, cost-effective portfolio of EE programs, and allows for further study of several important, complex issues. The annual update filings provide for Commission review of any plan changes resulting from those further inquiries. The Three-Year Plan and the Settlement Agreement provide for cost recovery of the EE program costs, as well as performance incentives and lost base revenue.

Based on the record, the Three-Year Plan meets the requirements of the 2016 EERS Order and is consistent with applicable law, including the least cost integrated planning requirements promoting energy efficiency. The Three-Year Plan will reduce market barriers to investment in cost-effective energy efficiency and provide incentives for appropriate demand-side management. The savings from the EE programs will benefit all customers, both participants and non-participants. The participants will enjoy the direct benefit of increased energy efficiency. Both participants and non-participants will benefit from on-peak and off-peak load reduction and related system improvements. Accordingly, we find the Three-Year Plan, as modified by the Settlement Agreement, consistent with the public interest, and we approve it.

At the hearing, the Utilities indicated their intention to file an updated Three-Year Plan to reflect the terms of the Settlement Agreement, particularly to reflect the removal of Rest of Pool DRIPE from the cost effectiveness calculations. They stated that the most relevant updated

pages were provided as part of Exhibit 1, but that other portions of the plan should likewise be updated in an effort to present a complete record. Tr. at 37-38, 57-65. We will require an updated plan be submitted, reflecting only the changes needed to incorporate the terms of the Settlement Agreement.

**Based upon the foregoing, it is hereby**

**ORDERED**, that the Settlement Agreement filed in this docket on December 8, 2017, is approved; and it is

**FURTHER ORDERED**, that the 2018-2020 New Hampshire Statewide Energy Efficiency Plan, as modified by that Settlement Agreement, is approved; and it is

**FURTHER ORDERED**, that the System Benefits Charge rates presented by the Utilities in Exhibit 2 at 434 are hereby approved for effect January 1, 2018; and it is

**FURTHER ORDERED,** that each Electric Utility file compliance SBC tariffs within 15 days of this Order; and it is

**FURTHER ORDERED**, that the Utilities file an updated version of Exhibit 2, to reflect only the changes necessitated by our approval of the Settlement Agreement, within 15 days of the date of this Order.

By order of the Public Utilities Commission of New Hampshire this second day of January, 2018.

| Martin P. Honigberg | Kathryn M. Bailey | Michael S. Giaimo |
|---|---|---|
| Chairman | Commissioner | Commissioner |

Attested by:

Debra A. Howland
Executive Director

## EERS Three Year Program Budget Plan

| Programs | Electric | | | | Gas | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | Total | 2018 | 2019 | 2020 | Total |
| **Residential Programs** | | | | | | | | |
| Home Heating Assistance | 6,225,885 | 7,974,902 | 10,638,618 | 24,839,405 | 1,556,830 | 1,704,868 | 1,853,441 | 5,115,139 |
| Home Performance ENERGY STAR | 3,343,716 | 5,157,513 | 7,620,866 | 16,122,095 | 950,123 | 1,025,088 | 1,141,609 | 3,116,820 |
| ENERGY STAR Homes | 2,166,065 | 2,805,646 | 3,824,769 | 8,796,480 | 381,100 | 434,751 | 473,878 | 1,289,729 |
| ENERGY STAR Products | 4,417,154 | 4,921,565 | 5,899,396 | 15,238,115 | 1,385,311 | 1,501,137 | 1,594,176 | 4,480,624 |
| Home Energy Reports | 838,597 | 1,190,617 | 1,937,632 | 3,966,846 | 441,700 | 351,064 | 380,295 | 1,173,059 |
| Eversource Residential Customer Engagement Platform | 237,200 | 246,700 | 256,600 | 740,500 | | | | |
| **Commercial & Industrial Programs** | | | | | | | | |
| Large Business Energy Solutions | 9,499,712 | 12,271,495 | 16,454,849 | 38,226,056 | 2,516,426 | 2,798,338 | 3,086,692 | 8,401,456 |
| Small Business Energy Solutions | 5,974,800 | 7,805,041 | 10,599,286 | 24,379,127 | 1,831,623 | 2,112,527 | 2,265,611 | 6,209,761 |
| Municipal Program | 2,000,707 | 2,000,000 | 2,000,000 | 6,000,707 | Municipal gas programs are served through the Small and Large Business Energy Solutions programs | | | |
| Eversource C&I RFP | 801,060 | 1,263,185 | 1,837,304 | 3,901,549 | | | | |
| Eversource C&I Customer Engagement Platform | 355,800 | 370,000 | 384,800 | 1,110,600 | | | | |

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 17-136**

**GAS AND ELECTRIC UTILITIES**

**2018-2020 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN**

**2019 UPDATE PLAN**

**Order Approving Plan**

**O R D E R N O. 26,207**

**December 31, 2018**

**APPEARANCES:** Matthew J. Fossum, Esq., for Public Service Company of New Hampshire d/b/a Eversource Energy; Patrick Taylor, Esq., for Northern Utilities, Inc., and Unitil Energy Systems; Michael J. Sheehan, Esq., for Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities, Inc., and for Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities; Mark W. Dean, Esq., for New Hampshire Electric Cooperative; New Hampshire Legal Assistance, by Raymond Burke, Esq., for The Way Home; Rebecca Ohler for the New Hampshire Department of Environmental Services; Melissa E. Birchard, Esq., for Conservation Law Foundation; Brianna Brand and Madeleine Mineau, for the New Hampshire Sustainable Energy Association; Ellen Hawes, for Acadia Center; Office of the Consumer Advocate by D. Maurice Kreis, Esq. and Brian D. Buckley, Esq., for residential ratepayers; and Paul B. Dexter, Esq., for the Staff of the Public Utilities Commission.

In this order, the Commission approves the implementation of an energy efficiency (EE) plan for 2019 for electric and gas utilities (2019 Update Plan). The 2019 Update Plan meets the Energy Efficiency Resource Standard (EERS) established by the Commission in Order No. 25,932 (August 2, 2016) (2016 EERS Order) and represents the second year of the three-year EE plan for 2018-2020 (First Triennium Plan) approved in Order No. 26,095 (January 2, 2018) (First Triennium Order). The 2019 Update Plan continues the EE program elements previously approved for 2018. In addition, the 2019 Update Plan establishes a pilot demonstration program designed to reduce customer peak demand, and continues several

stakeholder working groups established in the First Triennium Order. Implementation will begin January 1, 2019.

This order also approves rates for the utilities to allow them to recover program costs, performance incentives, and lost base revenues (LBR). In addition, this order approves a framework for stakeholders to develop a second triennial plan for 2021-2023, which will be filed for Commission review on or before July 1, 2020.

## I. PROCEDURAL HISTORY

The 2016 EERS Order requires the filing of annual updates during each three-year EERS plan period. 2016 EERS Order at 41. The following electric and gas utilities (collectively referred to as the Utilities) filed an update for 2019 on September 14, 2018: Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (Granite State Electric), the New Hampshire Electric Cooperative, Inc. (NHEC), Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource), and Unitil Energy Systems, Inc. (Unitil) (collectively, the Electric Utilities); and Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (EnergyNorth) and Northern Utilities, Inc. d/b/a Unitil (Northern) (collectively, the Gas Utilities). The update for 2019, like the three-year 2018-2020 plan, was developed in consultation and collaboration with a variety of stakeholders.

On September 20, 2018, the Commission issued a Supplemental Order of Notice scheduling a pre-hearing conference for October 5, 2018. At that conference, the Commission took statements of preliminary position from the Utilities, New Hampshire Sustainable Energy Association (NHSEA), Acadia Center (Acadia), The Way Home (TWH), Conservation Law Foundation (CLF), New Hampshire Department of Environmental Services (NHDES), the Office

of the Consumer Advocate (OCA), and Commission Staff (Staff). In accordance with the procedural schedule, Staff and the parties engaged in discovery and met in a technical session.

On November 2, Staff, the OCA, and TWH filed direct testimony. Hearing Exhibit (Exh.) 11-15. NHSEA and Acadia filed direct testimony on November 5. Exh. 16-17. TWH and CLF submitted Statements of Legal Position on November 27. On December 13, the parties filed a Settlement Agreement (Settlement Agreement) signed by all parties, which called for approval of the Utilities' proposed update for 2019 with some modifications. The proposed update as modified is referred to in this order as the 2019 Update Plan. Exh. 18. The Commission held a hearing on the Settlement Agreement and 2019 Update Plan on December 13.

This order and prior docket filings, other than any information for which confidential treatment has been requested of or granted by the Commission, are posted on the Commission's website at http://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136.html.

## II. PRE-SETTLEMENT POSITIONS OF THE PARTIES

### A. Commission Staff

Commission Staff filed the testimony of James Cunningham, Elizabeth Nixon, and Leszek Stachow on November 2, 2018, that generally supported the Utilities' proposed update for 2019. Mr. Cunningham recommended that the Electric Utilities (except NHEC) provide an updated analysis of the impact of demand ratchets in their final 2019 LBR report. Exh. 13 at 12.

Ms. Nixon recommended that the Avoided Energy Supply Cost (AESC) values for reliability not be included in the benefit/cost screening test because the underlying data used to calculate the proposed reliability factor was not applicable to New Hampshire and was over 15 years old. In addition, Ms. Nixon did not support the additional 10 percent non-energy impact

(NEI) adder for screening income eligible programs at this time, pending the results of the NEI studies that were undertaken in 2018. Ms. Nixon supported inclusion of the environmental benefits from fossil fuel savings. Finally, Ms. Nixon recommended that in future plan filings, the Utilities highlight any changes in assumptions used in the AESC study, and that the Utilities include a summary of all available customer rebates. Exh. 14 at 5-11.

Mr. Stachow recommended that Eversource's customer engagement platform (CEP) program be extended for 2019 and monitored for increased participation. He also recommended that, after 2019, the CEP program be subject to a cost effectiveness screening test like all other EE programs. Mr. Stachow recounted the efforts of the Financing and Funding Working Group established per the First Triennium Order. Mr. Stachow testified that the utilities should move more quickly to find alternative sources of funding EE programs. Finally, Mr. Stachow made recommendations for the future roles of several working groups established in the First Triennium Order. Exh 15 at 7-18.

**B. The Office of the Consumer Advocate**

The OCA submitted the testimony of Jeffrey Loiter, Optimal Energy, Inc., who recommended that the Commission approve the programs, budgets, and savings targets as filed. Mr. Loiter made many additional recommendations concerning benefit/cost screening, performance incentives, funding and financing of EE, LBR, and Evaluation, Measurement, and Verification (EM&V). Key recommendations would require the EM&V Working Group to investigate the National Standards Practice Manual and the Resource Value Framework for evaluating EE programs, would require a detailed bill impact analysis, including the impacts on participants and non-participants, and would require a detailed billing analysis to test the accuracy of the LBR methodology. Mr. Loiter recommended that the Utilities be required to

analyze controllable domestic hot water heaters and implement a Strategic Energy Management pilot program designed to develop a strategy to meet demand reduction targets for large customer load. He also recommended that Unitil and Liberty be required to implement a street lighting program like that offered by Eversource, and be required to investigate advanced street lighting controls. Mr. Loiter further recommended that the Commission investigate Eversource's CEP program and direct the Utilities to asses EE programs as alternatives to distribution systems investments. Exh 12.

The OCA also submitted the testimony of Chris Neme, of Energy Futures Group, concerning geo-targeted EE as a non-wires alternative to distribution investments. This topic was ruled outside the scope of this update proceeding. See Order Nos. 26,192 and 26,197 (November 16 and 30, 2018).

**C. The Way Home**

TWH sponsored the testimony of Roger Colton, of Fisher, Sheehan & Colton. Mr. Colton recommended that the Commission require the Utilities to carry forward any unspent Home Energy Assistance (HEA) program funds into the next year's HEA spending, and that EE budgets be increased to the level predicted in the First Triennium Plan. Mr. Colton also recommended that a working group investigate how to ensure that low-income households are not systematically excluded from HEA participation. Finally, Mr. Colton recommended that a 10 percent NEI adder (in addition to the ten percent NEI adder applied to residential EE programs approved in the First Triennium Order) be applied to the low-income programs in the Utilities' proposed update for 2019. Exh. 11.

**D. Acadia Center**

Acadia submitted testimony of Ellen Hawes stating that the System Benefits Charge (SBC) rates should be set at the level proposed for 2019 in the First Triennium Plan, which are higher than what the Utilities proposed for 2019. Ms. Hawes also recommended that the additional funding be used to cover stakeholder consulting costs up to $300,000 (as opposed to the $95,000 approved in the First Triennium Order) and that the remainder be used for additional EE program implementation. In addition, Ms. Hawes recommended structural changes to improve the effectiveness of the EESE Board in EE matters. Exh 17.

**E. New Hampshire Sustainable Energy Association**

NHSEA filed testimony of Madeleine Mineau generally supporting the Utilities' proposed update for 2019. Ms. Mineau testified that Unitil and Liberty should re-design their outdoor lighting rates to bring those rates closer to those of Eversource. Ms. Mineau pointed out that 75 percent of streetlights in Eversource's territory have been converted to energy efficient LED fixtures, while only two percent of Liberty's and zero percent of Unitil's have been converted. Ms. Mineau also testified in support of on-bill financing for EE and for more flexible eligibility screening of program participants. Exh. 16.

## III. SETTLEMENT AGREEMENT

On December 13, 2018, all the parties to this docket filed a comprehensive Settlement Agreement calling for approval of the 2019 Update Plan (*i.e.*, the original proposed update for 2019 with modifications arrived at through settlement); setting a framework for the upcoming 2020 Update Plan and the second triennial plan (2021-2023); and otherwise addressing all issues in this case. Exh. 18. At the hearing held on December 17, all parties recommended that the

Commission approve the Settlement Agreement as filed. Staff and Utility witnesses testified that the EE programs to be implemented pursuant to the 2019 Update Plan are just and reasonable.

Concerning the 2019 budget levels, the Settlement Agreement provides funding close to the funding levels estimated for 2019 in the First Triennium Plan, which is $2.25 million higher than what the Utilities originally proposed. Exh. 10. The Settlement Agreement provides that $344,000 of the funding will be used for a peak demand reduction pilot program aimed at large business customers and $200,000 will be used for training of low-income program installers. The remainder will be split proportionately across other existing programs, with the additional EM&V allocation used to fund additional consulting for the stakeholder planning process that will be undertaken to develop the next triennial plan. Exh. 18 at 4.

The Settlement Agreement requires that any underspent funds of income eligible programs be carried forward to the succeeding year in those programs and not displace or reduce funding for a subsequent program year's budget. The Settlement Agreement states that this provision will be binding on the parties with regard to subsequent triennial plans.

The Settlement Agreement provides that LBR will be calculated according to the formula developed by the LBR Working Group. In addition, the Utilities will be required to include in their annual report filings three additional summary presentations relating to LBR. (Examples are shown on Attachments A, B, and C to the Settlement Agreement.) In June 2019, the regulated Utilities will provide an updated analysis of the impacts of demand ratchets on LBR, using the same format as used by each of the Utilities in Appendix E to the August 29, 2018, LBR Working Group Report. Finally, the Settlement Agreement provides that a previously planned evaluation of the Large Business Energy Solutions study will examine the customer peak and end-use load shapes used in the LBR calculation.

Concerning performance incentives, the Settlement Agreement provides that the PI Working Group established by the First Triennium Order will continue to study PI, with any changes to be included in the 2020 Plan update. Further, the PI Working Group will develop a performance incentive metric related to peak demand.

Eversource's CEP program will continue for 2019, and Eversource will increase marketing efforts with a goal of increasing participation by 50 percent over 2018 levels. Eversource will enhance tracking and reporting on customer use and will review increasing functionality. The Settlement Agreement provides updated roles for the working groups established in the First Triennium Order. The PI Working Group will continue to meet to develop recommendations in time for inclusion in the 2020 Update, including a peak demand reduction metric. The Financing and Funding Group will meet quarterly to continue to explore alternative funding sources and will employ a consultant in those efforts.

The Benefit/Cost (B/C) Working Group will continue the tasks laid out in the prior settlement approved in the First Triennium Order. In addition, the B/C Working Group will be the technical lead in two additional studies, one analyzing cost effectiveness and a second concerning energy optimization. The LBR Working Group made recommendations that were incorporated into the 2019 Update Plan and therefore this working group will be discontinued.

The EM&V Working Group will continue to follow the framework identified in the Strategic Evaluation Plan. In addition, the group will undertake a cost effectiveness analysis to review issues involving the use of the National Standards Practice Manual for screening EE programs. The EM&V Working Group will also explore how to treat the benefit and costs associated with fuel switching (also referred to as energy optimization). At the conclusion of

these studies, recommendations will be submitted for review and approval by the Commission by August 2019, so that the results can be used in developing the second triennial plan.

The Settlement Agreement provides that the second triennial plan will be developed with significant stakeholder input and sets out parameters for timelines, the role of the EERS Committee of the Energy Efficiency and Sustainable Energy (EESE) Board, and consulting help. The second triennial plan will be submitted for Commission review and approval by July 1, 2020, allowing more time for Commission review than allowed in the first triennium. The Settlement Agreement narrows the scope of issues that stakeholders can raise in the 2020 Update Plan proceeding.

Concerning benefit/cost modeling assumptions, the Settlement Agreement provides that 2018 AESC values for savings from pooled transmission facilities and intrastate oil Demand Reduction Induced Price Effect (DRIPE) shall be included in program screening, while any values for local transmission benefits shall be excluded. Further, environmental benefits from fossil fuel savings shall be included. The AESC value for reliability benefits shall not be included. Concerning NEIs, the ten percent adder approved for 2018 shall be continued for 2019 and an additional ten percent adder for income eligible programs shall be included. Those adders will remain for the 2020 Update Plan as well, and then will be re-evaluated in light of the results of the two on-going NEI studies.

The Settlement Agreement provides that the Utilities will provide transmission and distribution cost information to the AESC study preparer if asked, will provide stakeholders the benefit/cost modeling assumptions for 2019 and 2020, and will work with Staff to develop a summary table of available program incentives. Further, the Utilities will not object to an investigation into street lighting tariffs, will investigate opportunities for demand reductions

through controllable domestic hot water measures, and will undertake a detailed bill impact analysis of EE programs, including the impacts on participants and non-participants.

The Settling Parties agree that non-wires alternatives to distribution investments are worthy of study, but will not be a topic for review in this case or in the 2020 Update Plan docket. Non-wires alternatives may be reviewed in various other dockets (rate cases, Least Cost Integrated Resource Plan (LCIRP) reviews, grid modernization proceedings) and, in each Electric Utilities' next LCIRP filing, each company will provide a grid needs assessment.

## IV. SUMMARY OF THE 2019 UPDATE PLAN

As modified and enhanced by the settlement process, the 2019 Update Plan continues energy efficiency programs implemented for 2018 (the first year of the first triennium). It is summarized broadly below.

### A. Program Funding

The 2019 level of funding for the electric programs is $49,665,425. Exh. 18 at 4. The Electric Utilities propose an EE program SBC rate of $0.00373 per kWh, which is lower than the SBC rate of $0.00425 projected for 2019 when the EERS was adopted in the 2016 EERS Order. Exh. 19 at 1, 13, 24 and 27; Exh. 10 at 10-11. The current SBC rate for the 2018 Plan approved in the First Triennium Order is $0.00275. Exh. 10 at 10. Also, consistent with the 2016 EERS Order, each Electric Utility (except for NHEC) proposed an additional SBC component to recover Lost Base Revenues. Exh. 10 at 263.[1]

The 2019 funding for the gas programs is $11,469,197. Exh. 10 at 14. Each Gas Utility proposed a Local Delivery Adjustment Charge (LDAC) component for EE in its cost of gas

[1] Exhibit 10 includes four documents: (1) The proposed plan for 2019 filed by the Utilities on pp. 1-197, 223-259; (2) Direct Testimony of David Simek and Catherine McNamara from the most recent EnergyNorth cost of gas docket starting on p. 198; (3) Attachments of David Simek and Catherine McNamara starting on p. 217, and (4) Joint Testimony of Asbury, Goulding, Tebbetts and Woods starting on p. 260.

proceeding. Those rates were approved for Northern in Order No. 26,186, (October 31, 2018) and for EnergyNorth in Order No. 26,188 (November 1, 2018).

**B. Industry Budgets[2]**

The 2019 year electric program budget is $47,079,203. Exh. 18 at 4; Exh 20 at 2-3. It is allocated across the various sectors, as follows: Commercial & Industrial (C&I) and Municipal sectors: 52 percent of the budget; Residential: 31 percent; and Income Eligible: 17 percent. Exh. 10 at 15; Exh. 20 at 1-3.

The 2019 gas program budget is $9,896,499. Exh. 10 at 16; Exh 20 at 2-3. It is allocated across the various sectors, approximately as follows: C&I and Municipal sectors: 48 percent of the budget; Residential: 35 percent; and Income Eligible: 17 percent. Exh 10 at 16; Exh 20 at 2-3.

**C. Program Budgets**

The 2019 Update Plan includes the same residential and C&I energy efficiency programs that the Commission approved for 2018. A description of each program can be found in Order No. 26,095 at 5-9. The 2019 Update Plan and Settlement Agreement make several enhancements to the existing programs. For instance, as a result of the Settlement Agreement, the Utilities have budgeted an additional $200,000 for HEA workforce training to help address program backlog. Exh. 18 at 5. In addition, the Gas Utilities, Unitil, and the NHEC will offer zero percent on-bill financing up to $4,000 as part of the Home Performance with ENERGY STAR program, and all Utilities are developing an incentive structure designed for manufactured homes as part of the ENERGY STAR Homes program. In 2019, the Utilities will develop and test a point of sale e-rebates platform that will allow vendors to confirm eligibility using a

[2] The electric and gas program budget amounts are less than the funding levels stated above because the budget amounts do not include the performance incentive, which is included in a separate provision of the budget.

customer's smart phone at the time and point of purchase of ENERGY STAR certified items. Eversource will improve its program for making customized EE recommendations by providing customer usage data in greater detail, for example kW and interval usage data. Last, the Utilities will continue to explore offering rebates for lighting and heating equipment at the distributor level so the rebates can be applied to the price that the customers pay at the point of sale, and will apply $344,000 toward a peak demand reduction pilot program for large businesses.

Budgets for various residential, and commercial and industrial programs are listed in the following table. For additional details, see Exh. 20:

| SUMMARY OF 2019 EERS BUDGETS | | | |
|---|---|---|---|
| | **Electric Utilities** | **Gas Utilities** | **Total** |
| **Residential Program Budgets** | | | |
| Home Energy Assistance | $ 8,184,964 | $ 1,684,368 | $ 9,869,332 |
| NH Home Performance w/Energy Star | $ 5,387,205 | $ 1,239,988 | $ 6,627,193 |
| Energy Star Homes | $ 2,697,699 | $ 612,751 | $ 3,310,450 |
| Energy Star Products | $ 5,025,263 | $ 1,240,237 | $ 6,265,500 |
| Customer Engagement Platform | $ 211,877 | $ - | $ 211,877 |
| Home Energy Reports | $ 1,143,866 | $ 352,520 | $ 1,496,386 |
| **Commercial & Industrial Program Budgets** | | | |
| Large Business Energy Solutions | $ 12,243,177 | $ 2,923,338 | $ 15,166,515 |
| Small Business Energy Solutions | $ 7,442,124 | $ 1,742,527 | $ 9,184,651 |
| Municipal Program | $ 2,000,272 | $ - | $ 2,000,272 |
| C&I RFP Program | $ 1,195,561 | $ - | $ 1,195,561 |

**D. Program Financing**

The 2019 Update Plan proposes to continue several financing options currently available to participants, as well as offering some new options. For example, through the Residential Energy Efficiency Loan Program, the Utilities will continue to offer residential customers reduced rate financing (at 2 percent) through five New Hampshire lending partners. In addition, Unitil and the NHEC will offer residential customers zero percent on-bill financing for loans up to $4,000 (*i.e.* double the current maximum), and Northern and EnergyNorth will begin to offer

on-bill loans up to $4,000 per residential project. In 2019, the Gas Utilities will offer their commercial customers the same offerings that their electric affiliates offer their electric customers. All the Utilities offer financing to municipal and business participants, allowing those customers to use the energy savings realized to help pay back the loans.

**E. Benefit/Cost Screening**

As in past years, the Utilities screened the proposed EE programs for cost effectiveness using the Total Resource Cost (TRC) test, which compares the present value of the lifetime benefits of the programs to the Utilities' implementation costs, plus any participant out-of-pocket costs. The energy benefits are evaluated using an Avoided Energy Supply Cost (AESC) study which is performed on a New England-wide basis and is updated regularly. In this case, the 2018 AESC update was used to screen the 2019 programs. Exh. 10 at 36-37. The 2018 AESC update included values for DRIPE to capture the impact EE programs will have on wholesale energy prices. It also included updated cost savings for energy and capacity, and new elements such as the avoided cost of Pool Transmission Facilities, a value for oil DRIPE, and a value for increased reliability. *Id.*

In addition to the avoided costs calculated in the 2018 AESC, the Utilities included benefits from environmental costs associated with reduced emissions, and a ten percent benefit adder as an estimate for Non-Energy Impacts (NEIs) resulting from the EE programs, as approved for the 2018 plan. NEIs include reduced utility bill arrearages, reduced bill collection costs, reduced maintenance costs for participants, and improved health benefits for participants. For income eligible programs, the Utilities included a second ten percent adder for additional NEIs experienced by income eligible customers. *Id.* at 38-41.

As proposed, all the 2019 programs, when aggregated for all Utilities, show a benefit/cost ratio greater than 1.0. Exh. 20 at 13.

**F. Evaluation, Measurement, and Verification**

Evaluation Measurement and Verification efforts have the objective of verifying energy savings, estimating future savings, and identifying ways to improve program delivery and results. The basic framework of EM&V activities for 2018-2020 was detailed in the 2016 EERS Order and then accelerated in accordance with terms of the settlement approved in the First Triennium Order. That settlement also formalized the EM&V Working Group, which consists of Staff members, independent EM&V consultants hired and supervised by the Commission, and representatives of the Utilities and the EESE Board. Recent EM&V efforts began with the development of a Strategic Evaluation plan, which identified five priority studies to begin in 2018 (addressing the HEA program, NEIs, Home Performance with ENERGY STAR, C&I and Municipal Lighting, and an EE market assessment). In addition, three other studies are to begin in late 2018 or early 2019 (EE Potential Study, Technical Reference Manual, and Large Business C&I Impact and Process Evaluation). In 2017 and 2018, the independent third-party evaluators working on behalf of the EM&V Working Group completed evaluations of the ENERGY STAR Homes Program, Small Business and Municipal Lighting measures, and the ENERGY STAR Products program. The Utilities incorporated the results of those studies into the 2019 Update Plan. Exh. 10 at 48-49.

**G. Performance Incentive**

The 2019 Update Plan proposes to continue the Performance Incentive (PI) approved in the 2016 EERS Order, which offers utilities an incentive to invest in EE rather than traditional infrastructure. Utilities can earn up to 6.875 percent of actual program expenditures by

surpassing certain minimum performance thresholds, and when actual measured (*i.e.*, after the fact) program cost effectiveness and realized energy savings are greater than predicted cost effectiveness and savings. The PI Working Group established by the First Triennium Order continues to examine PI, with the goal of implementing any changes in 2020. Exh. 10 at 46.

**H. Lost Base Revenue**

The Electric Utilities (except for NHEC) propose that the SBC include collection for revenue lost from decreased electricity sales resulting from the programs, consistent with the framework laid out in the 2016 EERS Order, and as modified to include a demand component in kilowatts as called for in the settlement approved in the First Triennium Order. The Gas Utilities proposed rates for lost revenue in their individual cost of gas dockets. *See* Order Nos. 26,186 and 26,188.

## V. COMMISSION ANALYSIS

We encourage parties to settle issues through negotiation and compromise because it is an opportunity for creative problem solving, allows the parties to reach a result in line with their expectations, and is often a better alternative to litigation. *Granite State Electric Co.*, Order No. 23,966 at 10 (May 8, 2002); *see* RSA 541-A:31, V(a) ("informal disposition may be made of any contested case ... by stipulation [or] agreed settlement"). Even when all parties join a settlement, however, we must independently determine that the result comports with "applicable standards." *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH,* Order No. 24,972 at 48 (May 29, 2009). We analyze settlements to ensure that a just and reasonable result has been reached. *Id.*; *see* N.H. Code Admin. Rules Puc 203.20(b) ("The commission shall approve a disposition of any contested case by stipulation [or] settlement ... if it determines that the result is just and reasonable and serves the public interest.")

In this case, we review the 2019 Update Plan for conformity with the 2016 EERS Order and the First Triennium Order, and the law underlying the establishment of an EERS. We are further informed by the New Hampshire 10-Year State Energy Strategy, dated April 2018, at page 15, which calls for New Hampshire to "continue to coordinate and develop energy efficiency programming to achieve cost-effective savings." The Commission's authority to review the 2019 Update Plan and related rates arises out of laws governing energy efficiency funding as well as utility rates and long-term resource planning. *See* 2016 EERS Order at 45-49.

The EE programs included in the 2019 Update Plan are funded through several sources, including the SBC, the LDAC, Regional Greenhouse Gas Initiative auction proceeds, and Forward Capacity Market revenue. The SBC is a "nonbypassable and competitively neutral ... charge" collected through electric customer rates and "used to fund public benefits related to the provision of electricity." RSA 374-F: 3, VI. The LDAC is a reconciling surcharge imposed on gas customers, which includes a per-therm conservation charge to recover the costs of gas energy efficiency programs.

Staff and the Utilities testified that the 2019 Update Plan (*i.e.*, the Utilities' proposal as modified by the Settlement Agreement) is just and reasonable and should be approved by the Commission. All parties to this case signed the Settlement Agreement. The parties acknowledge that the 2019 Update Plan includes a comprehensive, cost-effective portfolio of EE programs, and establishes a framework for development and review of the 2020 update in 2019 and the second triennial plan in 2020. The Settlement Agreement provides for a pilot program aimed at reducing peak demand in 2019. The 2019 Update Plan and the Settlement Agreement provide for cost recovery of the EE program costs, as well as performance incentives and lost base revenue.

Based on the record, the 2019 Update Plan meets the requirements of the 2016 EERS Order and is consistent with applicable law, including the least cost integrated resource planning requirements promoting energy efficiency. The 2016 EERS Order established an annual energy savings target and budget. The 2019 Plan Update exceeds the Electric Utility energy savings targets within the budget approved in the 2016 EERS Order. Based on testimony at hearing, all energy efficiency in the 2019 Update Plan is cost-effective, and as such approval of this Settlement Agreement is consistent with prior Commission orders.

The 2019 Plan Update will reduce market barriers to investment in cost-effective energy efficiency and provide incentives for appropriate demand-side management. The savings from the EE programs will benefit all customers, both participants and non-participants. The participants will enjoy the direct benefit of increased energy efficiency. Both participants and non-participants will benefit from on-peak and off-peak load reduction and related system improvements. Energy efficiency will help mitigate increased regional transmission and capacity costs for New Hampshire electricity ratepayers. Accordingly, we find the 2019 Update Plan to be consistent with the public interest, and we approve it.

At the hearing, the Utilities indicated their intention to provide an update to their original filing to reflect the terms of the Settlement Agreement. They stated that the most relevant updated pages were provided as part of Exhibits 19 and 20, but that other portions of the full plan should likewise be updated in an effort to present a complete record. We will accept the necessary updates to Exhibit 10 as part of a compliance filing.

**Based upon the foregoing, it is hereby**

**ORDERED**, that the Settlement Agreement filed in this docket on December 13, 2018, is approved; and it is

**FURTHER ORDERED**, that the New Hampshire Statewide Energy Efficiency 2019 Update Plan (the Utilities' proposal as modified by the Settlement Agreement), is approved; and it is

**FURTHER ORDERED**, that the System Benefits Charge rates presented by the Utilities in Exhibit 19 at 1, 13, 24, and 27 are hereby approved for effect January 1, 2019; and it is

**FURTHER ORDERED,** that each Electric Utility file compliance tariffs within 15 days of this Order; and it is

**FURTHER ORDERED**, that the Utilities file a complete updated version of Exhibit 10, reflecting the changes necessitated by our approval of the Settlement Agreement, within 15 days of the date of this order.

By order of the Public Utilities Commission of New Hampshire this thirty-first day of December, 2018.

| Martin P. Honigberg | Kathryn M. Bailey | Michael S. Giaimo |
|---|---|---|
| Chairman | Commissioner | Commissioner |

Attested by:

Debra A. Howland
Executive Secretary

## SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED

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

Executive.Director@puc.nh.gov
al-azad.iqbal@puc.nh.gov
allen.desbiens@eversource.com
amanda.noonan@puc.nh.gov
asbury@unitil.com
bob.reals@libertyutilities.com
brian.buckley@oca.nh.gov
brianna@nhsea.org
carroll@unitil.com
christopher.goulding@eversource.com
christopher.plecs@eversource.com
craig.wright@des.nh.gov
cynthia.trottier@libertyutilities.com
deandra.perruccio@puc.nh.gov
donald.kreis@oca.nh.gov
downesm@unitil.com
edward.davis@eversource.com
ehawes@acadiacenter.org
elizabeth.nixon@puc.nh.gov
epler@unitil.com
eric.stanley@libertyutilities.com
f.anne.ross@puc.nh.gov
frank.melanson@eversource.com
heather.tebbetts@libertyutilities.com
henry@nhsea.org
james.brennan@oca.nh.gov
jarvis@unitil.com
jay.dudley@puc.nh.gov
jbesser@nececc.org
jim.cunningham@puc.nh.gov
joseph.fontaine@des.nh.gov
joseph.swift@eversource.com
jvanrossum@clf.org
karen.cramton@puc.nh.gov
karen.sinville@libertyutilities.com
kate@nhsea.org
katherine.peters@eversource.com
kbahny@trcsolutions.com
kristi.davie@eversource.com
laurel.proulx@eversource.com
leszek.stachow@puc.nh.gov
loiter@optenergy.com
lpaskvan@pierceatwood.com
madeleine@nhsea.org
marc.lemenager@eversource.com
matthew.fossum@eversource.com
maureen.karpf@libertyutilities.com

Docket #: 17-136-1 Printed: December 28, 2018

## FILING INSTRUCTIONS:

a) **Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:** DEBRA A HOWLAND
EXEC DIRECTOR
NHPUC
21 S. FRUIT ST, SUITE 10
CONCORD NH 03301-2429

b) **Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.**

c) **Serve a written copy on each person on the service list not able to receive electronic mail.**

mbirchard@clf.org
mdean@mdeanlaw.net
michael.goldman@eversource.com
michael.sheehan@libertyutilities.com
miles.ingram@eversource.com
ocalitigation@oca.nh.gov
palma@unitil.com
paul.dexter@puc.nh.gov
pradip.chattopadhyay@oca.nh.gov
rburke@nhla.org
rclouthier@snhs.org
rebecca.ohler@des.nh.gov
rhonda.bisson@eversource.com
robert.bersak@eversource.com
robertbackus05@comcast.net
sarah.knowlton@libertyutilities.com
scott.albert@gdsassociates.com
sgeiger@orr-reno.com
smaslansky@nhcdfa.org
snowc@nhec.com
Stephen.Eckberg@puc.nh.gov
Stephen.Hall@libertyutilities.com
steve.frink@puc.nh.gov
steven.elliott@eversource.com
steven.mullen@libertyutilities.com
stower@nhla.org
suzanne.amidon@puc.nh.gov
taylorp@unitil.com
teamnh@energyservicesgroup.net
thomas.belair@eversource.com
tirwin@clf.org
tom.frantz@puc.nh.gov
tomas.fuller@eversource.com
trooney@trcsolutions.com
woodsca@nhec.com

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 17-136**

**GAS AND ELECTRIC UTILITIES**

**2018-2020 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN**

**BENEFIT COST WORKING GROUP RECOMMENDATIONS**

**Order Approving Benefit Cost Working Group Recommendations**

**O R D E R  N O.  26,322**

**December 30, 2019**

**APPEARANCES:** Matthew J. Fossum, Esq., for Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource); Patrick Taylor, Esq., for Northern Utilities, Inc., (Northern), and Unitil Energy Systems; Michael J. Sheehan, Esq., for Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities, Inc., (Liberty), and for Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (EnergyNorth); Mark W. Dean, Esq., for New Hampshire Electric Cooperative; New Hampshire Legal Assistance, by Raymond Burke, Esq., for The Way Home; Rebecca Ohler for the New Hampshire Department of Environmental Services; Caitlin Peale Sloan, Esq., for Conservation Law Foundation; Madeleine Mineau, for Clean Energy NH; Jeff Marks, Esq., for Acadia Center; Melissa E. Birchard, Esq., for Sunrun, Inc.; Office of the Consumer Advocate, by D. Maurice Kreis, Esq., and Christa Shute, Esq., for residential ratepayers; and Paul B. Dexter, Esq., and Brian D. Buckley, Esq., for the Staff of the Public Utilities Commission.

This order adopts a new cost-effectiveness screening framework for New Hampshire's ratepayer-funded energy efficiency programs. The framework consists of a primary test, known as the Granite State Test, and two secondary tests: the Utility Cost Test, and the Secondary Granite State Test. A summary of these tests is attached in Appendix 1 of this order. The Commission also confirms that the planning process identified in Order No. 26,207 (December 31, 2018), should continue to investigate opportunities for load factor improvements associated with energy optimization.

## I. PROCEDURAL HISTORY

On December 31, 2018, the Commission approved the implementation of an energy efficiency plan for 2019 for electric and gas utilities (2019 Plan Update). Order No. 26,207. In approving the 2019 Plan Update, the Commission designated the Benefit/Cost (B/C) Working Group as the technical lead for two studies analyzing cost effectiveness and energy optimization. The Commission also required the B/C Working Group to make recommendations for the Commission's use in developing the next triennial energy efficiency plan for 2021-2023. *Id.* at 8-9.

The B/C Working Group met eight times between February 2019 and September 2019. On October 31, 2019, the Commission Staff filed the *New Hampshire Cost-Effectiveness Test Review* (Cost-Effectiveness Test Review) and *Energy Optimization through Fuel Switching Study* (Energy Optimization Study) along with a report on behalf of the B/C Working Group (B/C Working Group Report, or Report). The Report summarizes the findings of both studies and lists recommendations for next steps based on those studies. On November 6, the Commission issued a secretarial letter soliciting comments on the Report and the recommendations contained therein. Comments were filed by New Hampshire Legal Assistance, Clean Energy NH, and the NH Utilities.[1]

## II. B/C WORKING GROUP RECOMMENDATIONS

Based on the outcome of the Cost-Effectiveness Test Review and Energy Optimization Study, the B/C Working Group recommended that the Commission:

> (1) Adopt the Granite State Test as the primary test for energy efficiency cost-effectiveness screening;

[1] The "NH Utilities" include the electric utilities (Eversource, Liberty, New Hampshire Electric Cooperative, Unitil) and gas utilities (EnergyNorth and Northern).

(2) Adopt the Utility Cost Test and Secondary Granite State Cost Test as secondary tests, requiring the utilities to perform and file both alongside the primary test;

(3) Consider, if proposed following additional review during development of future plans, other alterations to cost-effectiveness screening practices recommended by the Cost-Effectiveness Test Review; and

(4) Provide guidance as to whether stakeholders should continue, through the planning process identified in Order No. 26,207, to investigate energy optimization and related load factor improvement opportunities, including through:

a) Establishment of any relevant programs or pilot programs (*e.g.*, for air source heat pumps) to evaluate the reasonableness of accounting for unregulated fuel savings and increases in regulated fuel consumption resulting from energy optimization measures; and/or

b) Consideration of a net MMBtu savings goal component of the electric programs and any related alterations to the performance incentive mechanism during the program planning process for the next triennial plan.

B/C Working Group Report at 11-12.

**A. Granite State Test**

The B/C Working Group Report describes the Granite State Test (GST) as a test that "focuses on costs and benefits which accrue to the utility system, while also considering impacts associated with unregulated fuels, water, fossil fuel emissions, and income eligible participants." *Id*. at 5. Typical costs included in the GST are those associated with program administration, such as the customer incentive, evaluation costs, and the utility performance incentive. Typical benefits included in the GST are those associated with the utility system, as well as unregulated fuel savings, water savings, and low-income participant benefits such as improved occupant health and safety. Notably, the GST would not include the installed costs of a measure paid for by a program participant. *Id*. at 13; Cost-Effectiveness Test Review at 23-31. As the primary test, the GST would be the determinant of whether a program should be included in the portfolio of energy efficiency measures.[2] *Id*. at 4.

[2] The B/C Working Group report notes the Commission may wish to weigh the primary test results alongside other factors, including but not limited to: the results of secondary tests; least-cost planning imperatives; rate, bill, and

**B. Utility Cost Test and Secondary Granite State Test**

In addition to the GST, the B/C Working Group Report describes two secondary tests that the utilities will perform and file in order to help inform future resource allocation decisions, as well as treatment of marginally cost-effective programs: The Utility Cost Test (UCT) and Secondary Granite State Test (GST-2).

The UCT includes only those costs and benefits which affect the utility system and the distribution utility's revenue requirement. *Id*. at 5, citing Cost-Effectiveness Test Review at 54. Typical costs included in the UCT are those associated with program administration, such as the customer incentive, evaluation costs, and the utility performance incentive. Typical benefits included in the UCT include avoided energy, distribution, and transmission costs, and avoided credit and collection costs. *Id*. at 13; Cost-Effectiveness Test Review at 23-31.

The GST-2 includes all of the impacts within the GST, but also "includes participant costs, participant non-energy impacts beyond the income eligible sector, income eligible societal benefits, and environmental impacts beyond the fossil emission value currently used in New Hampshire." *Id*. at 5, citing Cost-Effectiveness Test Review at 55-58. Typical costs included in the GST-2 are those associated with program administration (*e.g*. the customer incentive, evaluation costs, and the utility performance incentive), the participating customer (*e.g*. the customer's share of installed measure costs), and costs that accrue to society more broadly. Typical benefits included in the GST-2 are those associated with the utility system (*e.g*. avoided energy, avoided distribution, avoided transmission, and avoided credit and collection costs); the participating customer (*e.g*. improved occupant health and productivity); and society (*e.g*. avoided emissions and public health). *Id*. at 13; Cost-Effectiveness Test Review at 23-31.

---

participation impacts; jobs and economic development impacts; customer equity; and any other goals of the programs.

**C. Other Alterations to Cost-Effectiveness Screening Practices**

The B/C Working Group Report cites several recommendations within the Cost-Effectiveness Review that the Commission may consider, if proposed, during future iterations of program plan filings, including: (1) adopting an alternative quantification of economic development impacts; (2) extending the measure lives in the B/C model from 25 years to 30 years; (3) adopting dual baselines for early replacement measures; (4) transitioning from adjusted gross savings accounting methodologies to a net savings accounting methodology; (5) adopting the National Standard Practice Manual's (NSPM) standardized program-level reporting template; and (6) collecting more detailed information regarding program participation. *Id*. at 6, citing Cost-Effectiveness Test Review at 41, 47-49, 65-67.

**D. Energy Optimization Study and Request for Guidance**

The B/C Working Group Report defines energy optimization as "a strategy to minimize energy use and maximize customer benefits … [that] considers efficiency and the mix of fuels used," and distinguishes energy optimization from fuel switching, energy efficiency, and beneficial electrification. *Id*. at 7-8, citing Energy Optimization Study at 1. The Report observes that New Hampshire's energy efficiency program administrators already offer "fuel blind programs through which the regulated utilities claim savings and recover costs for measures that target unregulated fuel savings." *Id*. at 8. The Report further explains that when a customer switches fuels to an electric or natural gas-powered end-use for heating or cooling, the program administrators do not claim savings associated with the previous fuel, which is often an unregulated fuel such as oil or propane. In those cases, the programs assume that the decision to switch fuels was not influenced by the program incentives, and, as a result, the program administrators only claim savings for the difference between the electricity use of the incented

measure and a less efficient baseline version of the same fuel type. *Id*. at 8-9. The Report observes that, as a result of recent statutory and regulatory guidance, and supporting program evaluations, program administrators throughout the Northeast are transitioning "to a model where, in at least some residential retrofit applications, the calculation of program savings does not assume the customer would have switched fuels regardless of program support." *Id*. at 9.

The B/C Working Group Report notes that the Energy Optimization study also includes modeled customer energy usage and bill impacts associated with energy optimization on a measure-by-measure basis. *Id*. at 10-11, citing Energy Optimization Study at 30-32. To assess those impacts, a pre-existing residential energy optimization model was adapted to include New Hampshire specific inputs such as fuel cost data, weather data, saturation of various air conditioning technologies, and the regional electric generation mix. *Id*. Consistent with treatment of energy optimization measures in neighboring jurisdictions, the model nets MMBtu savings associated with the previous fuel (*e.g*. oil or propane) against increased energy usage and demand associated with the new fuel (*e.g*. electricity). Although the study models both oil-to-electric and oil-to-natural gas measures, the study notes that no Northeast states allow program administrators to claim savings for conversion from an unregulated fuel to natural gas, largely due to concerns that the customer would have switched to gas regardless of the program intervention. Energy Optimization Study at 19, 30-32, 36.

Based on the study's review of existing energy optimization analyses, the B/C Working Group Report also observes that certain energy optimization measures have the potential to put downward pressure on rates by spreading the costs of the system peak over more units of usage. The downward pressure on rates is attributable to the average load shape of those newly electrified end uses, which on average would increase load during times when the transmission

and distribution system is not at its peak load. The result, which has the potential to reduce rates for both program participants and non-participants, is often referred to as "improved load factor." B/C Working Group Report at 11, citing Energy Optimization Study at 25-27.

## III. NOVEMBER 13, 2019 COMMENTS

In response to the Commission's November 6, 2019, Secretarial Letter soliciting comment, the NH Utilities, The Way Home, and Clean Energy NH filed comments on the B/C Working Group Report.[3]

### A. NH Utilities

The NH Utilities expressed appreciation for the time and attention devoted to the B/C Working Group process and Report, as well as support for the consensus described therein. NH Utilities Comments at 1.

### B. The Way Home

The Way Home expressed support for the Report and recommendations of the B/C Working Group, and suggests that the Commission's approval of the revised cost-effectiveness test will improve program planning, implementation, and evaluation. The Way Home Comments at 1.

### C. Clean Energy NH

Clean Energy NH expressed appreciation for the efforts of the working group, and suggested that any energy optimization approach embraced by New Hampshire should be technology neutral, encouraging "adoption of all forms of renewable and efficient energy including but not limited to geothermal energy and modern efficient centralized wood heating." Clean Energy NH Comments at 1.

---

[3] Clean Energy NH's comments are date-stamped on the day following the Commission's comment deadline, but are still addressed in this order.

## IV. COMMISSION ANALYSIS

As a preliminary matter, the Commission thanks the members of the B/C Working Group for the time and effort they have invested in the Cost-Effectiveness Test Review, Energy Optimization Study, the B/C Working Group Report, and the consensus recommendations contained therein. The stakeholders have consistently worked in a collaborative manner and serve as an example of how constructive stakeholder processes can aid the Commission in its decision-making duties and allow parties to reach a result in line with their expectations.

### A. Cost-Effectiveness Screening

The B/C Working Group Report recommends that the Commission adopt a new framework for determining benefits and costs associated with investments in energy efficiency.[4] The proposed cost-effectiveness framework was informed by an extensive review of state policies as defined by statute, interpreted by Commission precedent, and guided by the state energy strategy. Cost-Effectiveness Test Review, at 71-74 (Appendix A). The proposed framework departs from our previously approved framework, which was developed as a result of a similar working group process and adopted nearly two decades ago. Order No. 23,574 at 14. (November 1, 2000). While the previously approved framework applied a variation of the Total Resource Cost (TRC) test to New Hampshire's energy efficiency programs, the proposed framework embraces the GST as a primary test, while supplementing that with the UCT and GST-2 secondary tests. As the primary determinant of whether to include a program in the portfolio, we appreciate that the benefits and costs within the GST are based on a review of New Hampshire's existing statutes and policies. We also appreciate inclusion of the secondary

[4] As discussed *supra* at section II.C, the B/C Working Group Report suggests the Commission defer consideration of certain recommendations contained in the Cost-Effectiveness Test Review. We agree that certain issues would be more appropriately addressed in the context of a specific program proposal.

tests to aid the Commission and other stakeholders in decisions relating to resource allocation and treatment of marginally cost-effective programs. We note that the secondary tests provide additional data points, among several others, that the Commission may consider when evaluating marginally cost-effective programs, and that the primary test shall be the primary determinant of whether to include a program in the portfolio.

Use of the GST as the primary test will improve energy efficiency program screening by placing a greater emphasis on the utility system impacts than our current test. For example, in evaluating the cost-effectiveness of a lighting retrofit at a small business under the TRC, program evaluators consider the costs and benefits that accrue to the utility system and the program participant who installed the lighting measure. Evaluating that same lighting retrofit under the GST, program evaluators would consider the costs and benefits that accrue to the utility system, but would not generally consider those impacts accruing to program participants (*e.g.,* the participant's improved productivity, comfort, property value, and share of installation costs). We find that this emphasis on utility system impacts, which accrue to program participants and non-participants equally, will more appropriately target those measures and programs that lower utility system costs, minimizing disparate treatment of program participants and non-participants.

Based on the foregoing, we adopt the proposed framework for energy efficiency programs, subject to additional guidance regarding: (1) applicability of the framework to distributed energy resource (DER) investments other than energy efficiency; and (2) treatment of hard-to-quantify impacts.

### 1. Applicability to Other Investments

The Cost-Effectiveness Test Review contains a section discussing whether the new cost-effectiveness framework might apply to other DERs. Cost-Effectiveness Test Review at 83-85 (Appendix C). Noting stakeholder agreement that it was beyond the scope of the working group to address issues relating to the cost-effectiveness of other DERs, the Cost Effectiveness Test Review describes how the new framework *might* be applied to other DERs and makes recommendations relative to that application. *Id*. at 83. We note that the policies considered by the B/C Working Group in their development of the cost-effectiveness framework and contained in Appendix A of the B/C Working Group Report focused on statutes, policies, and precedents related to energy efficiency, rather than the broader universe of DERs. We also note that cost-effectiveness is an issue being considered in other dockets before the Commission, including DE 16-576 where the Commission has approved studying the value of certain distributed energy resources, and DE 15-296 where cost-effectiveness screening of certain distribution system investments remains at issue. Because cost effectiveness is an issue we are evaluating in other dockets, we clarify that our approval of the proposed framework for energy efficiency investments should not be considered approval for the purpose of any other investments, DER or otherwise.

### 2. Treatment of Hard-to-Quantify Impacts

Both the GST and the GST-2 include non-energy impacts that have not previously been quantified through New Hampshire specific primary research. B/C Working Group Report at 5-6. The Cost-Effectiveness Test Review describes two ongoing studies related to non-energy impacts that may inform the quantification of those impacts. Cost-Effectiveness Test Review at 69-70. The Report notes that, consistent with the Commission-approved 2018-2020 Energy

Efficiency Plan Settlement, the B/C Working Group will determine whether to accept the results of the evaluations, adopt a reasonable proxy based on those evaluations, or continue to use the existing adders. B/C Working Group Report at 5-6. As the B/C Working Group stakeholders consider the results of the ongoing evaluations, we direct stakeholders to minimize, to the extent reasonable, any incremental costs associated with quantifying impacts that were not previously included in New Hampshire's variation of the TRC test. For example, the cost of quantifying impacts associated with secondary tests should be balanced against the likely magnitude of the impact and opportunities to embrace evidence-based studies from other jurisdictions whose values might be adapted for New Hampshire-specific impacts. While we agree in principle that hard-to-quantify impacts should not be neglected simply because they are hard to quantify, we remain mindful that the costs associated with quantifying those impacts are ultimately borne by ratepayers, and direct the relevant working group(s) to carefully balance the costs and benefits of each possible approach.

**B. Energy Optimization**

The B/C Working Group Report requests guidance from the Commission regarding whether stakeholders should continue to investigate energy optimization and related load factor improvement opportunities, citing establishment of pilot programs and alterations to the savings goals or performance incentive framework as two opportunities for further investigation. B/C Working Group Report at 10. We note that there is no specific pilot proposal, savings goal alteration, or revised performance incentive framework before us to consider. In light of that fact, we take no position on whether a pilot or alterations to the savings goals or performance incentive framework are appropriate at this time. We do, however, provide further guidance

below, on our understanding of how energy optimization might fit within the landscape of New Hampshire's energy efficiency programs.

**1. Precedent and Unregulated Fuel Savings**

In 2013, the Commission expanded the residential Home Performance with Energy Star® (HPwES) fuel neutral pilots to full-fledged program status for two primary reasons. First, fuel neutral savings tend to also have ancillary electric savings (*e.g.*, weatherizing an oil-heated home also minimizes the need for summer air cooling). Second, fuel-neutral measures can help improve cost-effectiveness at a given site and "serve as the catalyst for electric savings once utilities are 'in the door' with customers." Order No. 25,402, at 20-25 (August 23, 2012).[5]

**2. Load Factor Improvement Opportunities**

The B/C Working Group Report and Energy Optimization Study posit an additional reason the Commission might encourage efficiency program administrators to save fuels other than the one they deliver: load factor improvement. The Report suggests that certain energy optimization measures have the potential to put downward pressure on rates by spreading the costs of the system peak over more units of usage. Load shape can be improved if newly electrified end uses operate primarily during times when the transmission and distribution system have unused capacity. Increasing usage without increasing peak demand, (improving the system load factor) has the potential to result in lower rates for both program participants and non-program participants. B/C Working Group Report at 11, citing Energy Optimization Study at 25-27.

[5] Customers derive benefit from the uniform availability of weatherization programs throughout the territory of the electric distribution utilities, rather than just to those homes that heat with regulated fuels such as electricity or natural gas.

In approving the energy efficiency programs for each of the first two years of the current EERS triennium (2018 and 2019), and the Commercial and Industrial (C&I) Demand Reduction Initiative, we noted that both participants and non-participants benefit from New Hampshire's energy efficiency programs. Order No. 26,232 at 6 (approving C&I Demand Reduction Initiative); Order No. 26,207 at 17 (approving 2019 energy efficiency programs); Order No. 26,095 at 18 (January 2, 2018) (approving 2018 energy efficiency programs). We find, based on the analyses of the Cost-Effectiveness Test Review, that load factor improvements associated with certain energy optimization measures, namely heat pumps and ductless mini-splits, may present a related opportunity for ratepayers. In that situation, non-participants may stand to benefit from increased electricity sales that do not significantly increase transmission and distribution system costs.

**3. Energy Optimization Guidance**

The Commission remains mindful that cost-of-service ratemaking promotes capital investment and may encourage a distribution utility that also administers energy efficiency programs to focus on savings strategies that either increase or do not adversely affect its own sales. For example, in order to counter-balance that incentive, shortly after approving the transition of the fuel neutral pilots to full-scale programs, the Commission altered the energy efficiency program performance incentive to ensure electric savings remain the primary focus of the programs. Order No. 25,569, at 2-3. (September 6, 2013) ("If it is determined that electric lifetime savings are greater than or equal to 55 percent of total lifetime energy savings, a higher performance incentive would apply. If the electric lifetime savings fall below 55 percent of total lifetime energy savings, a lower incentive would apply"). We note that that aspect of the performance incentive remains in effect today. While we continue to view that aspect of the

performance incentive as necessary, below we clarify additional safeguards which can be used to ensure the unregulated fuel program savings and incentives do not unreasonably shift costs to non-participants.

In reviewing the 2019 Update Plan settlement agreement, the Commission approved a plan to conduct a bill impact analysis for the energy efficiency programs that would consider bill impacts to efficiency program participants and non-participants. Order No. 26,207, at 10. (December 31, 2018). The Cost-Effectiveness Test Review notes that the bill impact analysis is expected to be complete by spring 2020 and "can help inform program priorities, program design, and whether and how to place limits on program spending." Cost-Effectiveness Test Review at 64. The bill impact analysis and the utility cost test will be used by the Commission, and should be used by the utilities and other stakeholders to ensure unregulated fuel program savings and incentives do not unreasonably shift costs to non-participants.

The Energy Optimization Study identifies program changes related to energy optimization that Northeastern states have pursued through pilots or small scale programs including: counting unregulated fuel savings and electric load increase for fuel-to-electric measures; offering tailored air-source heat pump measure bundles, such as those including weatherization and integrated controls; and offering energy optimization-specific workforce training guidance. Energy Optimization Study at 59. If the next iteration of the program plans were to propose an energy optimization pilot, the effectiveness of the above-mentioned program changes could be tested and verified prior to any decision regarding whether to embrace them at the program level. For example, the Energy Optimization Study modeled the savings that might be claimed for various energy optimization measures when embracing a more holistic accounting method that nets MMBtu savings against electric load increases. There are no existing New

Hampshire-specific evaluations that verify the validity of those projected bill savings and effects on avoided cost assumptions. Such evaluation results could also be used to inform the treatment of so-called "lost revenues" which are offset by load built through the installation of a program-sponsored heat pump or ductless mini-split, which could be described as "found revenues." A pilot and/or study could also be used to determine whether installation of certain energy optimization measures really do, on average, result in load factor improvements without unduly impacting overall peak transmission or distribution system load.

We observe that all stakeholders praised the efforts of the B/C Working Group and were generally supportive of the recommendations. The single caveat to this observation is the comment filed by Clean Energy NH, which supports the recommendations of the B/C Working Group, but also suggests that any energy optimization framework embraced by the Commission should be technology neutral and encourage "all forms of renewable and efficient energy including but not limited to geothermal energy and modern efficient centralized wood heating." Clean Energy NH Comments at 1.

In response to CENH's comments, we take this opportunity to clarify the potential scope of any continued energy optimization investigation that might occur within the planning process identified in Order No 26,207. The planning process identified in that Order focuses on the types of measures and technologies supported within energy efficiency programs. We note that the Energy Optimization Study contains only limited discussion of wood pellet and geothermal heating, and that in other states incentives for such measures are not generally provided through energy efficiency programs. Energy Optimization Study at 18, 19, Appendix E. Since the Energy Optimization Study and the planning process outlined in Order No. 26,207 did not consider the measures suggested by Clean Energy NH, we clarify that we do not view it as a

reasonable investment of energy efficiency program funds to consider those measures during this docket's continued investigation of energy optimization.

**Based upon the foregoing, it is hereby**

**ORDERED**, that the Granite State Test as described above is adopted as the primary test for screening the cost effectiveness of investments in energy efficiency, effective January 1, 2021; and it is

**FURTHER ORDERED**, that the Utility Cost Test and Secondary Granite State Test as described above are adopted as secondary tests for screening the cost effectiveness of investments in energy efficiency, effective January 1, 2021; and it is

**FURTHER ORDERED,** that an energy optimization pilot and/or study and related alterations to the cost-effectiveness screening methods of energy optimization measures will be considered if a specific proposal detailing such a pilot is presented.

By order of the Public Utilities Commission of New Hampshire this thirtieth day of December, 2019.

| Dianne Martin | Kathryn M. Bailey | Michael S. Giaimo |
|---|---|---|
| Chairwoman | Commissioner | Commissioner |

Attested by:

Debra A. Howland
Executive Director

## Appendix 1: Cost-Effectiveness Screening Framework Summary

The table below summarizes the impacts included in the Granite State Test (GST), the Utility Cost Test (UCT), and Secondary Granite State Test (GST-2).

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

ExecutiveDirector@puc.nh.gov

christopher.skoglund@des.nh.gov
tmartin@resilientbuildingsgroup.c
al-azad.iqbal@puc.nh.gov
allen.desbiens@eversource.com
asbury@unitil.com
bob.reals@libertyutilities.com
brianna@cleanenergynh.org
carroll@unitil.com
Christa.Shute@oca.nh.gov
christopher.plecs@eversource.com
cpeale@clf.org
craig.wright@des.nh.gov
cynthia.trottier@libertyutilities.con
donald.kreis@oca.nh.gov
downesm@unitil.com
edward.davis@eversource.com
epler@unitil.com
eric.stanley@libertyutilities.com
erica.menard@nu.com
frank.melanson@eversource.com
heather.tebbetts@libertyutilities.co
henry@cleanenergynh.org
james.brennan@oca.nh.gov
jarvis@unitil.com
jmarks@acadiacenter.org
joseph.fontaine@des.nh.gov
joseph.swift@eversource.com
jvanrossum@clf.org
karen.sinville@libertyutilities.com
kate@nhsea.org
katherine.peters@eversource.com
kristi.davie@eversource.com
laurel.proulx@eversource.com
madeleine@cleanenergynh.org
marc.lemenager@eversource.com
matt.siska@gdsassociates.com
maureen.karpf@libertyutilities.con
mbirchard@keyesfox.com
mdean@mdeanlaw.net
michael.goldman@eversource.com
michael.sheehan@libertyutilities.c
miles.ingram@eversource.com
Mosenthal@OptEnergy.com
ocalitigation@oca.nh.gov
palma@unitil.com
pradip.chattopadhyay@oca.nh.gov
rburke@nhla.org
rclouthier@snhs.org
rebecca.ohler@des.nh.gov
robert.bersak@eversource.com
robertbackus05@comcast.net
sarah.knowlton@libertyutilities.co
scott.albert@gdsassociates.com
sgeiger@orr-reno.com
smaslansky@nhcdfa.org
snowc@nhec.com
Stephen.Hall@libertyutilities.com
steven.elliott@eversource.com
steven.mullen@libertyutilities.com
stower@nhla.org
stracy@pierceatwood.com
taylorp@unitil.com
teamnh@energyservicesgroup.net
thomas.belair@eversource.com
Todd.Bohan@eversource.com
tomas.fuller@eversource.com
trooney@trcsolutions.com
woodsca@nhec.com
matthew.fossum@eversource.com
amanda.noonan@puc.nh.gov
brian.buckley@puc.nh.gov
deandra.perruccio@puc.nh.gov
elizabeth.nixon@puc.nh.gov
F.Ross@puc.nh.gov
jay.dudley@puc.nh.gov
karen.cramton@puc.nh.gov

paul.dexter@puc.nh.gov
richard.chagnon@puc.nh.gov
Stephen.Eckberg@puc.nh.gov
steve.frink@puc.nh.gov
suzanne.amidon@puc.nh.gov
tom.frantz@puc.nh.gov

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 17-136**

# GAS AND ELECTRIC UTILITIES

# 2018-2020 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN

## 2020 UPDATE PLAN

## Order Approving Plan

## O R D E R N O. 26,323

**December 31, 2019**

APPEARANCES: Matthew J. Fossum, Esq., for Public Service Company of New Hampshire d/b/a Eversource Energy; Patrick Taylor, Esq., for Northern Utilities, Inc., and Unitil Energy Systems; Michael J. Sheehan, Esq., for Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities, Inc., and for Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities; Mark W. Dean, Esq., for New Hampshire Electric Cooperative; New Hampshire Legal Assistance, by Raymond Burke, Esq., for The Way Home; Rebecca Ohler for the New Hampshire Department of Environmental Services; Madeleine Mineau, for Clean Energy NH; Office of the Consumer Advocate, by Christa Shute, Esq., for residential ratepayers; and Paul B. Dexter, Esq., and Brian D. Buckley, Esq., for the Staff of the Public Utilities Commission.

This order approves the implementation of an updated energy efficiency plan for 2020 (2020 Update Plan) for electric and gas utilities. The 2020 Update Plan meets the energy efficiency resource standard established by the Commission in Order No. 25,932 and represents the third year of the three-year energy efficiency plan for 2018-2020. The 2020 Update Plan continues the energy efficiency program elements previously approved for 2019. In addition, the 2020 Update Plan expands a demand response pilot demonstration program designed to reduce customer peak demand by including opportunities for residential customers to participate. The 2020 Update Plan also includes revisions to the calculation of performance incentives that utilities can earn by exceeding certain program thresholds. This order also approves rates to

allow utilities to recover program costs, performance incentives, and, in most cases as discussed below, lost base revenue. The rates are more than 12 percent (approximately 0.1 cent per kWh) lower than the rates projected when the Commission approved the 2018-2020 energy efficiency plan. Implementation of the 2020 Update Plan will begin January 1, 2020.

## I. PROCEDURAL HISTORY

The Commission established an energy efficiency resource standard (EERS) in Order No. 25,932 (August 2, 2016) (2016 EERS Order). That Order requires the filing of annual updates during each of the three-year EERS plan period. 2016 EERS Order at 41. The following electric and gas utilities (collectively referred to as the Utilities) filed an update for 2020 on September 13, 2019: Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (Granite State Electric), the New Hampshire Electric Cooperative, Inc. (NHEC), Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource), and Unitil Energy Systems, Inc. (Unitil) (collectively, the Electric Utilities); and Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (EnergyNorth) and Northern Utilities, Inc. d/b/a Unitil (Northern) (collectively, the Gas Utilities).[1]

The Utilities revised their filing on November 1, 2019, to reflect changes required by budget legislation (HB 4) which was signed into law in the end of September. This newly passed budget bill requires that at least 20 percent of the System Benefits Charge (SBC) funds for energy efficiency be expended on low-income programs. The Utilities' November 1 filing also reflected budget changes associated with Eversource's decision to stop offering Home Energy Reports to its residential customers. On November 13, Staff filed direct testimony. Hearing Exhibits (Exh.) 23, 24, and 25. Clean Energy NH (CENH) filed testimony on November 14.

[1] On October 2, 2019, Sunrun Inc. filed a Petition for Intervention, which the Commission has granted.

Exh. 27. On December 12, Eversource filed a Settlement Agreement (Settlement Agreement) signed by all parties [2] Exh 26. In this order, we refer to the 2020 Update Plan as the utilities' original filing as modified on November 1 and by the Settlement Agreement. The Commission held a hearing on the Settlement Agreement and the 2020 Update Plan on December 17. On December 18, Sunrun and CENH filed testimony of Chris Rauscher.[3] On December 20, Granite State Electric filed a revised version of Attachment F-3 (which is part of the 2020 Update Plan) to correct the Lost Base Revenue (LBR) component of that company's proposed SBC rate.[4] Also on December 20, the Utilities filed responses to three record requests posed at the December 17 hearing. *See* Exh. 28-30.

The Settlement Agreement, 2020 Update Plan, and prior docket filings, other than any information for which confidential treatment has been requested of or granted by the Commission, are posted at http: www.puc.nh.gov/Regulatory/Docketbk/2017/17-136.html.

## II. PRE-SETTLEMENT POSITIONS

### A. Commission Staff

On November 13, 2019, Staff filed the testimony of Jay E. Dudley, Elizabeth R. Nixon, and Stephen R. Eckberg. Staff generally supported the Utilities' proposed 2020 Update Plan.

Mr. Dudley recommended approval of the proposed modified Performance Incentive (PI) methodology. That modification was developed by the Performance Incentive Working Group (PIWG), which was established earlier in the triennium to review potential performance

[2] The parties include Granite State Electric, NHEC, Eversource, Unitil, EnergyNorth, Northern, the Office of the Consumer Advocate, the Department of Environmental Services, Clean Energy New Hampshire, The Way Home, Conservation Law Foundation, Acadia Center, and Sunrun Inc. Commission Staff also signed the Settlement Agreement.

[3] Sunrun and CENH filed Mr. Rauscher's testimony late, along with a motion seeking leave to file. The Commission has granted that motion.

[4] We address this filing later in this order.

incentive calculation methodologies that could further promote the achievement of energy efficiency.

Ms. Nixon recommended that Eversource's customer engagement platform (CEP) program continue for 2020 and be reviewed in greater detail during the next triennium plan before any further energy efficiency funds are used to support the CEP.

Mr. Eckberg testified that the 2020 Home Energy Assistance (HEA) program budgets meet the 20 percent requirement included in HB 4. Mr. Eckberg also testified that the LBR amounts proposed by each utility for recovery are reasonable, but subject to continued review when the utilities file LBR results for reconciliation in June 2020.

### B. Sunrun and CENH

Sunrun and CENH jointly sponsored the testimony of Chris Rauscher, Director of Policy and Storage Market Strategy at Sunrun. Mr. Rauscher was generally supportive of the planned Residential Demand Reduction Initiative proposed by Eversource and Unitil whereby customers can be compensated for making devices (such as batteries and Wi-Fi thermostats) available to their utility for adjustment during peak demand times. Exh. 27.

## III. SETTLEMENT AGREEMENT

On December 12, 2019, the parties filed a comprehensive Settlement Agreement calling for approval of the 2020 Update Plan. Exh. 26. At the hearing held on December 17, all parties recommended that the Commission approve the Settlement Agreement. Staff and Utility witnesses testified that energy efficiency (EE) programs proposed for implementation to be implemented in the 2020 Update Plan, and the resultant rates proposed for collecting program costs, are just and reasonable.

The parties agree that Eversource and Unitil will make a submission no later than March 1, 2020, concerning the demand response programs proposed by Eversource and Unitil. That submission will include, among other things, the results and findings of the 2019 initiative using an active demand benefit cost model currently under development.

The Settlement Agreement provides updated roles for the working groups established in Order No. 26,095 (January 2, 2018) (First Triennium Order). The Settlement Agreement noted that the PIWG and the Lost Base Revenue Working Group have completed their tasks. The Settlement states that the Financing and Funding Working Group made substantial progress resulting in several financing programs being offered in the 2020 Update Plan and recommends the group continue to meet quarterly in 2020 to complete its work concerning funding options. The Benefit/Cost (B/C) Working Group largely completed its tasks culminating with the submission of a proposed cost-effectiveness screening framework on October 31, 2019. The B/C Working Group will continue to meet as needed to address remaining issues concerning non-energy impacts and energy optimization opportunities.

Under the Settlement Agreement, Eversource's Customer Engagement Platform program will continue for 2020. Eversource will continue to track and report on the success of its marketing efforts, including its count of customers using the CEP program who move forward with energy efficiency program offerings.

Consistent with prior settlements in this docket, this Settlement Agreement provides that the Commission will hire a technical consultant on evaluation, measurement, and verification (EM&V) matters. The Settlement Agreement also provides that the Utilities will make a 2020 Update Plan compliance filing (following the form of Exhibits 21 and 22) that will include the corrections that were included in Attachment B to the Settlement Agreement.

## IV. SUMMARY OF THE 2020 UPDATE PLAN

As modified and enhanced by the settlement process, the 2020 Update Plan continues energy efficiency programs implemented for 2018 and 2019 (the first and second years of the first triennium).

### A. Program Funding

The 2020 level of funding for electric programs is $69,302,537. Exh. 22 at 15. The Electric Utilities propose an EE program SBC rate of $0.00528 per kWh. That rate is lower than the SBC rate of $0.00609 projected for 2020 when the EERS was adopted in the 2016 EERS Order. Exh. 22 at 72, 105, 141 and 162; Settlement DE 15-137, Attachment A at 17. The current SBC rate for the 2019 Plan approved in Order No. 26,207 (2019 Update Plan Order) is $0.00373. 2019 Update Plan Order at 10. Also, consistent with the 2016 EERS Order, each Electric Utility (except for NHEC) proposed an additional SBC component to recover Lost Base Revenue. Exh. 22 at 72 and 162.

The 2020 funding for gas programs is $11,791,916. Exh. 22 at 17. Each Gas Utility proposed a Local Delivery Adjustment Charge (LDAC) component for EE in its cost of gas proceeding.[5]

### B. Industry Budgets

The 2020 electric program budget is $65,691,434. Exh. 26 at 21; Exh. 22 at 18.[6] It is allocated across the various sectors as follows: 51 percent for Commercial & Industrial (C&I)

[5] Those rates were approved for Northern in Order No. 26,303, (October 29, 2019) and for EnergyNorth in Order No. 26,306 (October 31, 2019).

[6] The electric and gas program budget amounts are less than the funding levels stated above because the budget amounts do not include the performance incentive.

and Municipal sectors; 32 percent for Residential; and 17 percent for Income Eligible. Exh. 22 at 18.

The 2020 gas program budget is $11,151,972. Exh. 22 at 19; Exh. 26 at 21. It is allocated across the various sectors approximately as follows: 47 percent for C&I and Municipal sectors; 34 percent for Residential; and 19 percent for Income Eligible. Exh. 22 at 19.

**C. Program Budgets**

The 2020 Update Plan includes essentially the same residential and C&I energy efficiency programs the Commission approved for 2018 and 2019.[7] The 2020 Update Plan and Settlement Agreement, however, contain several significant changes. First, Eversource and Unitil have expanded their demand response offerings to residential customers and will offer monetary incentives to customers who allow the utilities to control certain customer-owned devices (such as batteries and Wi-Fi controlled thermostats) during times of high electric demand. Second, Eversource will no longer be sending Home Energy Reports to customers and instead has re-allocated those funds to other residential offerings such as its Home Performance with ENERGYSTAR® and ENERGYSTAR® Products programs. Third, Unitil and NHEC will increase the amount of funds available for on-bill loans (using unspent over-collections from 2019). Also, Unitil will increase the maximum on-bill financing amount from $4,000 to $7,500 for residential customers and to $15,000 for moderate-income residential customers. In 2020, the Utilities will expand their point of sale distributor relationships to include additional measures such as lighting, electric HVAC equipment, and electric commercial kitchen equipment.

[7] A description of each program can be found in Order No. 26,095 at 5-9.

Budgets for various residential, and C&I programs are listed in the following table. For additional details, *see* Exh. 22:

| SUMMARY OF 2020 EERS BUDGETS | | | |
|---|---|---|---|
| | **Electric Utilities** | **Gas Utilities** | **Total** |
| **Residential Program Budgets** | | | |
| Home Energy Assistance | $11,503,901 | $ 2,089,441 | $13,593,342 |
| NH Home Performance w/ENERGYSTAR® | $ 8,592,871 | $ 1,155,804 | $ 9,748,675 |
| ENERGYSTAR® Homes | $ 3,618,372 | $ 1,087,876 | $ 4,706,248 |
| ENERGYSTAR® Products | $ 8,016,264 | $ 1,214,683 | $ 9,230,947 |
| Customer Engagement Platform | $ 267,703 | $ – | $ 267,703 |
| Home Energy Reports | $ 275,084 | $ 356,201 | $ 631,285 |
| **Commercial & Industrial Program Budgets** | | | |
| Large Business Energy Solutions | $17,739,336 | $ 2,931,069 | $20,670,405 |
| Small Business Energy Solutions | $ 10,038,740 | $ 2,210,387 | $12,249,127 |
| Municipal Program | $ 2,043,245 | $ – | $ 2,000,272 |
| RFP Program | $ 1,482,952 | $ – | $ 1,195,561 |
| Customer Engagement Platform | $ 373,126 | | $ 373,126 |

### D. Program Financing

The 2020 Update Plan proposes to continue several financing options currently available to participants, with some enhancements. For example, NHEC and Northern have used prior period over-collections to increase the funding levels available for zero-percent on-bill loans. Unitil has proposed to increase the per participant cap on on-bill loans from $4,000 to $7,500 (and to $15,000 for moderate-income customers) for both electric and gas customers. All the Utilities will continue to offer financing to municipal and business participants, allowing those customers to use energy savings to help pay back their loans. The Funding and Finance Work Group will continue to explore grant funding in 2020.

**E. Benefit/Cost Screening**

As with the 2019 EE programs, the Utilities screened the proposed 2020 EE programs for cost effectiveness using the Total Resource Cost (TRC) test, which compares the present value of the lifetime benefits of the programs to the Utilities' implementation costs, plus any participant out-of-pocket costs. The energy benefits are evaluated using an Avoided Energy Supply Cost (AESC) study, which is performed on a New England-wide basis and is updated regularly. In this case, the 2018 AESC update was used to screen the 2020 programs. Exh. 22 at 38. As proposed, each utility's portfolio of 2020 EE programs shows a benefit/cost ratio greater than 1.0. Exh. 26 at 28, 32.

On October 31, 2019, the Benefit/Cost Working Group proposed a modified B/C test for effect in the 2021 program year, as anticipated by the 2019 Settlement. We address that proposal in a separate order. *See* Order No. 26,322 (December 30, 2019).

**F. Evaluation, Measurement, and Verification**

Evaluation, measurement, and verification (EM&V) efforts have the objective of verifying energy savings, estimating future savings, and identifying ways to improve program delivery and results. The basic framework of EM&V activities for 2018-2020 was detailed in the 2016 EERS Order and then accelerated in accordance with terms of the settlement approved in the First Triennium Order. That settlement also formalized the EM&V Working Group, which consists of Staff members, independent EM&V consultants hired and supervised by the Commission, and representatives of the Utilities and the Energy Efficiency and Sustainable Energy Board. Three New Hampshire-specific evaluation activities have begun, or are planned to begin in early 2020.[8] An update of the Strategic Evaluation Plan is scheduled for 2020. In

[8] EE Potential Study, Technical Reference Manual, and Large Business C&I Impact and Process evaluation.

2019, independent third-party evaluators working on behalf of the EM&V Working Group completed, or are close to finalizing, evaluations of the C&I Non-Lighting programs, the Home Performance with ENERGYSTAR® program, the Home Energy Assistance Program, and the cross cutting Non-Energy Impacts (NEI) study. Results from those studies that were available in July 2019 were incorporated into the 2020 Update Plan. Exh. 22 at 43-45.

**G. Performance Incentive**

The 2020 Update Plan included a proposal from the PIWG for a modified performance incentive mechanism for effect with the 2020 EE programs. Exh. 22 at 268-269. Like the PI mechanism that was approved in the 2016 EERS Order, the proposed mechanism offers utilities an incentive to invest in EE rather than traditional infrastructure. Utilities can earn up to 6.875 percent of actual program expenditures by surpassing certain minimum performance thresholds, several of which were increased from the prior mechanism. Importantly, the proposed mechanism introduces incentives for increasing peak demand savings by reducing peak demand usage. The proposal shifts the focus of the PI calculation from the sector level to the portfolio level to help reduce any incentive Utilities have to de-emphasize valuable lower performing programs. Exh. 22 at 39.

**H. Lost Base Revenue**

The Electric Utilities (except for NHEC) propose that the SBC include collection for revenue lost from decreased electricity sales resulting from the programs. The proposal is, consistent with the framework laid out in the 2016 EERS Order, modified to include a demand component in kilowatts as called for in the settlement approved in the First Triennium Order. The Gas Utilities proposed rates for lost revenue in their individual cost of gas dockets. *See* Order Nos. 26,303 and 26,306.

## V. COMMISSION ANALYSIS

We encourage parties to settle issues through negotiation and compromise because it is an opportunity for creative problem solving, allows the parties to reach a result in line with their expectations, and is often a better alternative to litigation. *Granite State Electric Co.*, Order No. 23,966 at 10 (May 8, 2002); *see* RSA 541-A:31, V(a) ("informal disposition may be made of any contested case … by stipulation [or] agreed settlement"). Even when all parties join a settlement, however, we must independently determine that the result comports with "applicable standards." *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH*, Order No. 24,972 at 48 (May 29, 2009). We analyze settlements to ensure that a just and reasonable result has been reached. *Id;* N.H. Admin. R., Puc 203.20(b).

In this case, we review the 2020 Update Plan for conformity with the 2016 EERS Order and the First Triennium Order, and the law underlying the establishment of an EERS. We are further informed by the New Hampshire 10-Year State Energy Strategy, dated April 2018, at page 15, which calls for New Hampshire to "continue to coordinate and develop energy efficiency programming to achieve cost-effective savings." The Commission's authority to review the 2020 Update Plan and related rates arises out of laws governing energy efficiency funding as well as utility rates and long-term resource planning. *See* 2016 EERS Order at 45-49. The EE programs included in the 2020 Update Plan are funded through several sources, including the SBC, the LDAC, Regional Greenhouse Gas Initiative auction proceeds, and Forward Capacity Market revenue. The SBC is "nonbypassable and competitively neutral" and collected through electric customer rates. RSA 374-F:3, VI. The SBC is "used to fund public benefits related to the provision of electricity." *Id.* The LDAC is a reconciling surcharge

imposed on gas customers, which includes a per-therm charge to recover the costs of gas energy efficiency programs.

Staff and the Utilities testified that the 2020 Update Plan *(i.e.*, the Utilities' proposal as modified by the Settlement Agreement) is just and reasonable and should be approved by the Commission. All parties to this case signed the Settlement Agreement. The parties acknowledge that the 2020 Update Plan includes comprehensive EE programs that are cost-effective. The Settlement Agreement expands a 2019 pilot program to residential customers, aimed at reducing peak demand. The 2020 Update Plan provides for cost recovery of the EE program costs, as well as performance incentives and lost base revenue. The SBC rates that result from this order are more than 12 percent lower (approximately 0.1 cent per kWh) than the rates projected for 2020 when the Commission first approved the 2018-2020 energy efficiency program in 2016. Compare Order No. 25,932 at 53 with Exh. 22 at 72 (Eversource), at 141 (NHEC), and at 162 (Unitil).

A few elements of the 2020 programs warrant additional comment. While we appreciate the efforts to reduce peak demand, we have some concerns about the Active Demand Reduction pilots proposed by Eversource and Unitil. The pilots allow the utilities to use customer-owned devices such as batteries and Wi-Fi thermostats to reduce electricity use during periods of high demand. There may be potential cybersecurity risks associated with the integration of systems installed behind the meter at customers' premises. Eversource and Unitil presented no information concerning cybersecurity, other than the fact that they will have original equipment manufacturers operate the customer equipment when the utility calls for demand reduction. We are not convinced that indirect control of customer equipment fully addresses the potential cybersecurity risks. Consistent with what the Commission required of Granite State Electric, for

its battery storage pilot, before we will permit implementation, we require that Eversource and Unitil complete a comprehensive evaluation of the cybersecurity risks raised by the Active Demand Reduction pilots, including both firmware and software elements. When the evaluation is completed, we direct Eversource and Unitil to file a report confirming that cybersecurity risks for manipulation of electrical usage, access to customer personal protected information, and unauthorized alteration of equipment performance or settings have been addressed. In addition, Eversource and Unitil must complete an evaluation of the relevant vendors' practices and certify them to be sufficient. Further, Eversource and Unitil must outline the measures, detection methods, and mitigation strategies they plan to implement regarding integration of customer-owned equipment and systems installed behind the meter. Finally we direct Eversource and Unitil to explain how they have ensured the Active Demand Reduction pilots comply with the smart metering consent law, RSA 374:62.

Another issue of concern related to the Active Demand Reduction pilots involves distributed generation customers that participate with a customer-owned battery. Net-metered customers with on-site distributed generation should not be permitted to charge their batteries from the grid as part of the Active Demand Reduction pilots. *See Liberty Utilities (Granite State Electric) Corp. d/b/a LibertyUtilities,* Order No. 26,209 at 19, 44 (January 17, 2019) (approving settlement agreement and implementation of battery storage pilot program). Also of concern is the high level of Unitil's administrative costs for this program, which are estimated to exceed the level of incentive for customers ($72,100 for administration compared to $50,000 in incentives). Exh. 26 at 20. We recognize that start-up costs can be higher than long-run administrative costs and that the initiative is a pilot. We direct Staff, however, to monitor those costs to determine whether that Unitil expends administrative funds frugally, as Unitil stated it would.

We also question Eversource's plan to cease offering its Home Energy Reports in 2020. This program has proven to be cost-effective in the past. Eversource stated that it intends to achieve the beneficial customer behavioral aspects of this program through other means post-2020. We are concerned that this might lead to additional reliance (and expenditures) on Eversource's CEP, which is not evaluated using a B/C screening test and has shown very limited value in attracting customers to participate in EE programs. Exh. 23 at 22. For the next triennial program Eversource should be prepared to explain what it has learned in 2020 relative to ending the Home Energy Report program, whether the Home Energy Report program should be reinstated, or propose a viable alternative to the Home Energy Report program.

Finally, following the hearing, the Commission discovered errors in Granite State Electric's calculation of its proposed SBC rate and inconsistent numbers in its filings. *See* Exh. 22 Bates Pages 15 and 105. The errors were contained in Attachment F-3 to the Utilities' November 1, filing. On December 20, Granite State Electric filed a revised Attachment F-3. The company did not move to reopen the record or request that the revised attachment be entered into evidence. In addition, neither the parties nor the Commission had opportunity for discovery or to question the company regarding its revised calculations. The Commission has questions regarding Granite State Electric's calculations, particularly with regard to lost base revenues. As a result, we will approve an SBC rate for Granite State Electric that does not include a lost base revenue component. We will allow Staff and interested parties to conduct discovery on Revised Attachment F-3 and promptly schedule an evidentiary hearing for that purpose.

Based on the record, the 2020 Update Plan meets the requirements of the 2016 EERS Order and is consistent with applicable law, including least-cost integrated resource planning requirements promoting energy efficiency. The 2016 EERS Order established an annual energy

savings target and budget. The 2020 Plan Update exceeds the Electric Utility energy savings targets within the budget approved in the 2016 EERS Order. Based on testimony at hearing, the the 2020 Update Plan contains a cost-effective portfolio for each utility. As such, approval of the Settlement Agreement is consistent with prior Commission orders.

Savings from cost-effective EE programs benefit all customers, both participants and non-participants. Participants enjoy direct benefits of increased energy efficiency through lower electricity bills. Both participants and non-participants benefit from on-peak load reduction and related system improvements by mitigating increased regional transmission and capacity costs for New Hampshire. Accordingly, we find the 2020 Update Plan consistent with the public interest, and we approve it.

At the hearing, the Utilities indicated their intention to provide an update to their November 1 filing (Exh. 22) to reflect the terms of the Settlement Agreement. They stated that many updated pages were provided as part of Attachment B to the Settlement (Exh. 26) but that other portions of the full plan should likewise be updated in an effort to present a complete record. We will accept the necessary updates as part of a compliance filing.

**Based upon the foregoing, it is hereby**

**ORDERED,** that the Settlement Agreement filed in this docket on December 12, 2019, is approved; and it is

**FURTHER ORDERED,** that the New Hampshire Statewide Energy Efficiency 2020 Update Plan (the Utilities' proposal as modified by the Settlement Agreement), is approved; and it is

**FURTHER ORDERED,** that the System Benefits Charge rates presented by Eversource in Exhibit 22 at 72, New Hampshire Electric Cooperative at 141, and Unitil at 162, are hereby approved for effect January 1, 2020; and it is

**FURTHER ORDERED,** that Granite State Electric is authorized to collect its proposed System Benefits Charge in Exhibit 22 at 105, without the Lost Base Revenue component for effect January 1, 2020; and it is

**FURTHER ORDERED,** that Eversource and Unitil file the results of their cybersecurity risk evaluation as described above, before beginning the Active Demand Reduction pilots; and it is

**FURTHER ORDERED,** that each Electric Utility file compliance tariffs within 15 days of this Order; and it is

**FURTHER ORDERED,** that the Utilities file a complete updated version of Exhibit 22, reflecting the changes necessitated by our approval of the Settlement Agreement, within 15 days of the date of this order.

By order of the Public Utilities Commission of New Hampshire this thirty-first day of December, 2019.

| Dianne Martin | Kathryn M. Bailey | Michael S. Giaimo |
|---|---|---|
| Chairwoman | Commissioner | Commissioner |

Attested by:

Debra A. Howland
Executive Director

ExecutiveDirector@puc.nh.gov
christopher.skoglund@des.nh.gov
tmartin@resilientbuildingsgroup.cc
al-azad.iqbal@puc.nh.gov
allen.desbiens@eversource.com
asbury@unitil.com
bob.reals@libertyutilities.com
brianna@cleanenergynh.org
carroll@unitil.com
Christa.Shute@oca.nh.gov
christopher.plecs@eversource.com
cpeale@clf.org
craig.wright@des.nh.gov
cynthia.trottier@libertyutilities.con
donald.kreis@oca.nh.gov
downesm@unitil.com
edward.davis@eversource.com
epler@unitil.com
eric.stanley@libertyutilities.com
erica.menard@nu.com
frank.melanson@eversource.com
heather.tebbetts@libertyutilities.co
henry@cleanenergynh.org
james.brennan@oca.nh.gov
jarvis@unitil.com
jmarks@acadiacenter.org
joseph.fontaine@des.nh.gov
joseph.swift@eversource.com
jvanrossum@clf.org
karen.sinville@libertyutilities.com
kate@nhsea.org
katherine.peters@eversource.com
kristi.davie@eversource.com
laurel.proulx@eversource.com
madeleine@cleanenergynh.org
marc.lemenager@eversource.com
matt.siska@gdsassociates.com
maureen.karpf@libertyutilities.con
mbirchard@keyesfox.com
mdean@mdeanlaw.net
michael.goldman@eversource.com
michael.sheehan@libertyutilities.cc
miles.ingram@eversource.com
Mosenthal@OptEnergy.com
ocalitigation@oca.nh.gov
palma@unitil.com
pradip.chattopadhyay@oca.nh.gov
rburke@nhla.org
rclouthier@snhs.org
rebecca.ohler@des.nh.gov
robert.bersak@eversource.com
robertbackus05@comcast.net
sarah.knowlton@libertyutilities.co
scott.albert@gdsassociates.com
sgeiger@orr-reno.com
smaslansky@nhcdfa.org
snowc@nhec.com
Stephen.Hall@libertyutilities.com
steven.elliott@eversource.com
steven.mullen@libertyutilities.com
stower@nhla.org
stracy@pierceatwood.com
taylorp@unitil.com
teamnh@energyservicesgroup.net
thomas.belair@eversource.com
Todd.Bohan@eversource.com
tomas.fuller@eversource.com
trooney@trcsolutions.com
woodsca@nhec.com
matthew.fossum@eversource.com
amanda.noonan@puc.nh.gov
brian.buckley@puc.nh.gov
deandra.perruccio@puc.nh.gov
elizabeth.nixon@puc.nh.gov
F.Ross@puc.nh.gov
jay.dudley@puc.nh.gov
karen.cramton@puc.nh.gov

paul.dexter@puc.nh.gov
richard.chagnon@puc.nh.gov
Stephen.Eckberg@puc.nh.gov
steve.frink@puc.nh.gov
suzanne.amidon@puc.nh.gov
tom.frantz@puc.nh.gov

# 2021-2023 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN

**Jointly submitted by New Hampshire's Electric and Natural Gas Utilities:**

- Liberty Utilities Corp. (Granite State Electric Corp.) d/b/a Liberty Utilities
- Liberty Utilities Corp. (EnergyNorth Natural Gas) d/b/a Liberty Utilities
- New Hampshire Electric Cooperative, Inc.
- Northern Utilities, Inc. d/b/a Unitil-NH Gas Operations
- Public Service Company of New Hampshire d/b/a Eversource Energy
- Unitil Energy Systems, Inc. d/b/a Unitil-NH Electric Operations

**September 1, 2020**

**This page intentionally blank.**

# Table of Contents

**Attachments**

**This page intentionally blank.**

# Executive Summary

**For more than two decades, New Hampshire's electric and natural gas utilities have offered energy efficiency and demand response programs to residential and Commercial and Industrial ("C&I") customers across the state.[1] These programs provide energy savings, promote economic development, reduce the need for additional capacity investments and protect the natural environment by reducing the amount of carbon dioxide ("$CO_2$") and sulfur and nitrogen oxides released into the atmosphere due to reduced energy generation and consumption.**

New Hampshire's electric and natural gas utilities ("NH Utilities") are pleased to submit the 2021-2023 Statewide Energy Efficiency Plan ("2021-2023 Plan" or "Plan"). This 2021-2023 Plan is being submitted jointly by Liberty Utilities Corp. (Granite State Electric) d/b/a Liberty Utilities ("Liberty Electric"), New Hampshire Electric Cooperative, Inc. ("NHEC"), Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"), and Unitil Energy Systems, Inc. d/b/a Unitil-NH Electric Operations ("Unitil Electric") (hereinafter referred to as the "NH Electric Utilities"), and Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities ("Liberty Gas"), and Northern Utilities, Inc. d/b/a Unitil-NH Gas Operations ("Unitil Gas") (hereinafter referred to as the "NH Natural Gas Utilities").

*Over the last few decades, New Hampshire's energy efficiency programs have achieved significant energy savings for the state's electric and natural gas customers.*

Energy efficiency is emission free and the lowest-cost resource available to utilities, customers, and states. Every kilowatt-hour ("kWh") or million natural gas British Thermal Units ("MMBtu") saved through New Hampshire's energy efficiency programs helps the NH Utilities achieve deeper energy savings, reduce harmful greenhouse gas

[1] Hereinafter, the word "customer" will be understood to mean both utility customers and New Hampshire Electric Cooperative members.

("GHG") emissions, save customers money, and mitigate the need to generate additional power. The NH Utilities designed the 2021-2023 Plan to scale up energy savings and program participation, create and promote new and existing "on ramps" to energy efficiency to attract customers, diversify program offerings, tailor marketing solutions and incentives, and broaden outreach to customers and local communities.

Since 2002, New Hampshire's electric and natural gas customers have installed energy efficiency measures that have resulted in lifetime savings of more than 19.1 billion electric kWh and 45.7 MMBtu. This results in a cumulative customer savings in excess of $3.4 billion.

*The New Hampshire energy efficiency industry supports a robust local and state workforce.*

The NH Utilities are proud to deliver innovative energy-efficient solutions to customers—residential, municipal, and C&I—throughout the state. The NH Utilities are well trusted and recognized for their ability to work together, and with stakeholders, legislators, and regulators, to provide continuity in delivering cost-effective energy efficiency solutions across the state facilitated under the NHSaves™ Programs ("NHSaves Programs") brand. The NH Utilities are prepared to help customers achieve increased energy efficiency savings in 2021-2023 in furtherance of the Energy Efficiency Resource Standard ("EERS"), established by the New Hampshire Public Utilities Commission ("Commission"), and other state energy policies (see Chapter One).

The NH Utilities have designed a dynamic energy efficiency framework to help reduce energy demand and achieve significant energy savings over the next three-year period. The NH Utilities remain focused on directing customers' attention to how they use energy and to provide them accessible paths to saving energy and money over the next three years. The 2021-2023 Plan will provide the following results:

- **More Customer Energy Savings.** The 2021-2023 NHSaves Programs will result in customer energy cost savings of more than $1.3 billion over the lifetime of the measures.

- **Increased Energy Savings.** During the 2021-2023 term, NHSaves Programs will result in savings of 6.7 billion electric kWh and 9.6 million natural gas MMBtu over the lifetime of installed energy-saving measures. In addition, New Hampshire's 2021-2023 energy efficiency programs will save 8.3 million MMBtu from other fuels, such as oil and propane.

- **Increased Peak Demand Reduction Savings.** The NHSaves Programs result in passive demand reduction savings that will reduce summer peak demand by 64.0 megawatts ("MW") and winter peak demand by 57.2 MW. The NHSaves Active Demand Reduction programs will reduce summer peak by an additional 67.7 MW.

*2021-2023 Plan programs will reduce GHG emissions by 3.8 million tons.*

- **Stronger State Economy.** New Hampshire's energy efficiency investments help support the state's economy in multiple ways. Energy efficiency contractors are necessarily local, so most of the NHSaves Programs funds invested in residential weatherization and other efficiency measures stay in the New Hampshire economy. In turn, lower energy bills free up participating residential customers' household budgets, to be directed to other needs, goods and services.

  Participating C&I customers will lower their energy bills, allowing owners to invest in other company operations, such as labor, materials, and other business-related resources. Energy savings that result from municipal building projects lead to a more efficient use of taxpayer dollars in the community. Funds once allocated to energy costs can now be utilized for increased public services, such as education, health and safety, and public libraries.

- **Highly-Trained Workforce.** The NH Utilities plan to continue providing workforce development opportunities to the growing local labor workforce that supports the implementation of energy

efficiency solutions throughout the state. The 2021-2023 NHSaves Programs will support 4,673 full-time equivalents ("FTEs") or 9.7 million work hours.[2]

- **Cleaner Environment.** The energy savings from the NHSaves Programs protect the public health and environment through significant reductions in carbon dioxide, air-polluting sulfur and nitrous oxides, and other air pollutant emissions. The 2021-2023 NHSaves Programs will provide a lifetime reduction of more than 4.4 million tons of GHG emissions, the equivalent of taking 949,313 passenger vehicles off the road for one year.[3]

[2] According to a study from the Political Economy Research Institute ("PERI") of the University of Massachusetts at Amherst (2019), every million dollars spent on energy-efficient measures, such as building retrofits, supports 6.2 direct jobs, 2.7 indirect jobs, and 3.3 induced jobs. See Pollin, R., Wicks-Lim, J., Chakrabortu, S., Hansen, T. *A Green Growth Program for Colorado*. Study available at: https://www.peri.umass.edu/publication/item/1168-a-green-growth-program-for-colorado.

[3] Utilizing the Environmental Protection Agency's Greenhouse Gas Equivalencies Calculator. Retrieved from: www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

# Chapter One: New Hampshire's Energy Efficiency Programs

**The 2021-2023 Plan reflects a coordinated and integrated planning effort among the six NH Electric and Natural Gas Utilities, with significant input from a diverse array of energy efficiency stakeholders, contractors, and customers.**

The NH Utilities worked extensively and collaboratively with members of the Energy Efficiency and Sustainable Energy ("EESE") Board's EERS Committee, Commission Staff and the stakeholder consultant to develop an energy efficiency and demand management plan that is consistent with the state's energy policies and legislation, including the EERS. During the 2021-2023 term, the NH Utilities will remain focused on implementing high-quality energy efficiency programs that drive energy savings, save customers money, reduce the need for additional capacity investments, and help protect the environment through reduced electricity, natural gas, and delivered fossil fuel consumption.

The 2021-2023 Plan is a strategic guide for the NH Utilities to deliver multiple energy efficiency and demand management programs and initiatives designed for residential, commercial, municipal, and industrial customers. These programs, taken together as an integrated whole, will achieve significant energy savings, protect the environment, help businesses operate more efficiently, and help lead the state into the next decade as a leader in energy efficiency. For the 2021-2023 term, the NH Utilities remain focused on scaling up participation and energy savings for the NHSaves Residential and C&I Programs and will work together to seamlessly deliver customer-centric solutions under the NHSaves brand. As noted in the C&I and Residential sector chapters of this 2021-2023 Plan, the NH Utilities will support these objectives by designing programs that can be modified quickly to address changing energy code standards, customer demand, emerging

technologies, and economic conditions affecting customers, vendors, and the energy efficiency marketplace.

## 1.1 NHSaves Programs

New Hampshire's energy efficiency programs are jointly marketed by the NH Utilities under a statewide umbrella marketing brand—NHSaves. Through this collaboration, the NH Utilities deliver innovative, award-winning programs on a statewide marketing platform ensuring continuity in branding and messaging, consequently increasing brand recognition and customer awareness of the programs. The NHSaves.com website serves as the statewide information portal where customers can learn about incentives and services offered through the NHSaves Programs.

## 1.2 State Energy Policy

### 1.2.1 Energy Efficiency Resource Standard

In August 2014, the Commission initiated an informal, non-adjudicative stakeholder process to develop a framework, the EERS, within which the NHSaves Programs would be implemented. The process resulted in an eighteen-month dialogue among the Commission, the NH Utilities, and numerous stakeholders. In 2016, the state's first EERS was established through a settlement agreement filed with the Commission.[4] The EERS is the framework within which the NHSaves Programs have been implemented since 2018, and requires the NH Utilities to file triennial plans, to pursue annual savings goals, and to achieve the long-term objective of achieving all cost-effective energy efficiency.

Coincident with the EERS, the Commission also established a recovery mechanism to compensate the NH Utilities for lost revenue resulting from the implementation of NHSaves Programs under the EERS. The NH Utilities file annual updates with the Commission regarding any necessary changes that need to be made to the Systems Benefit Charge ("SBC") or Local Delivery Adjustment Clause ("LDAC"), the

[4] State of New Hampshire Public Utilities Commission. DE 15-137. *Order No. 25,392: Energy Efficiency Resource Standard*, Aug. 2, 2016. Available at: https://www.puc.nh.gov/Regulatory/Orders/2016orders/25932e.pdf.

primary funding mechanisms for the NHSaves Programs. The SBC and LDAC are nominal charges on customers' electric and natural gas utility bills, respectively.

During the state's transition to the EERS, the Commission extended for an additional year the approved 2015-2016 NHSaves Programs (i.e., the program implementation and established annual savings targets for the 2017 program year). On January 2, 2018, the Commission approved the implementation of the NH Utilities' first three-year plan ("2018-2020 Plan").[5] The NH Utilities filed plan updates in September 2018 ("2019 Plan Update") and September 2019 ("2020 Plan Update") to realign energy-saving goals and program budgets with the Commission-approved 2018-2020 Plan. The 2021-2023 Plan is the second triennial plan filed by the NH Utilities under the EERS.

### 1.2.2 New Hampshire's 10-Year State Energy Strategy

In April 2018, New Hampshire Governor Christopher T. Sununu and the New Hampshire Office of Strategic Initiatives ("OSI") released the New Hampshire 10-Year State Energy Strategy ("Strategy") in compliance with state legislation and statute.[6] The Strategy established 11 statewide goals that should be pursued to better meet residential and C&I customers' needs, including prioritizing all cost-effective energy policies and achieving environmental protection that enables economic growth. The Strategy noted that, "[i]nvesting in efficiency boosts the state's economy by creating jobs and reducing energy costs for consumers and businesses." During the 2021-2023 term, the NH Utilities will vigorously pursue cost-effective strategies to lower customers' energy bills, decrease demand for new generation capacity on the electric and natural gas systems, and to reduce air pollutant emissions.

## 1.3 Energy Efficiency and Sustainable Energy Board

In 2008, New Hampshire's legislature created the EESE Board to promote and coordinate energy efficiency, demand response, and other sustainable energy programs in the state.[7] The EERS

---

[5] State of New Hampshire Public Utilities Commission. DE 17-136. *Order No. 26,905: 2018-2020 New Hampshire Statewide Energy Efficiency Plan*, Jan. 2, 2018. Available at: https://www.puc.nh.gov/Regulatory/Orders/2018orders/26095e.pdf.

[6] New Hampshire Office of Strategic Initiatives. *New Hampshire 10-Year State Energy Strategy.* Apr. 2018. Available at: https://www.nh.gov/osi/energy/programs/documents/2018-10-year-state-energy-strategy.pdf.

[7] RSA 125-O:5-a; Oct.1, 2008.

Committee of the EESE Board serves as the primary stakeholder body in the development of the NH Utilities' triennial plans.

The EERS Committee met twice a month from November of 2019 to August of 2020 for a total of 20 stakeholder meetings to discuss EERS savings targets, budgets, program design, marketing approaches, development of new elements such as codes and standards savings and energy optimization, changes in the lighting market, the three-year plan structure and other related topics. Participating in the meetings were EERS Committee members, the stakeholder consultant, NH PUC Staff and other interested members of the public. Three of the meetings were specifically designed to gather comments and feedback from members of the public who were not able to devote time to the full committee process. The stakeholder consultant held 11 additional meetings with NH Utility staff for deeper review and discussion on program design and implementation elements, and then reported out the results and recommendations from those meetings to the full EERS Committee.

The work of the NH Utilities and the EERS Committee shifted forums with the onset of the COVID-19 pandemic, as meetings and discussion moved to a remote format starting in March. The pandemic has had a significant impact on customers and program implementation in 2020 and pandemic-related impacts will likely continue well into the 2021-2023 Plan performance period. The NH Utilities worked with the Committee, Commission Staff and the Commission, resulting in Order No 26,375, adjusting the filing schedule to allow more time for analysis, adjustment, and discussion related to the pandemic's impacts. The NH Utilities submitted a Draft Plan to the Committee on April 1, 2020, received feedback and had additional discussion with the Committee about that feedback. A Second Draft was submitted to the Committee on July 1, 2020.

This 2021-2023 Plan is the result of additional feedback and discussion on the July 1st Draft, as well as a culmination of the full 10 months of substantive stakeholder process. The EERS Committee voted 11-0 in unanimous support of the Plan approach at its August 10, 2020 meeting and the EESE Board voted 9-2 in support of the Plan approach at its August 14, 2020 meeting.

## 1.4 2021-2023 Plan Goals

With more than two decades of experience in jointly operating successful energy efficiency programs across the state, the NH Utilities have the expertise, infrastructure, and relationships in place to meet the EERS program goals for the 2021-2023 term. During the 2018-2020 term, the NH Utilities are pursuing increased energy efficiency savings goals under the EERS.

To meet the 2021-2023 EERS goals laid out in this Plan, the NH Utilities will develop new market-friendly offerings and heavily promote existing programs to increase customer participation and drive energy savings. Between 2021 and 2023, the NH Utilities will achieve cumulative energy savings of five percent of the NH Electric Utilities' 2019 kWh delivery sales and three percent of the NH Natural Gas Utilities' 2019 MMBtu delivery sales. The data in Tables 1-1 and 1-2 provide a comparison to the 2018-2020 Plan.

**Table 1-1: Comparison to 2018-2020 Plan (Electric)**

| Electric Programs | 2018-2020 Plan | 2021-2023 Plan |
|---|---|---|
| Cumulative Lifetime MWh Savings | 4,038,590 | 6,681,441 |
| Cumulative Annual MWh Savings | 334,273 | 525,333 |
| Cumulative Annual Savings as a % of 2019 Delivery Sales | 3.2% | 5.0% |
| Cumulative Program Funding | $154,142,047 | $350,828,573 |
| Program Cost per Lifetime kWh Savings | $0.038 | $0.053 |

**Table 1-2: Comparison to 2018-2020 Plan (Natural Gas)**

| Natural Gas Programs | 2018-2020 Plan | 2021-2023 Plan |
|---|---|---|
| Cumulative Lifetime MMBtu Savings | 7,509,343 | 9,619,232 |
| Cumulative Annual MMBtu Savings | 525,575 | 753,581 |
| Cumulative Annual Savings as a % of 2019 Delivery Sales | 2.1% | 3.0% |
| Cumulative Program Funding | $31,396,650 | $41,882,264 |
| Program Cost per Lifetime MMBtu Savings | $4.18 | $4.35 |

## 1.5 2021-2023 Plan Priorities

For the 2021-2023 term, the NH Utilities are focused on scaling up energy savings and increasing customer participation in the NHSaves Programs. New Hampshire was ranked twentieth in the American Council for an Energy-Efficient Economy's ("ACEEE") *2019 State Energy Efficiency Scorecard* ("Scorecard"), a one-place improvement from the 2018 and 2017 Scorecards.[8] In the portion of the Scorecard for Utility and Public Benefits Program and Policies, New Hampshire was ranked thirteenth. In preparation for the 2021-2023 Plan filing, the NH Utilities reviewed other states' energy efficiency portfolios to determine additional opportunities to modify, improve, and lead the NHSaves Programs toward cost-effective, comprehensive energy savings over the next three years, and improve the state's ACEEE ranking.

The 2021-2023 Plan's program offerings and incentives are designed to increase New Hampshire's leadership in energy efficiency and demand management programs. Market trends, new federal regulations and policies, changing state building codes, emerging technologies, and baseline studies were all incorporated into the NH Utilities' planning process. In addition, the NH Utilities used evaluation results during the 2018-2020 term to help steer the NHSaves Programs toward greater efficacy while driving energy savings, GHG emissions reductions, and increased economic benefits.

The NH Utilities developed the following 2021-2023 Plan priorities building on discussions with the EERS Committee and its consultant. *The order of this list does not necessarily correlate to prioritization.*

### Priority One: Commitment to Deliver Cost-Effective Energy Efficiency

Energy efficiency is emissions free and is the lowest-cost energy resource available to New Hampshire's homes, businesses, and municipalities. The NH Utilities recognize that it is imperative to communicate the important benefits that energy efficiency provides to customers and to motivate them to actively pursue all cost-effective energy efficiency measures and behaviors. The 2021-2023

[8] ACEEE. *2019 State Energy Efficiency Scorecard.* Rel. Sep. 2019. Available at: https://www.aceee.org/sites/default/files/pdf/state-sheet/2019/new-hampshire.pdf.

term represents a continued increase in electric, natural gas, and fuel-neutral energy savings in New Hampshire.

**Figure 1-1: Electric Programs Over Time**

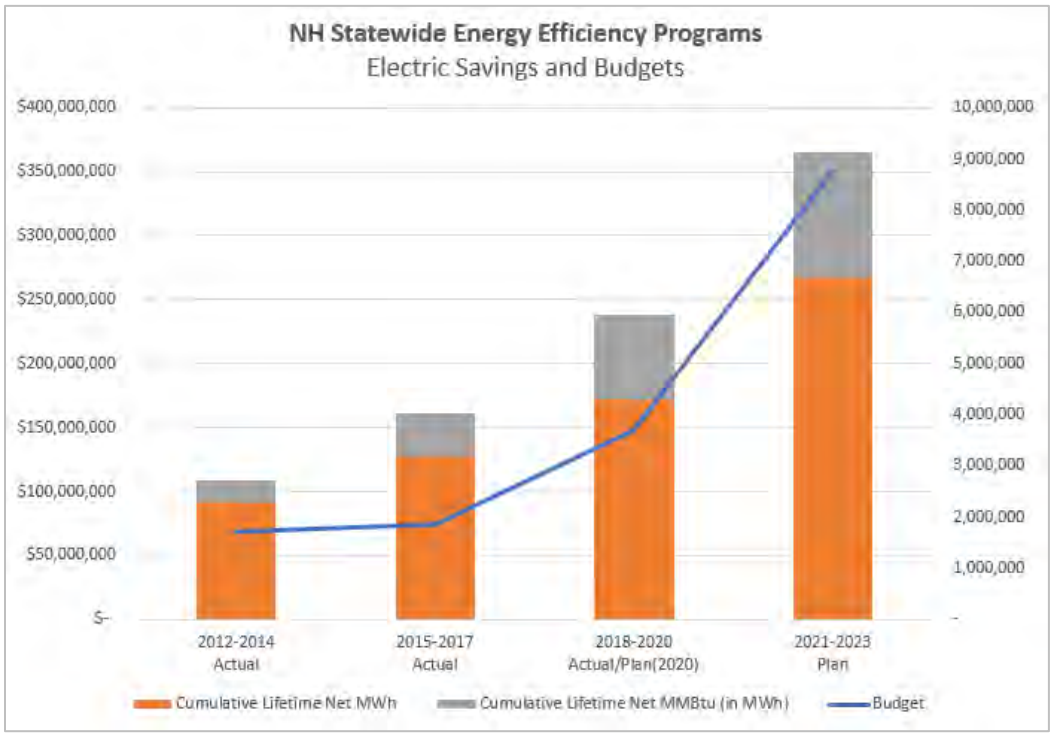
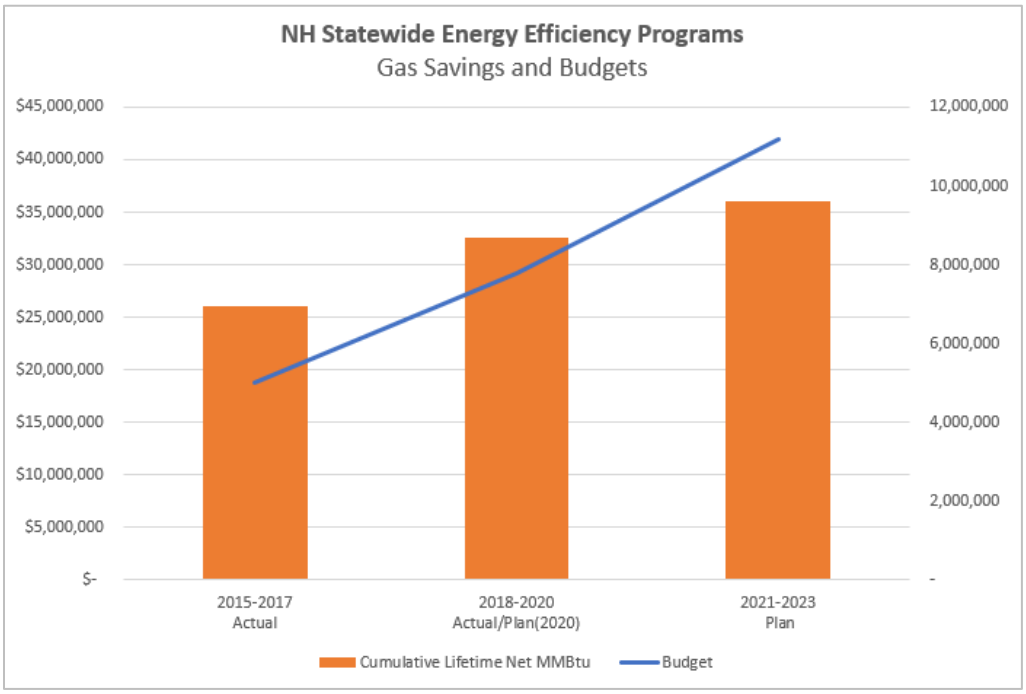



**Figure 1-2: Natural Gas Programs Over Time**



Throughout the 2021-2023 term, the NH Utilities plan to deliver tailored, comprehensive solutions to customers that will drive electric and natural gas savings. The electric programs are deliberately expanding beyond lighting measures, which have provided an inexpensive and relatively easy means of reducing electricity use for the past decade.

For the C&I Programs, "tailored, comprehensive solutions" will involve testing various channels, incentive models, and strategies to identify more precisely what motivates customers and contractors to implement comprehensive energy-saving projects. The NH Utilities will explore offering a tiered incentive design focused on the delivered energy savings of an entire project, rather than the current approach of incentivizing single measures. For the 2021-2023 term, the NH Utilities will continue to offer cost-sharing comprehensive audits and determine if this incentivizes more C&I customers to invest in deeper energy-saving projects.

The NH Utilities will promote comprehensiveness in the 2021-2023 Residential Programs through the introduction and heavy promotion of multiple "on ramps" to energy efficiency (referenced in Priority Three) that will be utilized to encourage investment in multiple-measure projects over the next three-year period.

## Priority Two: Provide Significant Benefits to New Hampshire's Economy

New Hampshire's energy efficiency investments help support the state's economy in multiple ways. Delivering cost-effective energy efficiency programs to customers helps lower energy bills, generates local jobs, reduces the energy dollars that go toward out-of-state energy generation, and increases the quality of the state's building stock. Businesses can invest energy savings toward making their companies more profitable, and into operations and personnel. Towns and cities can use taxpayers' dollars to fund critical infrastructure projects and public services. Homeowners, particularly limited-income customers, can use their energy savings toward their most critical needs, with their dollars staying in the local economy.

## Priority Three: Increasing Participation through New and Expanded Program Pathways

The NH Utilities remain focused on transforming the way customers think about and use energy by providing them a variety of innovative energy efficiency services and information that will help them to better manage their energy use and costs, moving them toward adoption of efficiency measures as a standard practice. The NH Utilities will effectively scale up the NHSaves Programs to increase energy savings and program participation by introducing or reinforcing multiple "on ramps" with varied levels of participation requirements for different customer types. These new or more heavily promoted program pathways create easily accessible avenues for customers to achieve energy savings. Through targeted marketing efforts, the NH Utilities can re-engage these customers to purchase additional energy-efficient equipment, use that equipment more effectively, and dive deeper into energy savings.

The NHSaves Residential Programs will introduce or more heavily promote several pathways, including: code-plus initiatives, online platforms, single-measure rebates, energy kits, and visual audits. For the C&I sector, the NH Utilities will encourage additional participation through the expansion of their "Main Street" efforts and community outreach initiatives, as well as the creation of standard marketing collateral targeting C&I customers and market segments (see Priority Four).

## Priority Four: Offer Effectively-Packaged Solutions to Engage Customers

To increase program participation and energy savings, the NH Utilities must effectively market and package energy efficiency solutions to residential, municipal, and C&I customers. During the 2021-2023 term, the NH Utilities will expand midstream and point-of-purchase rebate offerings for the NHSaves Residential Programs, as well as include additional tiers and bonus incentives for the residential new construction marketplace.

For the NHSaves C&I Programs, the NH Utilities will create standard offer marketing pieces, such as sell sheets and presentations, specifically developed for target C&I market segments and end-use equipment. These tailored marketing collateral packages will make it easier for customers to understand the potential incentives and estimated energy savings associated with common high-efficiency measures applicable to their specific type of business, such as a marketing package for

restaurants presenting light-emitting diode ("LED") fixtures and controls and commercial refrigeration, kitchen, and heating, ventilation, and air conditioning ("HVAC") equipment.

## Priority Five: Develop and Implement a Workforce Development Strategy

A skilled workforce is a critical component of successfully moving the state toward the EERS' increased energy savings goals. The NH Utilities will work with an experienced vendor, as well as knowledgeable and interested New Hampshire stakeholders to train and recruit a qualified energy efficiency workforce. The NH Utilities will also leverage regional activities, best practices and research to inform the workforce development strategy. If needed, the strategy will also be supplemented by a needs assessment or additional research to better understand workforce barriers specific to New Hampshire. In particular, the NH Utilities will be closely examining the outcome of the COVID-19 pandemic on the New Hampshire workforce. The NH Utilities anticipate working more closely with key state agencies, such as the NH Employment Security Office, and the community college system, in order to develop this comprehensive workforce development strategy for (re)building the energy efficiency workforce. For more information regarding the NH Utilities' workforce development plan, please see Chapter Nine.

## Priority Six: Increase Outreach to Main Streets, Municipalities and Rural Areas

For both the Residential and C&I sectors, the NH Utilities will expand efforts to reach customers in hard-to-serve and rural communities, including municipalities, businesses, and residential customers. Part of the NH Utilities' strategy will consist of building a community network of energy champions that includes municipal representatives, sustainability groups, energy committees, and economic development commissions. In addition, the NH Utilities plan to expand Main Streets efforts and community blitzes to further engage local businesses and community groups.

## Priority Seven: Upgrading Weatherization Systems and Data Sharing

The NH Utilities are currently working to expand and refine the capabilities of Information Technology ("IT") data sharing, energy modeling and tracking systems for certain statewide programs. For the NHSaves Residential weatherization programs, the home audit and tracking system will be upgraded

and deployed in 2021, which will allow the NH Utilities to streamline contractor interactions and provide better energy-savings information to customers.

In the December 13, 2018 settlement, Eversource agreed to review further integration of *Green Button Connect My Data*, which allows utility customers to automate the secure transfer of their own energy usage data to third parties, based on affirmative (opt-in) customer consent and control.[9] Each of the regulated NH Utilities has been investigating the IT requirements and deployment costs associated with the sharing of customer energy use data.

## Priority Eight: Implement Effective Active Demand Reduction Strategies


Effective demand-reduction strategies can help reduce energy prices and price spikes during summer. For the 2021-2023 term, the NH Electric Utilities will develop and deploy several Active Demand Reduction ("ADR") strategies to flatten peak loads, improve system load factors, and reduce costs for all electric customers.

The NH Electric Utilities plan to implement two C&I ADR offerings: Load Curtailment and Storage Performance. The Load Curtailment offering will be technology agnostic and allow customers to earn an incentive based on their curtailment performance. The Storage Performance offering consists of a bring-your-own device ("BYOD") offering for C&I customers with behind-the-meter storage. Participating customers will earn a performance-based incentive for responding to peak demand events initiated or called by their respective NH Electric Utility.

For the 2021-2023 term, the NH Electric Utilities will include two residential ADR offerings: Battery Storage and wirelessly communicating ("Wi-Fi") Thermostat Direct Load Control ("DLC"). In addition, the

[9] The Green Button initiative is an industry-led effort that responded to a 2012 White House call-to-action to provide utility customers with easy and secure access to their energy usage information in a consumer-friendly and computer-friendly format for electricity, natural gas, and water usage. Customers are able to securely download their own detailed energy usage with a simple click of a literal "Green Button" on utility websites. US DOE, "Green Button". Available at: https://www.energy.gov/data/green-button.

NH Electric Utilities will explore implementing an Electric Vehicle ("EV") pilot. The Battery Storage offering will incentivize participants to discharge stored energy from their batteries in response to a signal from their NH Electric Utility. DLC offering participants will be incented to allow brief, limited adjustments to their Wi-Fi thermostats during periods of peak demand. If implemented, the EV measure would utilize incentive strategies to reduce charging demand during peak hours. The NH Utilities will explore this program offering and implement it if deemed feasible during the 2021-2023 term.

For more information regarding the NH Utilities' Residential and C&I ADR offerings, see Chapter Five.

## Priority Nine: Implementing an Energy Optimization Pilot

Energy optimization is an energy resource framework that guides customers to make the most efficient use of all energy sources: for heating and cooling, electrification, charging, and even transportation, while maximizing energy and non-energy benefits. With this Plan, the NH Utilities are proposing an Energy Optimization pilot, based on learnings from pilots and programs in other states and from work performed by NHEC. The NHSaves pilot will be focused on conversions from delivered fossil-fuel systems to higher-efficiency electric heating and cooling systems. The pilot will be carefully evaluated in order to guide future decisions on expanding to a full-scale program and to assess the benefits of energy optimization to customers and the electric grid. For more information on the NH Utilities' Energy Optimization pilot, see Chapter Seven.

## Priority Ten: Increase Energy Efficiency Portfolio Savings from Non-Lighting Measures

The NH Utilities have carefully considered and accounted for the significant ongoing changes in the residential and C&I lighting marketplaces in the development of the Plan. The NH Utilities' strategy is to actively seek out cost-effective, non-lighting measures wherever possible to provide a robust portfolio during the 2021-2023 term. Several factors were considered to make this determination, including significant discussion with stakeholders at EERS Subcommittee working sessions, as well as among members of the Evaluation, Measurement and Verification ("EM&V") Working Group. Most influential in this decision were the federal roll-back of minimum efficiency standards for lighting (see

Section 4.1.3 for a full discussion), results from the Energy Efficiency Baseline and Potential study and other studies conducted in the region (see Section 10.4 for a full discussion), and the need to pursue comprehensive energy efficiency projects to capture all achievable energy savings.

Despite the federal roll-back of minimum efficiency standards, the lighting market has continued to drive the transition to LEDs in the marketplace. In order to help maintain and accelerate the strong demand for high-efficiency ENERGY STAR LED technologies, the NH Utilities will continue to aggressively support and incentivize energy-efficient bulbs and fixtures for the NHSaves Residential Programs through the end of 2021. Beginning in 2022 and depending on how the marketplace responds to the relaxed federal standards, the NH Utilities will transition program support to discount retailers focused on reaching the last-to-adopt and hard-to-reach customers.

For the NHSaves C&I Programs, an emphasis on contractor trainings and the introduction of tiered incentives should encourage comprehensiveness in energy efficiency projects and increase the share of energy savings from non-lighting measures during the 2021-2023 term.

## 1.6 Benefits of Energy Efficiency Programs

The NHSaves Programs provide significant value to all customers, both participants and non-participants. As noted in the Executive Summary section, the benefits associated with improving the energy performance of residential and C&I buildings and facilities are numerous and include reduced GHG emissions, direct energy and cost savings, direct and indirect jobs creation, lower municipal spending, reinvestment in local New Hampshire communities, and a variety of other non-energy benefits.

Participation in the NHSaves Programs delivers additional benefits, such as lower asthma rates and other health-related improvements due to better air quality (indoor and outdoor). In addition, businesses can realize improved performance and productivity due to the installation of high-efficiency equipment, such as LED lighting controls and commercial kitchen equipment. Other non-energy benefits include: increased comfort, reduced maintenance costs, improved building value, and

healthier buildings in which homeowners or renters are spending a significant portion of their day, whether working or relaxing at home.

### 1.6.1 Direct Energy Savings and Demand Reduction

Since 2002, New Hampshire electric and natural gas customers have installed energy efficiency measures that have saved more than 19.1 billion electric kWh and 45.7 million natural gas MMBtu, resulting in cumulative customer savings in excess of $3.4 billion. Furthermore, the 2019 Independent System Operator-New England ("ISO-NE") Energy Efficiency Forecast found that energy efficiency programs in New England will save over 2,460 MW of peak demand from efficiency projects installed between 2020 and 2028.[10] The 2021-2023 NHSaves Programs will save 6.7 billion electric kWh and 9.6 million natural gas MMBtu. In addition, the 2021-2023 NHSaves Residential and C&I Programs will save 8.3 million MMBtu from other fuels, such as oil and propane. Over the lifetime of these measures, this will result in customer cost savings of more than $1.3 billion.

### 1.6.2 Cost Savings

Energy efficiency program participants receive significant direct benefits from energy efficiency programs; however, all customers benefit from the reduction in energy consumption through efficiency and conservation resulting from NHSaves Programs. Energy efficiency improvements can defer the costs of building new power plants and are less expensive than new energy generation. According to the US Energy Information Administration ("EIA"), nationwide residential and commercial sector energy efficiency improvements were responsible for partially offsetting increasing energy demand resulting from the country's higher growth rates in population, number of households, and commercial floorspace.[11]

---

[10] ISO New England, Inc. *Final 2019 Energy Efficiency Forecast.* May 12, 2019. Available at: https://www.iso-ne.com/static-assets/documents/2019/04/eef2019_final_fcst.pdf.

[11] EIA. *Annual Energy Outlook 2020.* Available at: https://www.eia.gov/outlooks/aeo/.

### 1.6.3 Environmental Benefits

Energy efficiency programs help reduce energy consumption, which in turn reduces the amount of fossil fuels burned by power plants. This reduces GHG emissions that contribute to climate change and air pollution across the region, thereby helping to minimize the cost of mitigation at the state and federal level. Since inception, the NHSaves Programs have helped reduce GHG emissions by more than 11.8 million tons, the equivalent of taking 2.6 million passenger vehicles off the road for one year. The 2021-2023 NHSaves Programs will lead to a reduction of more than 4.4 million tons of GHG emissions, the equivalent of taking 949,313 passenger vehicles off the road for one year.

### 1.6.4 Economic Benefits

Spending on energy efficiency services and technologies supports the local workforce in New Hampshire. For every million dollars spent on energy-efficient measures, such as building retrofits or new equipment, an estimated 6.2 direct jobs and 2.7 indirect jobs are supported.[12] Using this calculation, the 2021-2023 NHSaves Programs will support 4,673 FTEs or 9.7 million work hours.

Direct jobs are defined as those that perform energy services or install equipment in a home or a building, such as a home energy auditor, installation contractor, or energy service company. Typically, direct jobs in the energy efficiency industry are located close to where building retrofits and new construction take place, thereby stimulating the local economy. Indirect jobs are defined as those that supply direct-install companies with the equipment needed for building retrofits and construction, such as high-efficiency commercial kitchen equipment, insulation, LED lighting and controls, and refrigeration equipment.

Across the state, the NH Utilities work directly with approximately 1,200 architects, builders, distributors, electricians, energy auditors, engineers, energy service companies, retailers, and other

[12] Pollin, R., Wicks-Lim, J., Chakrabortu, S., Hansen, T. *A Green Growth Program for Colorado*. Available at: https://www.peri.umass.edu/publication/item/1168-a-green-growth-program-for-colorado.

energy efficiency professionals. As noted in Priority Five, the NH Utilities are developing a regional comprehensive plan to facilitate workforce development strategies for the energy efficiency industry.

## 1.7 2021-2023 Program Goals

**Table 1-3: Electric Program Annual Savings, by Utility**

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Savings |
|---|---|---|---|---|---|
| **Electric Annual Savings (MWh)** | | | | | |
| Eversource | 110,672 | 130,959 | 160,737 | **402,368** | 77% |
| Liberty Electric | 13,074 | 14,488 | 16,624 | **44,185** | 8% |
| NHEC | 9,144 | 8,382 | 7,874 | **25,400** | 5% |
| Unitil Electric | 15,914 | 17,150 | 20,315 | **53,380** | 10% |
| **Total** | **148,804** | **170,978** | **205,551** | **525,333** | **100%** |

**Table 1-4: Electric Program Annual Savings, by Sector**

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Savings |
|---|---|---|---|---|---|
| **Electric Annual Savings (MWh)** | | | | | |
| C&I and Municipal | 117,997 | 146,379 | 180,990 | **445,365** | 85% |
| Residential | 28,176 | 21,264 | 20,530 | **69,970** | 13% |
| Income-Eligible | 2,631 | 3,336 | 4,031 | **9,998** | 2% |
| **Total** | **148,804** | **170,978** | **205,551** | **525,333** | **100%** |

**Table 1-5: Natural Gas Program Annual Savings, by Utility**

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Savings |
|---|---|---|---|---|---|
| **Natural Gas Annual Savings (MMBtu)** | | | | | |
| Liberty Gas | 153,886 | 191,719 | 219,574 | **565,179** | 75% |
| Unitil Gas | 44,150 | 61,938 | 82,314 | **188,402** | 25% |
| **Total** | **198,036** | **253,657** | **301,888** | **753,581** | **100%** |

**Table 1-6: Natural Gas Program Annual Savings, by Sector**

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Savings |
|---|---|---|---|---|---|
| **Natural Gas Annual Savings (MMBtu)** | | | | | |
| C&I and Municipal | 129,917 | 151,159 | 177,362 | 458,438 | 61% |
| Residential | 58,569 | 91,891 | 112,498 | 262,959 | 35% |
| Income-Eligible | 9,550 | 10,606 | 12,028 | 32,184 | 4% |
| **Total** | **198,036** | **253,657** | **301,888** | **753,581** | **100%** |

## 1.8 Energy Efficiency Program Funding

### 1.8.1 Electric Energy Efficiency Funding

There are three main funding sources for the NHSaves electric programs: (1) a portion of the SBC that is applied to the electric bills of all customers receiving delivery service from one of the NH Electric Utilities; (2) a portion of the Regional Greenhouse Gas Initiative ("RGGI") auction proceeds; and (3) proceeds earned by each of the NH Electric Utilities from ISO-NE for participation in ISO-NE's Forward Capacity Market ("FCM").

All electric utility FCM revenues are derived from the NH Utilities' energy efficiency programs and support NHSaves electric programs. Any balance of funds, positive or negative, from prior program years is carried forward to future years. This includes interest applied on the monthly balance at the prime rate. The NH Utilities have either estimated prior year carryforwards for calculation of 2021-2023 funding or intend to utilize all prior year funding within the 2020 program year or for additional on-bill loan capital. Any transfers of 2020 funding between programs or to loan funds will follow applicable requirements for notification and/or approval under DE 17-136 and the approved 2020 Plan Update. True-up of actual carryforward from 2020 will take place with the 2020 Annual Report and, if needed, the following SBC or LDAC rate adjustment.

The Commission's staff provides an estimate of RGGI revenue figures to be dedicated to the energy efficiency programs. ISO-NE's FCM revenues are estimated based on the market price for passive demand savings and the obligation of each NH Electric Utility during the two commitment periods covered by calendar years 2021-2023. These figures differ by each NE Electric Utility and can be subject to adjustment based on actual performance.

**Table 1-7: Electric Program Funding**

| 2021 | Sector | Carryover | HEA Carryover | RGGI | FCM | SBC Funds | Total |
|---|---|---|---|---|---|---|---|
| Eversource | Residential | $0 | $0 | $377,341 | $1,557,889 | $20,673,489 | $22,608,719 |
| | C&I | $0 | $0 | $1,531,542 | $3,635,073 | $46,577,169 | $51,743,785 |
| NHEC | Residential | $407,827 | $0 | $34,612 | $30,000 | $3,934,561 | $4,407,000 |
| | C&I | $28,157 | $0 | $172,873 | $70,000 | $2,710,970 | $2,982,000 |
| Liberty | Residential | $598,262 | $19,796 | $44,153 | $263,079 | $1,636,452 | $2,561,742 |
| | C&I | $755,404 | $0 | $177,584 | $348,732 | $3,571,782 | $4,853,502 |
| Unitil | Residential | $480,100 | $0 | $56,687 | $168,524 | $3,972,213 | $4,677,524 |
| | C&I | ($111,241) | $0 | $228,000 | $393,222 | $4,382,004 | $4,891,985 |

| 2022 | Sector | Carryover | HEA Carryover | RGGI | FCM | SBC Funds | Total |
|---|---|---|---|---|---|---|---|
| Eversource | Residential | $0 | $0 | $362,535 | $1,433,201 | $20,620,060 | $22,415,796 |
| | C&I | $0 | $0 | $1,531,542 | $3,344,136 | $67,090,791 | $71,966,469 |
| NHEC | Residential | $0 | $0 | $34,612 | $30,000 | $4,100,388 | $4,165,000 |
| | C&I | $0 | $0 | $172,873 | $70,000 | $3,100,127 | $3,343,000 |
| Liberty | Residential | $0 | $0 | $42,420 | $233,584 | $2,496,480 | $2,772,483 |
| | C&I | $0 | $0 | $177,584 | $309,634 | $5,398,895 | $5,886,113 |
| Unitil | Residential | ($879) | $0 | $54,463 | $140,137 | $4,964,828 | $5,158,548 |
| | C&I | ($852) | $0 | $228,000 | $326,985 | $5,633,809 | $6,187,942 |

| 2023 | Sector | Carryover | HEA Carryover | RGGI | FCM | SBC Funds | Total |
|---|---|---|---|---|---|---|---|
| Eversource | Residential | $0 | $0 | $347,726 | $1,198,252 | $21,735,949 | $23,281,927 |
| | C&I | $0 | $0 | $1,531,542 | $2,795,920 | $91,149,205 | $95,476,667 |
| NHEC | Residential | $0 | $0 | $34,612 | $30,000 | $4,006,388 | $4,071,000 |
| | C&I | $0 | $0 | $172,873 | $70,000 | $3,005,127 | $3,248,000 |
| Liberty | Residential | $0 | $0 | $40,687 | $150,966 | $2,651,629 | $2,843,282 |
| | C&I | $0 | $0 | $177,584 | $200,117 | $6,770,979 | $7,148,680 |
| Unitil | Residential | $0 | $0 | $52,238 | $133,129 | $5,159,285 | $5,344,652 |
| | C&I | $0 | $0 | $228,000 | $310,634 | $7,212,807 | $7,751,441 |

## 1.9 Natural Gas Energy Efficiency Funding

The NHSaves natural gas programs are funded by a portion of the LDAC, which is applied to natural gas bills for customers of the NH Natural Gas Utilities. Similar to the NHSaves electric programs, the balance of funds from prior program years is carried forward to future years, including interest earned on monthly balances applied at the prime rate.

The NH Natural Gas Utilities determine the overall budget requirements to meet the required energy savings targets. LDAC rates are then set by program sector by each of the NH Natural Gas Utilities based on revenue needs and sales forecasts.

**Table 1-8: Natural Gas Program Funding**

| 2021 | Sector | Carryover | HEA Carryover | LDAC Funds | Total |
|---|---|---|---|---|---|
| Liberty | Residential | $ 55,173 | $ - | $ 5,694,467 | $ 5,749,640 |
| | C&I | $ (29,094) | $ - | $ 3,734,528 | $ 3,705,434 |
| Unitil | Residential | $ (276,963) | $ - | $ 1,557,446 | $ 1,280,483 |
| | C&I | $ 60,459 | $ - | $ 1,704,995 | $ 1,765,455 |

| 2022 | Sector | Carryover | HEA Carryover | LDAC Funds | Total |
|---|---|---|---|---|---|
| Liberty | Residential | $ - | $ - | $5,999,242 | $ 5,999,242 |
| | C&I | $ - | $ - | $ 4,100,187 | $ 4,100,187 |
| Unitil | Residential | $ 7,185 | $ - | $ 1,548,992 | $ 1,556,177 |
| | C&I | $ 10,794 | $ - | $ 2,548,396 | $ 2,559,190 |

| 2023 | Sector | Carryover | HEA Carryover | LDAC Funds | Total |
|---|---|---|---|---|---|
| Liberty | Residential | $ - | $ - | $ 6,510,458 | $ 6,510,458 |
| | C&I | $ - | $ - | $ 4,624,437 | $ 4,624,437 |
| Unitil | Residential | $ - | $ - | $ 1,892,786 | $ 1,892,786 |
| | C&I | $ - | $ - | $ 3,644,397 | $ 3,644,397 |

## 1.10 Annual Program Budgets

**Table 1-9: Annual Electric Budget, by Utility**

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Budget |
|---|---|---|---|---|---|
| **Electric Budget ($000)** | | | | | |
| Eversource | $70,478 | $89,464 | $112,569 | **$272,511** | 78% |
| Liberty Electric | $7,030 | $8,207 | $9,471 | **$24,708** | 7% |
| NHEC | $7,004 | $7,129 | $6,960 | **$21,093** | 6% |
| Unitil Electric | $9,070 | $10,755 | $12,691 | **$32,516** | 9% |
| **Total** | **$93,582** | **$115,554** | **$141,692** | **$350,829** | **100%** |

**Table 1-10: Annual Natural Gas Budget, by Utility**

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Budget |
|---|---|---|---|---|---|
| **Natural Gas Budget ($000)** | | | | | |
| Liberty Gas | $8,962 | $9,573 | $10,554 | **$29,089** | 69% |
| Unitil Gas | $3,076 | $4,133 | $5,583 | **$12,793** | 31% |
| **Total** | **$12,038** | **$13,706** | **$16,137** | **$41,882** | **100%** |

Budget allocations by sector are informed by the source of the funds, and each NH Utility's forecasted delivery sales to each customer sector. The Home Energy Assistance (income-eligible) program budget is not less than 17 percent of each NH Utility's total portfolio budget exclusive of any unspent income-eligible program funds from the prior year and meets New Hampshire legislative requirements that 20 percent of the SBC funds be directed toward limited-income programs.[13]

[13] RSA 374-F.3 VI: *Electric Utility Restructuring Act*, 1996. VI. Benefits for All Consumers. "Restructuring of the electric utility industry should be implemented in a manner that benefits all consumers equitably and does not benefit one customer class to the detriment of another. Costs should not be shifted unfairly among customers. A non-by-passable and competitively neutral system benefits charge applied to the use of the distribution system may be used to fund public benefits related to the provision of electricity. Such benefits, as approved by regulators, may include, but not necessarily be limited to, programs for low-income customers, energy efficiency programs, funding for the electric utility industry's share of commission expenses pursuant to RSA 363-A, support for research and development, and investments in commercialization strategies for new and beneficial technologies...".

Monthly interest at the prime rate is applied to fund balances and reinvested into programs. Funding estimates from the SBC and LDAC are based on each of the NH Utility's sales projections. Actual sales may differ, resulting in potentially more or less SBC or LDAC revenue available for energy efficiency programs. In addition, RGGI and FCM proceeds are estimated and are also likely to differ from actual revenues. When planning program budgets and reporting expenses, the NH Utilities summarize expenses by specific tracking activities, defined as follows in Table 1-11:

**Table 1-11: Tracking Activities for Expenses**

| Tracking Activity | Description |
|---|---|
| Administration—Internal | Internal utility costs associated with program design, development, regulatory support, and quality assurance. Costs include: employee labor, benefits, expenses, materials, and supplies. |
| Administration—External | Costs associated with external costs of program administration. This includes contractors and consultants used in support of program design, development, regulatory support, and quality assurance. |
| Customer Rebates and Services | Includes costs associated with incentives that reduce the cost of equipment as well as costs for services to speed adoption. This includes direct rebate dollars paid to distinct participants, as well as indirect incentives for equipment discounts. It also includes services such as technical audits, employee and contractor labor to install measures, expenses, materials, and supplies. |
| Internal Implementation Services | Tracks costs associated with delivering programs to customers, including labor, benefits, expenses, materials, and supplies. |
| Marketing | Includes costs for marketing, advertising, trade shows, toll-free numbers, and NHSaves website. Types of expenses include labor, benefits, consultants, contractors, expenses, materials, and supplies. |
| Evaluation | Costs for EM&V activities including labor, benefits, expenses, materials, supplies, consultants, contractors, and tracking systems. |

# Chapter Two: Three-Year Planning Structure

**This chapter outlines the NH Utilities' proposal to effectuate a true triennial program operating period with a single planning and settlement effort and three-year goals, rather than three distinct annual operating periods with distinct planning efforts, budgets, and goals.**

This chapter describes the rationale and details behind the NH Utilities' proposal, unanimously supported by the EESE Board and stakeholders to the EERS process, to transition from a three-year plan punctuated by significant annual updates to a true three-year plan that emphasizes long-term goals and three-year budgets. This change will provide the NH Utilities the flexibility of the full term to successfully implement the plan while maintaining transparency and accountability with both the Commission and stakeholders.

Adoption of a true three-year plan structure will improve program delivery to customers, foster innovation, provide vendors and contractors with greater flexibility to adapt to fluid and evolving market conditions, and result in a more cost-effective and efficient process for the NH Utilities and stakeholders. Many of the leading states for energy efficiency (e.g., Massachusetts, California, and Vermont) implement true three-year or multi-year plan operating cycles, allowing them to focus on longer term goals, new technologies, innovative program designs, and more effective targeting of all customer demographics.[14]

## 2.1 A Three-Year Plan

Commencing with the 2021-2023 Plan term, the NH Utilities propose to fully transition the NHSaves Programs to a 36-month operating structure, for which the program budgets, energy savings goals, and planned program designs are approved by the Commission for the entire triennium, rather than for

[14] ACEEE. 2019 State Scorecard. Available at: https://database.aceee.org/state-scorecard-rank. In the 2019 State Scorecard, Massachusetts, California, and Vermont, were ranked first, second, third, respectively.

each year of the term. Once approved by the Commission, the NH Utilities will implement the three-year plan consistent with such approval and will only seek to modify budgets or goals if certain triggers discussed in Section 2.1.6 occur. During the three-year term, the NH Utilities will apply new evaluation results and updated avoided costs to the actual results on a prospective basis beginning on January 1st of the year after the results are finalized.

The final calculation of achievement of the Commission ordered three-year term energy savings and benefits goals. The resulting Performance Incentive ("PI") earned will be finalized following the conclusion of the third and final year of the term, in a comprehensive term report ("Term Report") to be filed by each NH Utility, along with a statewide summary. Planned and approved targets will not change during the term. However, the actual savings and benefits resulting from the portfolio of programs will be reported using the prospective application of results from evaluations as well as the Avoided Energy Supply Components study ("AESC Study"), which is scheduled to be completed in the spring of 2021. While the plan will be triennial, stakeholders will remain fully engaged with the NH Utilities' progress toward achieving the term goals through quarterly and annual reports and participate in information sharing and feedback during quarterly meetings and other updates.

A true triennial plan term will improve program delivery and eliminate some of the barriers facing customers and contractors, including the stop/start of programs due to annual budget constraints. Contractors, installers, NH Utility staff, and other local and regional stakeholders will be afforded a longer view and greater ability to improve programs and adapt over time. Setting three-year budgets and goals will allow the NH Utilities the necessary flexibility to respond to changing economic conditions, seasonal anomalies, and the evolving energy efficiency marketplace. This new structure will also allow for the introduction of new measures and innovations, with the ability to learn and adjust during the three-year period without undue focus on annual goals.

With a three-year planning structure, programs and measure offerings can be emphasized or de-emphasized based on market needs, and resources can be deployed when opportunities arise rather than being constrained by one-year budgets and goals. Three-year budgets and the ability to shift

funds from one program to another will minimize disruption in the marketplace caused by programs opening and closing on a calendar-year basis and maximize efficient use of funds.

Budget flexibility across program years will also allow the NH Utilities to effectively execute multi-year commitments with large C&I and municipal customers, which the NH Utilities are confident will result in sustained, long-term, and comprehensive energy savings and potential reductions in administrative costs. Furthermore, a three-year plan, budget, and goals support a sustainable energy efficiency economy by providing more stability and certainty for contractors and partners that invest in training and workforce development over a longer time horizon than 12 months. Moving to a 36-month budget will reduce administrative resources needed to design and approve annual planning efforts and program changes, and will put a greater focus on program implementation, innovation, and achievement of goals.

Prior to implementation of the EERS, the NH Utilities filed biannual energy efficiency plans, which were updated annually. During the course of the 2018-2020 term, the NH Utilities filed two plan update filings with the Commission (2019 Plan Update and 2020 Plan Update). These annual filings and plan updates require an enormous amount of time and resources for the NH Utilities to prepare, beginning in the early summer of the preceding year. Following the filing of a plan or plan update, the NH Utilities and numerous other parties, including Commission Staff, must participate in public input and stakeholder sessions, as well as a four-month adjudicative proceeding including tech sessions, discovery and settlement, and culminating in hearings before the Commission.

An EERS plan that truly spans a three-year period will reduce the time and resources spent in adjudicative proceedings for <u>all</u> parties, thereby allowing resources to be dedicated to serving customers rather than administrative matters. The NH Utilities propose to provide regular and transparent reporting, including robust quarterly and annual reports to the Commission regarding progress toward the three-year goals, significant changes to NHSaves Program delivery or design, and the results from evaluations, including updates to the Technical Reference Manual ("TRM") and the AESC Study. Triggers for mandatory review of one or more of the NH Utilities' plans ensure that

proposals for significant mid-term modifications are reviewed and approved by the Commission, with opportunity for stakeholder input.

This proposal strikes the appropriate balance between improved program flexibility with reduced administrative burden, while maintaining robust accountability and Commission oversight.

### 2.1.1 Savings Goals

In a triennial plan structure, energy savings and benefits goals will be set for the entire three-year period. The NH Utilities will provide a savings target for each program year of the term. This annual target, however, shall be considered a directional indicator, while the binding goal for each utility will be based on the cumulative activity over the three-year term.

The NH Utilities will report actual savings and benefits, applying relevant evaluation findings prospectively The NH Utilities will also update benefits calculations resulting from the 2021 AESC Study in their reporting for program years 2022 and 2023.

Approved term goals *will not change without the Commission's approval* regardless of the results of evaluations and the avoided cost study. However, in order to maximize savings and benefits for customers, the NH Utilities are likely to implement changes to program delivery and measure mix as a result of changing market conditions, evaluation findings, and other market intelligence gained during the term. For example, if an evaluation finds that a specific measure saves less energy than was estimated in the approved triennial plan, the NH Utilities will apply the updated values to the following year's TRM, as well as the benefit-cost model used for the calculation of actual savings and benefits. The NH Utilities may also choose to modify the measure offering by adjusting incentive levels or even discontinuing incentive support for the affected measures.

Stakeholders will be made aware of these changes through several channels:

- The EM&V Working Group will be made aware of the evaluation impacts to measures and programs as evaluations are drafted and finalized, and other interested parties will have access to final reports once posted to the Commission's website;

- A searchable, electronic TRM, developed by the NH Utilities in coordination with the EM&V Working Group, will be updated and published annually to a public website and will highlight changes to measure assumptions to be applied to the following year;
- The NH Utilities will continue to report any changes to measure incentives in each quarterly report, which is distributed to the service list and subject to discussion at quarterly meetings; and
- The NHSaves website will reflect up-to-date information regarding what equipment and other energy efficiency measures are eligible for incentives, which measures are offered through mail-in rebate, retail/distributor or online channels, and the dollar amount of all incentives.[15]

These changes, however, will only impact the reporting of savings, and not the planned and approved term goals or budgets. The exception is if a mid-term modification trigger occurs, requiring Commission review and approval of the impacts before changes can be considered official. Under the three-year term construct, the NH Utilities will gain the flexibility to adapt to evaluation impacts and pursue cost-effective energy efficiency opportunities in order to achieve the term goals within the approved budget.

### 2.1.2 Budgets

Each NH Utility will develop individual program budgets for the term, as well as an estimate of the annual budgets. Any budgeted but underspent funds from one year will be carried over into the next program year (until the conclusion of the three-year term), remaining in the relevant energy-saving program. Overspending in the initial program years would reduce the remaining funds available for the remainder of the term. In order to ensure that the NH Utilities are not unduly constrained, while also ensuring significant increases in spending are subject to Commission review, the NH Utilities propose to allow each NH Utility to spend up to 110 percent of each sector's approved term budget without requiring Commission approval.

[15] Note: Some rebates are determined on a case-by-case basis and depend on the size, savings, total cost, efficiency rating, etc.

### 2.1.3 Funding

The three-year plan includes estimated customer bill and rate impacts by utility for each year of the triennium (see Section 10.4). Commission approval of the triennial plan will constitute approval of each of the NH Utility's three-year term budget, as well as the term budgets for each program; non-binding *annual* program budgets are also provided.

The three-year plan includes proposed SBC rates and LDAC rates for each year of the triennial plan, based on the projected annual budgets and other funding sources. Commission approval of the triennial plan will constitute approval of the SBC rates for each year. Annually, each of the NH Electric Utilities will review actual sales and revenues to determine whether the approved SBC rate for the next year is still applicable for collection of the approved budget. If this reconciliation results in the need to increase or decrease the rate by no more than 10 percent of the approved rate, the NH Utility will file a technical statement with the projected over or under calculation, along with the resulting energy efficiency portion of the SBC rate and adjust the rate without the need for a formal procedure and hearing. The NH Utility will also file a revised tariff page reflecting the change. At the end of the three-year period, a final reconciliation will be filed to reconcile the final three-year program budgets and expenses. Additional discussion of the proposed rates for the 2021-2023 term and adjustment procedures can be found in Attachment K.

The model for this proposal is the LDAC charges currently utilized by the NH Natural Gas Utilities. With this approach, energy efficiency budgets are developed and approved in the energy efficiency docket, while the LDAC rate itself is considered and approved in Liberty Gas's and Unitil Gas's utility-specific cost-of-gas filings. Additionally, in Docket No. DR 98-015, the Commission approved in Order No. 22,890, a monthly adjustment to the cost of natural gas that does not require a filing for rate approval, similar to the mechanism proposed in this Plan filing for handling yearly adjustments to the SBC.

The NH Electric Utilities are filing separate SBC rates with the Commission based on the funding needed to execute individual portfolio and sector energy efficiency programs. This methodology will streamline the manner in which actual collections and expenditures are reconciled for each NH Electric

Utility and allow each utility to collect only those funds needed to execute proposed programs, rather than being tied to a specific rate set for a statewide savings goal.

An important element of this proposal is that, as with the revenue-raising mechanism utilized by the natural gas energy efficiency programs, each NH Electric Utility will set a distinct SBC rate for each sector (Residential and C&I), based on the approved annual energy efficiency budget for that sector in each program year. As the opportunities for energy efficiency evolve in the marketplace, the need for distinct SBC rates for the residential and C&I sectors becomes paramount. In order to achieve increasingly ambitious EERS goals for kWh savings and demand reduction, it is imperative that the NH Utilities have the flexibility to collect revenues at different rates between the sectors.

A relatively high percentage of the investment in the residential sector results in fuel-neutral energy efficiency savings (i.e., heating and water heating savings from weatherization programs, which disproportionately reduces more fossil fuel use than electricity). This dynamic leads to a high cost to achieve kWh savings in the residential sector relative to the C&I sector. Maintaining an identical SBC rate for residential and C&I customers would lead to a disproportionate amount of funding for NHSaves Residential Programs, as well as residential rates that are unnecessarily high, and which contribute relatively little to the EERS' electricity savings goals. This disconnect will be exacerbated as the opportunity for claimable energy efficiency savings from residential lighting is greatly reduced over the coming term as a result of market transformation to LED technology.

A review of other jurisdictions shows that setting distinct energy efficiency rates for each customer sector is the norm.[16] By following suit, the NH Electric Utilities will be able to better target electric

---

[16] Eversource, MA (2020). Summary of Eastern Massachusetts Electric Rates for Greater Boston Service Area, Effective Jan. 1, 2020. Retrieved from: https://www.eversource.com/content/docs/default-source/rates-tariffs/ema-greater-boston-rates.pdf?sfvrsn=c27ef362_40.
Baltimore Gas & Electric (2020). Electric Efficiency Charge. Filed Nov. 18, 2019 and Effective Jan 1. 2020. Retrieved from https://www.bge.com/MyAccount/MyBillUsage/Documents/Electric/Rdr_2.pdf.
Efficiency Vermont (2019). Summary of Energy Efficiency Charges for 2019. Retrieved from https://www.efficiencyvermont.com/Media/Default/docs/EEC-rates/VECBill_Insert2018_Final.pdf.

funding to where it is most cost effective, capturing electric savings opportunities where they exist in order to achieve increasingly ambitious EERS goals.

Pursuant to state legislation, at least 20 percent of all SBC funds for energy efficiency shall be budgeted for low-income energy efficiency programs.[18] Additionally, the NH Utilities have committed to budgeting and spending at least 17 percent of the total portfolio investment on low-income energy efficiency programs. Other than the revenues needed for the low-income programs (which are funded by both the residential and C&I sectors, relative to revenues), SBC and LDAC funds will continue to be dedicated to the sector from which they are collected.

The electric energy efficiency programs will continue to receive and rely on revenues from two other sources: the proceeds from each NH Electric Utility's participation in ISO-NE's FCM, and New Hampshire's participation in RGGI. FCM revenues are unique to each utility and are based on the amount of capacity each NH Electric Utility has bid into and delivered to the market over the past decade. Revenues from RGGI have been relatively fixed for the past several years based on legislation that limits to $1 per allowance the amount of funding made available to the energy efficiency programs. Further restrictions on how the RGGI revenues can be spent limit most funding to the Municipal (C&I) and Home Energy Assistance (Residential) programs.

Actual and expected revenues from these two streams, as well as interest earned on balances, offset revenues needed by each of the NH Electric Utilities when proposing each year's SBC rate.

### 2.1.4 Performance Incentive

Under the proposed three-year planning structure, each NH Utility's PI will be determined based on achievement over the full three-year term. The NH Utilities propose to retain the new PI framework

---

Georgia Power (2020). Demand Side Management Residential & Commercial Schedules: "DSM-R-8". Retrieved from, 1) https://www.georgiapower.com/content/dam/georgia-power/pdfs/residential-pdfs/residential-rate-plans/DSM-R-8.pdf, and 2) https://www.georgiapower.com/content/dam/georgia-power/pdfs/business-pdfs/rates-schedules/small-business/DSM-C-7.pdf.
CenterPoint Energy Houston Electric, LLC (2020). Tariff for Retail Delivery Service. Retrieved from https://www.centerpointenergy.com/PublishingImages/CNP/Common/SiteAssets/doc/CNPRetailDeliveryTariffBook12107.pdf.

approved by the Commission in Order 26,323 for the 2021-2023 term, with a modification to incorporate the active demand response kW goal in the calculation and adjustment to the threshold percentages as explained in Section 10.2. More substantively, the calculation of the Benefit-Cost Ratio ("BCR") will be amended to reflect the new Granite State Cost Test, which removes customer costs and non-energy benefits from the calculation of the BCR.

For the NH Utility annual reports, each NH Utility will complete a preliminary PI calculation based on actual costs, savings, and benefits for the program year. At the end of the third year of the three-year term, each NH Utility will perform a final calculation of earned PI, based on actual achievement over the term compared to the three-year term goals. After the Commission's final audit is complete, the resulting PI for the entire term will be considered approved, and subsequent SBC filings will adjust rates to account for any over or under recovery of PI.

Additional discussion of the PI calculation, drawing from the 2019 PI Working Group Report, can be found in Chapter Ten.[17]

### 2.1.5 Reporting

As discussed above, each NH Utility will calculate actual achievement of term goals, budgets, and PIs as part of a comprehensive Term Report. The NH Utilities will report actual achievement relative to planned goals, as adjusted by any mid-term modifications (see Section 2.1.6, "Commission Notification and Mid-Term Modifications"). The Term Reports, along with a statewide summary, will be filed with the Commission no later than August 1st after the conclusion of the final year of the three-year term. The Commission will perform its final audit of the 2021-2023 term based on the Term Report and grant final cost recovery and PI following such investigation.

In addition to the Term Report, quarterly reporting over the course of the 2021-2023 term will ensure continued transparency into the progress of the NH Utilities in achieving the proposed goals, as well as

[17] 2019 PI Working Group Report. Available at: https://www.puc.nh.gov/EESE%20Board/EERS_WG/20190913-EERS-WG-PI-FINAL-REPORT.pdf.

provide an opportunity for New Hampshire's regulators and stakeholders to engage with the NH Utilities to provide feedback on the evolving market for energy efficiency. The NH Utilities will continue to submit a joint Quarterly Report no later than 60 days after the end of each quarter.

For the first and second years of the term, a statewide Annual Report will be filed with the Commission. Assumptions underlying the reported savings and benefits will be based on that year's Report and TRM, as discussed in more detail below. Updated avoided costs from the 2021 AESC Study will also be applied to the 2022 and 2023 Annual Reports for the purpose of calculating benefits. In addition, each Annual Report will detail the progress made by the NH Utilities individually and as a group toward achieving the three-year goals, as well as estimated PI earned that year for each of the NH Utilities.

Each NH Utility's Annual Report will also include a projection of anticipated term spending, savings and benefits over the term. While the Term Report will be subject to a comprehensive review by the Commission, the Annual Report filing will not include a formal adjudicative process unless the Commission deems further investigation necessary. This structure will provide the Commission and stakeholders the continued ability to assess cost effectiveness and progress toward goals on an annual basis. In addition, the structure will reduce administrative time and cost burdens, and will continue to provide the opportunity for comprehensive review after the term has concluded but before the final PI is booked.

By December 1st of each year, the NH Utilities will file an updated TRM, reflecting prospective changes to measure assumptions that will take effect on January 1st of the following program year. This TRM will incorporate all evaluation findings, marketplace changes, emerging technologies, changing federal and state regulations, building code standards, and other pertinent information impacting measure savings assumptions. For the 2021-2023 term, the NH Utilities anticipate producing three TRMs, which are detailed in Table 2-1 on the next page:

**Table 2-1: Planned TRMs during the 2021-2023 Plan Term**

| TRM Version | Used for: |
|---|---|
| 2021-2023 Plan TRM, revised draft filed with Plan[18] | Planned 2021-2023 activity<br>Reporting 2021 actual activity |
| 2022 TRM for Reporting, to be filed 12/1/2021 | Reporting 2022 actual activity |
| 2023 TRM for Reporting, to be filed 12/1/2022 | Reporting 2023 actual activity |

This TRM update process will be managed by the EM&V Working Group, which consists of NH Utility members, as well as the Commission's evaluation consultants, Commission Staff representatives, and a liaison to the EESE Board who is nominated and approved by vote of the EESE Board representatives. The NH Utilities will strive to include consensus-based assumptions for all measures and offerings included in the NHSaves Programs. Should consensus not be reached, members of the EM&V Working Group may petition the Commission for resolution on the matter. For more information regarding the EM&V process, see Chapter 11.

In order to provide the Commission and EESE Board with information on the results of the 2021 regional AESC Study, the NH Utilities will also submit an informational report to the Commission and EESE Board in the fall of 2021, documenting the impact on planned benefits over the three-year term. As part of this informational report, each NH Utility will calculate the impact of the updated avoided costs on the approved plan for 2022 and 2023. The report will allow for a comparison by year of 2022 and 2023 Commission-approved benefits and cost-effectiveness calculations with the projected benefits and cost effectiveness applying the results of the AESC Study.

As noted above, while the new AESC Study will impact reported benefits, the NH Utilities will not change their *planned* savings or benefits goals unless a mid-term modification trigger occurs, and the Commission approves a requested change. If the impact of the AESC Study (alone or in conjunction with other evaluation results) is substantial enough to require a modification, each of the impacted NH

[18] The 2021-2023 Plan TRM is substantially complete, but some chapters are still under review by members of the EM&V Working Group. The NH Utilities will finalize and publish the complete TRM as soon as possible, in accordance with the 2018-2020 settlement agreement to complete a TRM by December 31st of the final year of the triennium. See Section 10.3 for further details.

Utilities will develop and file a proposed revision of plan goals and budgets in accordance with the process set forth in Section 2.1.6.

### 2.1.6 Commission Notification and Mid-Term Modifications

While a true three-year plan will lead to improved continuity of programs, flexibility, and minimization of time spent in adjudicative proceedings, some changes may be significant enough to necessitate a mid-course correction that requires adjustments to the NH Utilities' approved plans. The NH Utilities propose two mechanisms for amending the term plan based on the significance of the change(s) requested. The first mirrors the current practice of alerting the Commission and stakeholders regarding relatively modest changes in program budgets, program design or delivery, or measure offerings. The second type of amendment will require one or more individual utilities to file a mid-term modification, which the Commission must approve in order for the proposed change to take effect.

**Circumstances Requiring Notification to the Commission:**

- Adjusting program budgets by less than 20 percent of its approved term budget.
- The transition from a pilot offering to a full offering that does not trigger one or more of the conditions requiring a mid-term modification.
- The annual filing of the TRM, which includes modifications to measure level assumptions (e.g., measure life, gross savings, in-service rates, net-to-gross factors, load shape, coincidence factors, algorithms, etc.) that will be used in reporting savings and benefits.

A Commission notification under this section will not result in a change to approved three-year plan goals or budgets.

**Circumstances Requiring a Mid-Term Modification and Approval by the Commission (by one or more of the NH Utilities):**

- Inclusion of a new program.
- The suspension or closure of an approved energy savings program.
- An increase in a sector's approved term budget exceeding 110 percent of the original budget dollar amount:

  - The NH Utility proposing such change will also file an associated change to the budget for income-eligible programs in order to satisfy NH Rev Stat 374-F:3, VI.

- A projected decrease to the planned and approved benefits or primary annual energy savings (kWh or kW) for NH Electric Utilities; MMBtu for NH Natural Gas Utilities) in a particular sector of greater than 25 percent over the term.
- A change to the planned and approved Granite State Test's portfolio benefits or primary energy savings (kWh or summer kW for NH Electric Utilities, MMBtu for NH Natural Gas Utilities) greater than 10 percent in either direction over the term resulting from:
  - An update to the AESC Study; and/or
  - Evaluation findings.
- An approved mid-term modification under this section will result in a corresponding change to a NH Utility's plan goals or budgets. The NH Utility will compare actual term performance with the modified and Commission-approved plan goals and budgets in its respective Term Report.

### 2.1.7 Exceptions

In exigent circumstances, a NH Utility may petition the Commission for an exception to the specific mid-term modification triggers and procedures set forth above. The NH Utility shall have the burden to demonstrate the compelling nature of such request.

### 2.1.8 Program Continuity

The NH Utilities have designed the NHSaves Programs to be open and available year round throughout the three-year term in order to achieve the planned energy savings and to maximize customer satisfaction and minimize market disruption with key channel partners such as contractors, equipment suppliers, and distributors. In order to be responsive to the market, ensure consistent program availability and achieve goals, the NH Utilities may make specific program changes as needed during the term, including:

- Adjusting program marketing activity levels to ramp up or slow down demand;

- Modifying incentive levels for certain programs or measure categories;
- Introducing time-based incentives, which could involve promoting more limited period offerings, as well as potentially promoting higher incentive offers during periods of lower or seasonal demand where there may be greater contractor availability;
- Transferring available program funds from underperforming programs into programs with higher demand within the same sector; and
- Amending per-customer maximum project cap levels to help extend program availability.

# Chapter Three: NHSaves C&I Energy Efficiency Programs

**Since 2002, the NH Utilities have implemented programs to help improve the efficiency of small and midsize businesses, municipalities, and large C&I customers across New Hampshire. The NHSaves C&I Programs are designed to help businesses and municipalities reduce operating costs, purchase high-efficiency equipment and technologies, and increase productivity. Also, the C&I Programs defer the need for additional generation on the electric grid and protects the environment through reduced electricity, natural gas, and fossil fuel consumption.**

## 3.1 Overview

In addition to serving customers, the NHSaves C&I Programs collaborate with a mature and robust network of stakeholders, including but not limited to: energy efficiency contractors, architects, developers, distributors, manufacturers, and retailers. The NH Utilities provide education, incentives, design and technical assistance, and workforce development opportunities to promote investment in energy-efficient technologies and designs in C&I buildings and facilities.

For the 2021-2023 term, the NH Utilities are focused on scaling up energy savings and program participation for the NHSaves C&I Programs. The NH Utilities will support these goals by expanding their outreach to towns and business customers, incentivizing emerging energy-efficient technologies, ensuring convenient customer access to capital, developing an enhanced workforce development strategy, and encouraging customer participation through standard offer marketing pieces.

Through market research and data analytics, the NH Utilities can identify what financing mechanisms, incentives, and market actions are needed to convince a C&I customer or market segment to invest in energy-efficient equipment and process improvements. Over the next three-year period, the NH Utilities will continue to apply market research and customer insights gleaned from data analysis to identify key C&I segments and customers and deliver packaged marketing and incentive solutions tailored to their needs. During the 2021-2023 term, the NH Utilities will also develop standard offer marketing pieces for targeted market segments and end-use equipment.

The NHSaves' C&I Programs are continuously evaluated by independent third parties to determine how processes, procedures, energy savings calculations, and incentives can be improved. Once these evaluations are completed, the NH Utilities review the third-party's findings and recommendations to determine how they can improve the delivery of the NHSaves C&I Programs. The flexibility in design allows the NH Utilities to respond quickly to changing codes and standards, customer demand, economic conditions, emerging technologies, market transformation, and new federal and state laws.

### 3.1.1 2021-2023 C&I Program Priorities

For more than 20 years, the NH Utilities have designed and delivered valuable energy efficiency services to municipalities, small businesses, commercial entities, and industries across the state. The primary focus of the NH Utilities during the 2021-2023 term is to tailor energy efficiency solutions to the customer. Each C&I customer's business needs, energy consumption, on-site technical expertise in energy-efficient technologies and design, and access to capital are varied and unique. Different market segments, such as municipal buildings, convenience stores, manufacturers, and ski resorts, demand different solutions that do not fit into a one-size-fits-all approach.

To realize investment in energy-efficient technologies and building design, the 2021-2023 term will emphasize the following C&I Programs' priorities:

1. **Achieve Cost-Effective and Comprehensive Energy Savings.** The NH Utilities will continue their long-term push to motivate C&I customers and contractors toward implementing cost-effective, comprehensive projects at customer facilities and buildings. To promote

comprehensiveness, the NH Utilities may implement a tiered incentive approach for all C&I Programs to encourage multi-measure projects that move beyond common lighting upgrades.

2. **Scale Up to Deliver Increased Savings While Stimulating Market Transformation.** During the 2021-2023 term, the NH Utilities will look to develop strategic initiatives and support emerging technologies in the marketplace to create market demand for energy-efficient products and building design.

3. **Expand Reach of Programs by Serving More Customers.** The NH Utilities will expand efforts to reach hard-to-serve and rural small businesses, municipalities, and large C&I enterprises throughout the 2021-2023 term. The Small Business Energy Solutions and Municipal programs' turnkey direct-install pathways will support Main Street efforts and community blitzes targeting microbusinesses, small municipal accounts (libraries and town halls), and downtown areas to engage C&I customers in energy efficiency efforts.

4. **Deliver Excellent Customer Experience.** The NHSaves Programs provide great opportunities for the NH Utilities, as trusted entities within the state and local communities, to engage customers in energy efficiency and deliver excellent customer experience. The NH Utilities have refined and streamlined the C&I Programs' design for the 2021-2023 term that will deliver packaged marketing and tailored solutions to New Hampshire's businesses and municipalities.

5. **Encourage Customer Participation with "Standard Offer" Information.** For the 2021-2023 term, the NH Utilities will create standard offer marketing pieces, such as sell sheets and presentations, specifically developed for market segments (e.g., convenience stores, manufacturing, multifamily buildings, restaurants, retail stores, etc.) and end-use equipment (e.g., compressed air, industrial boilers, LED fixtures and controls, motors, retro-commissioning, VFDs and controls, HVAC including heat pumps, low-energy snowmaking guns, etc.). Standard offer marketing collateral packages will serve as market and facility-specific energy efficiency guides to help small and large C&I customers and contractors understand potential incentives, energy-efficient measures, and other energy-saving opportunities.

The NH Utilities have extensive expertise in effectively implementing the NHSaves C&I Programs and understand the target markets, end-use systems and equipment, participation barriers, and market actors (i.e., trade ally networks). The creation of a targeted, streamlined presentation of incentive options will encourage additional participation in the C&I Programs.

6. **Engage with Stakeholders to Increase Customer Participation.** For the Municipal and Small Business Energy Solutions programs, the NH Utilities will increase collaboration with New Hampshire's towns and cities by building a community network of energy champions that includes municipal representatives, sustainability groups, energy committees, and economic development commissions.

7. **Expand Product and Service Provider Infrastructure.** During the 2021-2023 term, the NH Utilities will continue to expand point-of-sale (midstream) incentive offerings by working with distributors and equipment manufacturers to monitor and evaluate new and emerging technologies. In collaboration with regional distributors, the NH Utilities will conduct periodic refreshes and introduce technologies to align efforts with customer demand and emerging technologies.

8. **Stimulate Customer and Other Private Investment.** To encourage C&I customer investment in energy efficiency projects, the NH Utilities will continue to explore and evaluate financing mechanisms throughout the 2021-2023 term. For the Small Business Energy Solutions program, the NH Utilities will look to establish a permanent source of capital for financing energy efficiency projects.

### 3.1.2 C&I Programs

The NH Utilities have three statewide C&I Programs that deliver vital energy efficiency services, technical assistance, and incentives to New Hampshire's industrial, large commercial, municipal, and small business customers. Figure 3-1 details the 2021-2023 NHSaves C&I Programs.

**Figure 3-1: 2021-2023 C&I Programs (Statewide)**


- **Small Business Energy Solutions Program.** Small businesses are the backbone of the state's charm and economic development. This retrofit and new equipment & construction initiative offers technical expertise and incentives to small business customers who lack the dedicated staff, time, or resources to address energy costs. This program allows small business owners to achieve energy savings while continuing to invest their time and resources in the business market they're operating in, customer service, and innovation.

- **Municipal Program.** This NHSaves energy efficiency solution provides technical assistance and incentives to municipalities and school districts to help them identify energy-saving opportunities and implement projects. The Municipal program was established by legislation and is administered by the NH Electric Utilities and provides fuel-neutral opportunities for energy savings. The NH Natural Gas Utilities also service municipalities by seamlessly providing the same key services and incentives to towns and cities through the Small Business Energy Solutions and Large Business Energy Solutions programs.

  Energy efficiency programs help town and school officials reduce their buildings' high energy costs, often a large component of their operations and maintenance ("O&M") budgets. This allows these entities to reduce O&M budgets or redirect the savings toward other priorities.

- **Large Business Energy Solutions (Retrofit and New Equipment & Construction) Program.** The program offers technical services and incentives to assist large C&I customers who are retrofitting existing facilities or equipment, adding or replacing equipment that is at the end of its useful life, or constructing new facilities or additions.

In addition to the three statewide programs referenced above, Eversource implements a Large Business Energy Rewards Request for Proposal ("RFP") program.

**Figure 3-2: C&I Programs (Eversource Only)**


- **Large Business Energy Rewards RFP ("Energy Rewards") Program.** The Energy Rewards program encourages customers to propose energy efficiency projects through a competitive solicitation process.

## *Multifamily Offering*

During the 2021-2023 term, the NH Utilities will continue to work with multifamily building owners to encourage investment in energy-efficient measures through both the NHSaves Residential and C&I Programs. The NH Utilities will create a standard offer for multifamily buildings which will include marketing sell sheets, presentations, and targeted incentives to reach this market segment. This will provide multifamily building owners an overview of the NHSaves Programs.

The Large Business Energy Solutions program will target multifamily buildings where there are common-area lighting and master-metered natural gas heat energy-saving opportunities. Tenant area energy-efficient measures (e.g., appliances, lighting, water-saving devices, plug load, etc.) will be served through the NHSaves Residential Programs. In addition, the NH Utilities will investigate creating

a pathway for multifamily buildings over the next three-year period to incentivize comprehensive energy approaches that optimize the energy performance of common areas and tenant units.

### 3.1.3 Incentives

The NH Utilities are responsible for managing the overall energy efficiency budgets and for achieving an equitable distribution of program funds across customer types and market segments. To move customers to action once opportunities have been identified, the NH Utilities offer various financial incentives and resources that are calibrated to match customer investment criteria and reduce barriers to adoption, while maintaining cost effectiveness and minimizing costs of acquisition. Each of the NH Utilities may establish caps on the level of incentives offered by that utility to serve as guideposts for disbursing incentives.

### 3.1.4 Workforce Development

To scale up participation and drive deeper energy savings for the 2021-2023 NHSaves Programs, the NH Utilities and a consultant will develop a cohesive statewide workforce development strategy for understanding workforce development priorities and what training is needed for vendors, community action agencies, distribution contractors, building operators, and other energy efficiency stakeholders. For more information regarding the NH Utilities' planned workforce development strategy, see Chapter Nine.

### 3.1.5 Marketing and Outreach

During the 2021-2023 term, the NH Utilities will create standard offer marketing collateral packages (as described in Section 3.1.1.), including sell sheets and presentations designed to deliver C&I customers targeted, industry-specific information regarding energy-efficient incentive offerings that can help their business maximize energy savings, improve productivity, and reduce O&M costs.

In addition to the creation of the standard offer marketing collateral, the NH Utilities will market the C&I Programs through a variety of proven marketing channels, both directly to individual companies as well as broadly through a statewide marketing approach. These channels include but are not limited to: the NHSaves website, program promotional materials, direct mail, distributor engagement, e-mail,

outbound calling, active social media campaigns, paid digital advertising, billboards, radio/TV/music streaming advertisements, trade shows, public relations efforts (statewide and utility-driven), providing presentations for and hosting energy efficiency trainings, forums, and events, and providing content for partners' blogs, newsletters, and websites.

### 3.1.6 Financing

The NH Utilities recognize that financing mechanisms are effective in encouraging C&I customers to invest in comprehensive energy efficiency projects, especially when combined with the NHSaves Programs' energy-efficient incentives. The NH Utilities currently offer several financing options, including on-bill financing and low-interest/interest-free loans, to commercial, municipal, and industrial customers. During the 2021-2023 term, the NH Utilities will continue to offer several financing options to encourage C&I customers to pursue comprehensive and cost-effective energy efficiency projects.

#### *On-Bill Financing*

All of the NH Utilities offer on-bill financing mechanisms for commercial, industrial, and municipal customers. On-bill financing mechanisms help reduce upfront costs and allow C&I customers to repay loans through their monthly natural gas or electric bills. Customers gravitate toward on-bill financing due to the simplicity in applying for loans, and the fact that repayment is typically treated as an operating expense rather than a capital investment. These financing tools allow for more comprehensive energy-saving projects by reducing cost and transaction barriers. These offerings, including flexible caps and repayment periods, depend upon the NH Utilities having sufficient capital available in on-bill loan pools.

The NH Utilities will continue to focus the marketing of on-bill financing towards small and medium businesses that are prone to face more significant barriers to access low-cost capital. Small business customers are more likely to commit to comprehensive energy-saving projects if they can overcome the upfront cost barriers of installing high-efficiency equipment and controls through on-bill, zero-percent interest loans.

### Traditional On-Bill Financing

All NH Utilities offer a zero-percent on-bill financing revolving loan program to small business customers. Thanks to these programs, customers can install energy efficiency measures with no upfront costs and pay for them over time on their electric bills. Liberty Electric, Liberty Gas, Unitil Electric, and Unitil Gas also make on-bill loans available to municipal and large business customers. NHEC added $300,000 from Commercial carry over funds to its existing commercial on-bill revolving loan program for 2021.

### Smart Start

Eversource and NHEC offer Smart Start tariffs, tied to the meter, on-bill repayments to municipal customers. This financial offering provides municipal customers with the opportunity to install energy-saving measures with no upfront costs and the ability to pay for the measures over time on their electric bill with the savings realized from lower energy costs. Municipalities reimburse their utility (Eversource or NHEC) through charges added to their regular monthly electric bill.[19] [20] The Smart Start charges are calculated to be less than or equal to the customer's estimated monthly energy savings. NHEC also offers Smart Start to commercial customers.

## *Additional Financing Offerings*

In addition to on-bill financing offerings, the NH Utilities provide customers with or can connect customers to other options that can help them invest in energy efficiency. These include an online competitive loan platform (described below), as well as loan options offered by the Community Development Finance Authority ("CDFA"), the New Hampshire Business Finance Authority ("NHBFA"), and Property Assessed Clean Energy ("PACE") financing where available, and from other banks and lending institutions across the state.

---

[19] Eversource Delivery Service Tariff Rate SSP106 outlines the requirement for service under the SmartSTART financing option.

[20] NHEC pays all costs associated with the purchase and installation of approved energy efficiency measures. A SmartSTART Delivery Charge, calculated to be less than or equal to the monthly savings, is added to the member's monthly electric bill until all costs are repaid. NHEC's Delivery Service Tariff Rate SmartSTART SDC 107 outlines the requirements for service under the SmartSTART financing option.

## *Online Competitive Loan Platform*

In 2019, the National Energy Improvement Fund ("NEIF") presented its online competitive loan platform to the NH Utilities and Financing and Funding Working Group. The NEIF platform can be utilized by energy efficiency installation contractors to better market their services by presenting a variety of financing options directly to the customer at the point of sale. By entering the customer's specific project details into the platform, the contractor can match the project with lenders willing and able to satisfy the lending needs of the customer. If the customer chooses to follow through with one of the loans included in the platform, a portion of their project incentive can be utilized to buy down the interest rate to zero percent. The customer and their contractor are able to explore an initial analysis of cashflow and paybacks to help them choose the best loan option. Eversource began including the loan platform as one element in the portfolio of financing supports to its vendors and C&I customers in 2019.

## 3.2 Small Business Energy Solutions Program

### 3.2.1 Program Objective

The NH Utilities' energy efficiency offering for small and midsize businesses is the Small Business Energy Solutions program. This is both a turnkey retrofit, and new equipment & construction initiative that provides small commercial customers with technical expertise and incentives to improve the energy performance of their businesses and facilities.

Many small business owners face a variety of needs and market barriers that limit or prevent them from pursuing energy efficiency opportunities. These needs and barriers include a shortage of capital resources, lack of staff dedicated to operations and facility issues, time, expertise or awareness of energy efficiency programs and opportunities, and splitting incentives between a building owner and the tenants. The Small Business Energy Solutions program helps identify electric and natural gas-saving opportunities and guides business owners through the energy efficiency process. This allows small business owners to focus on customer service, entrepreneurship, and creating a competitive niche within their market segments.


### 3.2.2 Target Market

Small and midsize energy users are the target market for the program, and specifically those customers who use less than 200 kW annual demand (electric) or 40,000 Therms (natural gas), which represent 97 percent of the NH Utilities' C&I customer accounts.

The small and midsize business market segment has a diverse set of customer types, including convenience stores, dry cleaners, office buildings, private schools, repair and professional services, restaurants, general and specialty retail stores, and commercially or master-metered multi-tenant facilities just to name a few.

Throughout the 2021-2023 term, the NH Utilities will continue to apply data analytics to identify underserved small business market segments and determine if new measures or tailored solutions should be employed to engage them in energy efficiency programs. These include small businesses that are in rural or hard-to-serve markets where energy efficiency contractors and program outreach have traditionally been limited.

### 3.2.3 2021-2023 Priorities

During the 2021-2023 term, the NH Utilities will expand the design of the Small Business Energy Solutions program to drive electric and natural gas energy savings and develop multiple pathways to engage the hard-to-reach small business customer in energy efficiency. This includes the following priorities:

#### *Developing a Comprehensive Energy Efficiency Approach*

The NH Utilities plan to deliver tailored, comprehensive solutions to small business customers and drive electric and natural gas savings beyond lighting measures. This will be a long-term effort testing various channels, incentive models, on-bill financing mechanisms, and strategies to identify what motivates customers and contractors toward implementing cost-effective, comprehensive projects. The NH utilities offer no-cost walk through project scoping audits. The NH Utilities will also continue to offer cost-sharing comprehensive audit expenses with small business customers in order to help reduce barriers related to exploring holistic energy efficiency solutions.

To encourage comprehensiveness in the Small Business Energy Solutions program, the NH Utilities are exploring a tiered incentive approach for the 2021-2023 term. The NH Utilities' tiered incentive design would package rebates based on delivered energy savings of an entire project, rather than the current prescriptive approach of incentivizing individual energy-efficient measures. To complement this approach, the NH Utilities will increase the number of contractor trainings on non-lighting measures, including HVAC equipment and controls, Wi-Fi thermostats, and building controls.

## Incentivizing New Energy Efficiency Measures

With the diverse priorities of the state's small businesses, the NH Utilities recognize that varied business operations and needs require different equipment, systems, and "on ramps" to participate in energy efficiency. Throughout the 2021-2023 term, the NH Utilities will introduce new and emerging technologies to diversify the energy efficiency measure portfolio, including products such as high-efficiency VFDs for distribution systems, heat recovery ventilators ("HRVs"), and energy recovery ventilators ("ERVs"). The NH Utilities will look to align the state's energy-efficient product qualifications with other New England and neighboring states to create regional continuity.

For the 2021-2023 term, the NH Utilities will expand the program's point-of-service (midstream) distributor incentives now offered for commercial kitchen equipment (i.e., dishwashers, fryers, griddles, and ice machines) and HVAC equipment (i.e., heat pump water heaters ("HPWHs")) and gas water heating equipment. The NH Utilities will work to provide consistent qualified product offerings across all New England states and will also partner with distributors, equipment manufacturers, and the Massachusetts & Connecticut Technical Assessment Center to monitor and evaluate emerging energy-efficient technologies. This continual review will ensure that the NH Utilities are incentivizing up-to-date, energy-efficient solutions tailored to optimizing building performance and ensuring that distributors are stocking high-efficiency equipment.

## Outreach Initiatives

Small businesses are the backbone of New Hampshire's economy and vital to local communities. In an effort to extend the reach of the Small Business Energy Solutions program, the NH Utilities will continue to employ outreach initiatives, such as Main Street efforts and community blitzes, to meet small and midsize C&I customers where they conduct business.

These outreach initiatives are collaborations between the NH Utilities and the cities and towns they serve to create small business communities engaged in saving energy. These efforts provide targeted communications and direct outreach to customers explaining the Small Business Energy Solutions program, its benefits, and what customers can do to begin their energy efficiency journey. Participating small business customers receive energy assessments and recommended energy efficiency solutions

tailored to their business' needs, priorities, and energy-consuming equipment and practices. These marketing and outreach activities engage small business customers in NHSaves C&I Programs and efforts, thereby helping Main Street reinvest in employees, business operations, and the local economy. Please see Section 3.3.3 for more information about Main Street efforts and community blitzes.

### 3.2.4 Program Design

The NH Utilities are exploring segment- and facility-specific energy efficiency guides and standard offer marketing packages that enable small business customers and contractors to plan for more comprehensive energy-saving projects. In the 2021-2023 term, the NH Utilities will work with program contractors to develop these types of resources.

Small business customers are offered a number of channels to participate in the NHSaves C&I Programs and throughout the 2021-2023 term the NH Utilities will continue to simplify this process. For instance, small business customers can install high-efficiency lighting through multiple pathways, including: direct installation by program contractors, applying for downstream rebates for prescriptive and custom projects, and receiving midstream rebates. The NH Utilities will continue to look for new pathways to better align with contractor distribution models and customer engagement within the small business market segment.

As noted in the C&I Program priorities section (3.1.3), during the 2021-2023 term, the NH Utilities will create standard offer marketing collateral, including sell sheets and presentations, to provide targeted small business market segments with specific information and incentives tailored to their market's end-use systems and equipment. For example, a food and grocery store sell sheet would identify the incentives for commonly-incentivized measures, such as high-efficiency lighting and controls, HVAC systems and controls, and commercial refrigeration equipment.

In addition, the NH Utilities will focus efforts on developing the state's workforce to increase program participation and encourage comprehensive, cost-effective efficiency projects. The Small Business Energy Solutions program, like the other NHSaves Programs, is dependent upon a well-trained and

customer-oriented contractor network to promote its benefits, energy-efficient measures, incentives, financing mechanisms, and to help identify tailored solutions for New Hampshire's small business community.

### *Incentives*

The program provides incentives to customers to encourage the implementation of cost-effective, energy efficiency projects. For the 2021-2023 term, the Small Business Energy Solutions program will continue to develop and refine measure initiatives over time. There are two types of incentives for energy-efficient measures—prescriptive and custom.

- **Prescriptive Incentives.** These incentives are fixed-price rebates for pre-qualified energy efficiency measures and are designed to streamline the process for customers who are installing common technologies.
- **Custom Incentives.** These incentives are flexible and allow customers to determine if a non-standard (not on the prescriptive list or overly complex) energy efficiency measure is cost effective. These types of incentives rely on engineering calculations to evaluate cost effectiveness and determine energy savings. As these incentives are more customer centric, custom rebates allow for more comprehensive energy efficiency projects that are tailored and unique to a particular small business. Custom projects are reviewed on a case-by-case basis and may require a technical study to present the planned energy savings and project costs.

For the 2021-2023 term, the NH Utilities will implement a tiered incentive level design for comprehensive energy efficiency projects with multiple measures. For lighting projects beyond fixture replacements only, incentives may be increased to account for greater savings derived by the addition of one or more control strategies. For projects that have a minimum of one or more non-lighting end uses with each end-use defined as a natural gas or electric measure impacting heating, cooling, lighting, process, domestic water heating, refrigeration, motors and drives, etc., incentives could be enhanced for each additional measure that increases savings beyond that single measure. Savings from each additional measure must be significant enough to warrant the additional incentives.

In addition, the Small Business Energy Solutions program may offer higher incentive levels for small microbusinesses, nonprofits, or customers in rural areas to broaden the NH Utilities' reach into hard-to-serve and underserved markets.

## Measures

Throughout the 2021-2023 term, the NH Utilities will continuously look for new energy efficiency measures to incentivize through the Small Business Energy Solutions program. This will include reviewing new and emerging technologies, such as controls, evaluated by the Massachusetts and Connecticut Technical Assessment Center.

The program will provide incentives for prescriptive high-efficiency equipment, including, but not limited to: air compressors, commercial kitchen equipment (e.g., dishwashers and ice machines), electric HVAC equipment (e.g., heat pumps and unitary air conditioners), HVAC controls, LED lighting, lighting controls, motors, spray rinse valves, variable speed drives ("VSDs"), water heating equipment, and Wi-Fi thermostats.

Throughout the three-year plan, the NH Utilities will pursue more comprehensive projects that look at energy efficiency as a long-term journey for the small business customer. This new approach can include a tiered incentive structure encouraging the installation of non-lighting measures in small business customers' buildings and facilities. To deliver tiered incentive measures the NH Utilities will collaborate with energy service companies and other turnkey service providers who have staff or sub-contractors capable of installing multiple energy efficiency measures.

Custom measures will include but are not limited to: energy management systems and controls, insulation and air sealing, integrated air compressors, specialized equipment (e.g., polymer bead washing machines), and industrial process equipment.

## Multiple Program Pathways

The Small Business Energy Solutions program is designed to provide hard-working small business owners with multiple pathways to engage in energy efficiency. These options allow the NH Utilities to broaden program reach to the different market segments, business sizes, and customer types that fall

under the "small business" umbrella. Whether a small business is replacing failed or end-of-life equipment, has aging, inefficient equipment and systems, or is planning for a major renovation or new construction project, there is a program option allowing customers to choose an energy-efficient solution designed for them.

The program's pathways include turnkey direct-installations, customer-directed installations, and midstream incentives.

### Turnkey Direct Installations

Turnkey direct installation is the program's simple, easy-to-use pathway that removes the initial barriers to energy efficiency (e.g., time, shortage of capital resources, and expertise or awareness of energy efficiency opportunities) and delivers solutions to small business customers. Professional trade ally contractors perform an initial assessment of the small business and its existing equipment at no cost to the customers. Then, the contractors recommend energy-efficient improvements, and directly install customer-approved measures, including, but not limited to: hot water-saving measures, LED lighting and controls, programmable Wi-Fi thermostats, commercial refrigeration measures, spray rinse valves, and weatherization measures.

As program administrators, the NH Utilities establish the pricing of energy-efficient measures, approve comprehensive custom projects, review energy savings proposals, and issue incentives. Contractors are paid directly for the incentive portion of approved energy efficiency projects: ensuring upfront costs are not a barrier to small business customer participation. The NH Utilities and energy efficiency contractors work with business owners to guide them through the program's processes, determine which prescriptive and custom measures can be installed, and assess how each business can optimize its facility's energy performance. In addition to routine marketing efforts, the NH Utilities promote the Small Business Energy Solutions program through Main Street efforts and community blitzes.

### Customer-Directed Installations

To streamline and increase participation, the NH Utilities also encourage customer-directed installations (measures installed by the customers' vendors of choice) of energy-efficient equipment through prescriptive incentives for common, pre-qualified measures.

**Midstream Incentives**

Midstream (point-of-sale) incentives encourage distributors to stock and promote energy-efficient equipment and systems, including, but not limited to lighting, HVAC, commercial kitchen, and water heating equipment. The midstream rebate approach is an effective way to impact the broader marketplace and influence what distributors purchase and make available throughout their product inventory. Midstream rebates increase the availability of energy-efficient products in the marketplace, streamline the transaction process for the customer (i.e., no rebate forms), and play a critical role in encouraging program participation and increasing energy savings.

### 3.2.5 Program Budget and Goals

**Table 3-1: Small Business Energy Solutions Program—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $18,256,109 | $23,519,869 | $26,472,350 | **$68,248,328** |
| Annual kWh Savings | 44,565,529 | 51,966,852 | 57,983,341 | **154,515,722** |
| Lifetime kWh Savings | 578,904,251 | 677,515,283 | 761,818,067 | **2,018,237,600** |
| kW Reduction | 5,305 | 5,725 | 6,234 | **17,264** |
| No. of Participants | 6,106 | 5,851 | 5,186 | **17,143** |
| **Natural Gas Programs** | | | | |
| Program Budget | $2,170,666 | $2,490,353 | $3,149,503 | **$7,810,522** |
| Annual MMBtu Savings | 34,139 | 38,422 | 43,814 | **116,374** |
| Lifetime MMBtu Savings | 574,867 | 647,631 | 738,300 | **1,960,797** |
| No. of Participants | 1,211 | 1,287 | 1,383 | **3,881** |

**Note:** kWh = kilowatt hours, kW = kilowatts, and MMBtu = million British thermal units.

## 3.3 Municipal Program

### 3.3.1 Program Objective

The Municipal program was established by legislation to focus RGGI energy efficiency revenues on New Hampshire's towns and cities and is administered by the NH Electric Utilities.[21] The objective is to help local communities to better identify, plan, and implement energy efficiency projects to help reduce the energy intensity and operating costs of municipal and school buildings. This turnkey retrofit and new construction program provides incentives and technical assistance to municipalities and school districts replacing existing equipment with high-efficiency alternatives, installing new equipment or systems, or planning major renovation or new construction projects. In addition, the program provides fuel-neutral weatherization services for existing municipal buildings to help reduce energy costs and promote comprehensive energy-saving projects.

The municipal sector (municipal and school buildings) is a large and important customer segment of the NH Utilities. Energy-efficient projects allow New Hampshire's towns and cities to reduce their operational costs and shift energy bill-related funds toward other priorities. The Municipal program is a close collaboration among the NH Electric Utilities, municipal representatives, and citizen stakeholders, including community energy committees.

The program's effective design allows the NH Electric Utilities to help municipal representatives and staff eliminate unique market segment barriers to planning and implementing energy efficiency projects. These barriers include a shortage of time, expertise or awareness of energy efficiency programs and opportunities, and the number of dedicated staff for facilities and operations. In addition, municipalities face other barriers that limit participation in energy efficiency programs, including the short operating hours of municipal buildings (resulting in reduced cost-benefit savings),

[21] RSA 125-O:23. Available at: http://www.gencourt.state.nh.us/rsa/html/X/125-O/125-O-23.htm. NH Senate Bill 123 ("SB 123") requires that the NH Electric Utilities ensure municipal customers have priority access to these funds. If after four months however, program funding is not fully allocated, the dollars will be offered to other business customers who contribute to the Systems Benefit Charge. This legislatively-directed funding for the Municipal program goes specifically to the NHSaves Electric programs and not the NHSaves Natural Gas programs.

the long-term budgeting and approval process of towns and cities for capital improvements, and the cyclic electoral turnover of municipal representatives.

### 3.3.2 Target Market

Municipalities and school buildings are the target market for the Municipal program, including both large and small energy users. The Municipal program covers a diverse array of energy-efficient projects, ranging from large comprehensive school district upgrades to small wastewater facility renovations. The program provides technical assistance and incentives to encourage comprehensive and fuel-neutral energy savings from electric, oil, and propane municipal customers. All municipal and local government energy efficiency projects are eligible to participate in the program, including local governments with municipal utilities, such as Ashland, Littleton, New Hampton, Wolfeboro, and Woodsville.

While the Municipal program is administered by the NH Electric Utilities, the NH Natural Gas Utilities provide the same C&I rebates, technical assistance, and financing to municipalities; however, these are offered through other NHSaves C&I Programs. The NH Utilities work closely together to ensure that the process for municipalities to participate in energy efficiency projects, regardless of electric, natural gas, or other fuel measures, is uniformly accessible.

### 3.3.3 2021-2023 Plans

For the 2021-2023 term, the NH Electric Utilities are considering a number of innovative approaches to expand the Municipal program's reach and energy savings. These include:

#### *Increasing the Comprehensiveness of Municipal Projects*

For the 2021-2023 term, the Municipal program will continue to pursue more comprehensive projects in municipal and school buildings, including potentially offering a new tiered incentive design to encourage the installation of multiple, non-lighting energy-efficient measures. If implemented, this proposed incentive design change would increase energy savings for municipal customers and drive comprehensiveness in school and town building renovation and new construction projects.

The NH Utilities will explore splitting comprehensive energy audit costs with municipal customers. Currently, these costs are seen as an upfront barrier to municipalities and school districts that prefer funds to be directed toward short-term energy fixes rather than long-term energy planning and solutions. Municipal capital projects involve long-term planning and goals which do not always align with the current annual savings goals for the NHSaves C&I Programs. For the 2021-2023 term, the NH Utilities will encourage long-term projects that consider comprehensive, multi-measure and multi-year energy solutions rather than short-term, energy-efficient fixes. This effort will involve the NH Utilities encouraging program contractors to shift toward multi-year strategies and energy savings goals, rather than annual goals, and encouraging process improvements.

In addition, the NH Utilities will increase the number of contractor trainings on non-lighting energy-efficient measures, such as commercial kitchen equipment, HVAC systems and controls, commercial refrigeration measures, programmable Wi-Fi thermostats, and VFDs. This will increase contractor awareness and education regarding new and emerging technologies that can help them customize energy solutions for a municipality's needs.

### *Engaging Municipalities and New Hampshire Communities in Energy Efficiency*

Continuing for the 2021-2023 term, the NH Utilities remain committed to increasing collaboration with municipalities and building a community network of energy champions that includes sustainability groups, community energy committees, and economic development commissions from across the state. Municipalities with energy-efficient town and school buildings serve as sustainable role models, educating and empowering citizens and businesses to participate in NHSaves Residential and C&I Programs.

The NH Utilities will continue to work with the Community Relations and Account Executive departments to engage municipal leaders to help identify appropriate energy champions within that community. Outreach will also be conducted by leveraging existing relationships already developed through the local energy committees.

### Main Street Efforts

In 2020, the NH Utilities initiated the Main Street efforts. This unique initiative allows the NH Utilities to focus outreach efforts on specific neighborhoods and to provide personal attention to the small businesses and smaller town and city accounts in that community. Initially, the NH Utility that serves the community will partner with a municipality to lead an "energy blitz" campaign to educate local businesses about the NHSaves C&I Programs, energy-saving measures, incentives, and financing tools that can help reduce energy consumption and save money. The applicable NH Utility will send out communications to the targeted community letting it know about the Main Street campaign in the community, including specifics regarding its duration, objectives, program partners, and how a small business can engage in energy efficiency.

Then, an NH Utility-authorized contractor will perform a no-cost energy assessment of businesses to identify energy-saving opportunities, such as high-efficiency lighting and controls, Wi-Fi thermostats, occupancy sensors, and commercial refrigeration measures and controls. During the assessment some of these measures are immediately installed, while larger energy-saving projects, such as new HVAC systems and controls, are scheduled for direct installation at a later date.

During the 2021-2023 term, the NH Utilities plan to continue Main Street efforts and offer increased incentives for micro-businesses, small town and city accounts, such as libraries and town halls. These efforts will be supported by direct outreach through NH Utilities' employees who work closely with municipalities and energy committees to leverage partnerships with chambers of commerce, Main Street groups, and affinity groups (e.g., NH Lodging & Restaurant Association, NH Grocers Association, NH Manufacturing Extension Partnership, etc.) to conduct more aggregated campaigns rather than single-customer marketing activities. Main Street efforts will also utilize the new standard offer materials to provide targeted marketing collateral to market segments and microbusinesses typically not targeted by the C&I Programs' turnkey vendors.

To ensure that the NH Utilities are strategically focusing Main Street efforts, the NH Utilities will look to establish a steering committee comprised of municipalities, energy committees, stakeholders, and community partners during the 2021-2023 term. This steering committee will help the NH Utilities

establish a clear set of guidelines for selecting (i.e., qualifying) a community for Main Street efforts to ensure its efficacy and cost-effectiveness.

**Additional Municipal Engagement**

In addition, the NH Utilities will explore ways to enhance municipal engagement by providing technical assistance and project management support for towns and cities with limited or no facility operations staff. Efforts will be made to help guide small and rural towns and cities through the energy efficiency process and provide education on the programs and incentives. The NH Utilities will provide additional technical assistance to help municipal customers review proposals, implement long-term planning, develop sustainable procurement policies, and how to discuss projects with the community at town and school board meetings. This increased technical assistance, combined with additional workforce development and the new Granite State benefit-cost test will allow less cost-effective projects (small municipal buildings with lower operating hours) to be implemented in rural and small towns across the state.

***Increasing Number of Comprehensive Fuel Neutral Projects***

The Municipal program is funded by RGGI to deliver fuel-neutral measures to New Hampshire's town and city buildings, facilities, and schools. During the 2021-2023 term, the NH Utilities stand ready to adjust programs if RGGI funding changes to help the state's municipalities save energy and money. Therefore, the NH Utilities will plan accordingly to increase the number of fuel-neutral projects in school districts through enhanced incentives for comprehensive energy efficiency solutions, including air sealing, insulation, and HVAC equipment and control measures. If RGGI funding is exhausted, the NH Utilities will work with the municipality to offer solutions through the other C&I Programs.

### 3.3.4 Program Design

The Municipal program covers a diverse array of building types, such as school buildings, town offices, public works facilities, police and fire stations, and libraries. For the 2021-2023 term, the NH Utilities will offer an array of C&I solutions, incentives, technical assistance, and financing options to support the state's municipalities in implementing energy-efficient projects. Similar to the other NHSaves C&I Programs, the Municipal program focuses on providing seamless pathways for customers to participate

in energy efficiency projects. Though programs, measures, and incentives are detailed in the 2021-2023 Plan, the NH Utilities work with municipalities to present efficiency solutions tailored to them.

The NH Utilities are consistently looking for new ways to simplify the process for municipal customers and contractors to engage in energy efficiency. Municipal customers have several pathways to install high-efficiency lighting, including direct install, downstream rebates for prescriptive and custom projects, and upstream rebates. In addition to the direct-install option, the NH Utilities envision a new mid-size comprehensive model for municipal customers. The NH Utilities have also moved certain existing downstream offerings upstream, such as commercial kitchen equipment to make a municipality's participation seamless. Throughout the 2021-2023 term, the NH Utilities will continue to develop new pathways to better align with contractor distribution models and customer engagement within the municipal market segment.

## *Incentives*

Similar to Small Business Energy Solutions, the Municipal program offers prescriptive and custom incentives to encourage towns and cities to implement energy efficiency projects.

### Prescriptive Incentives

Prescriptive incentives allow customers to select measures from a pre-qualified energy-efficient measure list and receive a set rebate amount to cover the incremental cost of installing a high-efficiency measure rather than a standard product. Municipal customers can receive prescriptive incentives through turnkey contractors (see Program Pathways section) if they are installing standard energy-efficient measures.

### Custom Incentives

The Municipal program also offers custom incentives that are determined based on engineering calculations and analyses. By offering custom incentives, the NH Utilities encourage customers to consider tailored solutions to reduce the energy intensity of their town's or school district's buildings and facilities. Custom incentives encourage long-term comprehensive projects that drive energy savings, reduce capital and operational budgets, and increase the rate of return on a municipality's

energy-efficient investment. The NH Utilities review and evaluate each project's technical studies and analyses on a case-by-case basis to determine the custom incentive amount.

### Targeted Incentives

In addition to prescriptive and custom measures, the Municipal program provides targeted incentives to encourage New Hampshire's towns and cities to commit to energy efficiency projects. For public school buildings, NHSaves Programs offer energy-efficient school incentives of up to 100 percent of the incremental cost of new equipment and new construction projects to assist buildings to improve indoor air quality.[22] As referenced earlier in this section, the Municipal program offers fuel-neutral incentives for the installation of energy-efficient measures, such as boilers, HVAC systems and equipment, and weatherization measures.[23] This is in addition to the custom, prescriptive, or energy-efficient school incentives given for the installation of electric and natural gas-saving measures.

### Financing Products and Incentive Structure

In addition to incentives, the NH Utilities provide on-bill financing and other financing products which allows municipalities to pay for a project out of O&M budgets (i.e., monthly utility bill): not requiring the towns and cities to secure additional approvals, bonding, or ballot measures.

For the 2021-2023 term, the NH Utilities are exploring a more flexible incentive structure that can calibrate incentive levels to meet the customer's benefit-cost decision making based on the customer's business needs. This portfolio-level view of cost effectiveness will allow for program review of municipal projects that historically may not have qualified due to cost-effectiveness barriers, such as low operating hours or other extenuating circumstances.

---

[22] RSA 374-F.4 VIII(a): Electric Utility Restructuring Act, 1996. VIII-a. Any electric utility that collects funds for energy efficiency programs that are subject to the Commission's approval, shall include in its plans to be submitted to the Commission program design, and/or enhancements, and estimated participation that maximize energy efficiency benefits to public schools, including measures that help enhance the energy efficiency of public school construction or renovation projects that are designed to improve indoor air quality. The report required under RSA 374-F:4, VIII(f) shall include the results and effectiveness of the energy efficiency programs for schools and, in addition to other requirements, be submitted to the commissioner of the department of education.

[23] Note: Very few fuel-neutral incentives for boilers and furnaces are issued on an annual basis. As natural gas is not available in many areas of the state, the NH Utilities see oil and propane as the only option for older municipal buildings without incurring extensive weatherization upgrades to cost-effectively support electric heating technologies, such as heat pumps.

To encourage comprehensiveness in the program, the NH Utilities may implement a pay-for-performance approach. This would include the creation of a tiered incentive system that packages rebates based on delivered energy savings of an entire project, rather than the current prescriptive approach of incentivizing specific energy-efficient measures. In addition, the NH Utilities may increase incentive levels for remote towns and allow non-turnkey vendors to implement Municipal program services in hard-to-serve areas. To complement these incentive approaches, the NH Utilities will increase the number of municipal contractor trainings on non-lighting measures, such as HVAC equipment and controls, programmable Wi-Fi thermostats, and air compressors.

## *Measures*

During the 2021-2023 term, the Municipal program will provide incentives for both high-efficiency prescriptive and custom measures. Over the next three-year period, the NH Utilities will pursue more comprehensive projects that consider energy efficiency from a long-term perspective. The program's new comprehensive incentive design will incentivize turnkey, performance contracting, and direct-install contractors (see Multiple Program Pathways section below) to install non-lighting measures in municipal buildings and facilities.

### Prescriptive Measures

The program will provide incentives for the following prescriptive measures: high-efficiency equipment including but not limited to: aerators, air compressors, electric commercial kitchen equipment (e.g., dishwashers and ice machines), electric HVAC equipment (e.g., heat pumps and unitary air conditioners), HVAC controls, HPWHs, LED lighting and controls, motors, spray rinse valves, VSDs, water heater pipe wrap, water-heating equipment, and Wi-Fi thermostats.

### Custom Measures

Custom measures will include, but are not limited to: energy management systems, HPWHs, insulation and air sealing, commercial refrigeration equipment, water heating equipment, and weatherization measures.

## *Multiple Program Pathways*

The NH Utilities have designed the Municipal program to provide New Hampshire's towns and cities with multiple pathways to participate in energy efficiency projects. They have developed a robust trade ally network of equipment distributors and installers, energy assessors, engineering and commissioning firms, and energy service companies to drive energy efficiency projects across New Hampshire's towns and cities. The NH Utilities rely on the technical and project management expertise of contractors to work effectively with municipalities to aggregate energy-saving projects, determine the best energy efficiency solution for the town or city, and analyze how incentives and financing mechanisms can help make the project feasible and affordable.

### Turnkey Vendor Installations

The program's turnkey vendor installation pathway connects municipalities with experienced trade allies who can help design, develop, and install prescriptive measures for town buildings or facilities. This pathway is an effective streamlined mechanism that provides municipalities with professional trade allies who perform initial assessments of municipal or school district buildings and make energy-efficient recommendations. The NH Utilities work with the contractors to determine pricing, approve energy savings proposals, and help municipalities prioritize the projects with the best payback. Contractors are paid directly for the incentive portion of approved energy efficiency projects: ensuring that upfront costs are not a barrier to municipalities participating in the program. During the 2021-2023 term, the NH Utilities will continue to increase the availability of turnkey vendors' schedules and expand Main Street efforts and community blitzes.

### Customer-Directed Installations

To streamline and increase participation in the Municipal program, the NH Utilities encourage customer-directed installations of energy-efficient equipment through prescriptive incentives for common, pre-qualified measures. This includes midstream rebates, incentives that encourage distributors to stock and promote energy-efficient equipment and systems, including, but not limited to HVAC, commercial kitchen, and water heating equipment. Midstream rebates allow distributors to offer incentives directly to customers and offers flexibility to non-turnkey vendors to participate in

NHSaves C&I Programs. This also streamlines the program for the NH Utilities, as many distributors operate in multiple states, allowing for coordination and common points of contact.

The NH Utilities provide technical assistance to municipal customers with limited energy efficiency expertise or resources to guide them through the project process. This assistance includes showing municipalities how to understand an energy audit's findings, determining which energy-efficient solutions are right for the town's needs, and how to leverage incentive and loan options to finance projects. For the 2021-2023 term, the NH Utilities will continue to provide technical assistance for specialized assessments of historical buildings, such as building shell or HVAC system audits.

Over the past few years, the NH Utilities have observed an increased interest in performance contracting by school districts and municipalities. For the 2021-2023 term, the Municipal program will continue to support performance contracting as it spurs comprehensiveness in projects and is a streamlined guided energy efficiency pathway for municipalities and school districts. The NH Utilities will also continue to service wastewater treatment facilities through a partnership with the New Hampshire Department of Environmental Services to implement audit findings and recommendations identified as part of a prior three-year US Department of Energy ("US DOE") grant. This grant funded comprehensive energy audits and benchmarking (analysis of energy performance of a building).

### *Contractor and Customer Education*

To encourage participation in the program and comprehensiveness, the NH Utilities will continue to offer contractor and customer education opportunities, including Builder Operator Certification ("BOC") training, energy code training, and workshops. BOC training helps municipal facility managers learn to efficiently manage town and school building operations and helps connect NH Utility employees with municipal points of contact. The NH Utilities will also participate in affinity group conferences during the 2021-2023 term.

### 3.3.5 Program Budget and Goals

**Table 3-2: Municipal Program—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $1,955,558 | $1,955,089 | $1,961,055 | **$5,871,702** |
| Annual kWh Savings | 3,769,585 | 3,520,545 | 3,409,955 | **10,700,086** |
| Lifetime kWh Savings | 52,433,933 | 50,268,690 | 48,703,610 | **151,406,233** |
| kW Reduction | 504 | 448 | 451 | **1,404** |
| No. of Participants | 227 | 224 | 220 | **672** |

**Note:** kWh = kilowatt hours, kW = kilowatts.

**This page intentionally blank.**

## 3.4 Large Business Energy Solutions Program (Retrofit and New Equipment & Construction)

### 3.4.1 Program Objective

New Hampshire's energy efficiency solution for large C&I customers is the Large Business Energy Solutions program. The program provides custom and prescriptive incentives to large C&I customers who are retrofitting existing facilities or equipment (Retrofit Pathway) or constructing new facilities, installing new equipment, or replacing equipment that is at the end of its useful life (New Equipment & Construction Pathway). The NH Utilities' energy efficiency staff, key account representatives, and energy service contractors work collaboratively with customers to design, build, and retrofit large C&I facilities to optimize energy performance. Energy-efficient projects can provide numerous benefits for large C&I customers, including reduced operating costs, increased productivity, improved comfort of employees and customers, and enhanced building air quality.

### 3.4.2 Target Market

Large C&I energy users are defined as customers who have an average annual demand of 200 kW or greater for electric customers and 40,000 Therms or greater for natural gas customers. The program serves large C&I customers who are replacing failed equipment, addressing aging, inefficient equipment and systems, or who are planning new construction or major renovation projects.

The target market segments for the Large Business Energy Solutions program include commercial real estate, healthcare facilities, higher education, hotels, manufacturers, national retail chains, private schools, ski resort areas (snowmaking), and large retail facilities. These large C&I customers typically have in-house sustainability and energy efficiency expertise and are primarily interested in reducing operating costs and eliminating waste.

In addition to focusing on large C&I energy users, the NH Utilities also target building developers, architects, and design teams through the New Equipment & Construction pathway. Working with design and building firms early in the process allows the NH Utilities to work with architects to promote and incorporate energy efficiency at the drawing board.

To optimize large C&I customer participation during the 2021-2023 term, the NH Utilities will continue to consider these customers' unique seasonal, organizational decision-making constraints. A recent New Hampshire Energy Efficiency Market Assessment ("Market Assessment") determined the decision-making constraints of four large C&I market segments and identified recommendations for the NHSaves Programs.[24] The NH Utilities will employ this research to create standard offer marketing packages to these large C&I customer segments:

- **Large National Retail Chains.** Decisions regarding energy efficiency are made at the national and regional level for large national retail chain stores. The Market Assessment noted that it was essential for the NH Utilities to maintain strong key account representative relationships and to coordinate efforts with other regional utility partners to promote energy efficiency.
- **Large Manufacturers.** The large manufacturing segment is a highly-competitive space focused on cost-cutting measures that increase productivity and output and give businesses an advantage over competitors. The decision-making process for large manufacturers is often decentralized and all levels of the business offer energy efficiency opportunities. The NH Utilities will maintain strong account representative relationships and highlight cost-saving measures to this market segment.
- **Municipal and Higher Education.** The decision-making process for these organizations is highly structured, long term, and time consuming. Large-scale projects are often considered with this market segment, increasing the potential for comprehensive energy-saving measures.
- **Seasonal Operations.** This market segment includes resorts, hotels, and manufacturing firms with cyclic down periods and limited operations. It is important to market these types of businesses during their respective off-seasons, so that energy efficiency investments will not interfere with business operations.

[24] Navigant Consulting. *New Hampshire Energy Efficiency Market Assessment*. Apr. 19, 2019 presentation. Available at: https://www.puc.nh.gov/EESE%20Board/Meetings/2019/0419Mtg/20190419-EESE-Board-NHSaves-Market-Assessment-Presentation.pdf.

The NH Utilities are exploring segment- and facility-specific energy efficiency guides and standard offer marketing packages that advise large C&I customers and contractors to plan for more comprehensive energy-saving projects. In the 2021-2023 term, the NH Utilities will work with contractors to develop these types of resources.

### 3.4.3 2021-2023 Retrofit Pathway

The Retrofit pathway incentivizes large C&I customers to replace existing, functioning equipment or systems with high-efficiency measures. The incentives cover a portion of the installed cost to purchase the energy-efficient measure, thus deeming it an acceptable return on investment for large companies and facilities. The NH Utilities are considering introducing several initiatives and design approaches to the 2021-2023 Large Business Energy Solutions program's Retrofit pathway. These changes include increasing contractor education and training, strengthening trade ally relationships, focusing on retro-commissioning equipment and systems performance, and delivering tailored solutions to targeted C&I market segments.

#### *Promoting Retro-commissioning and Systems Performance Optimization*

For the Retrofit pathway, the NH Utilities will introduce multiple channels to retro-commissioning during the 2021-2023 term. This includes offering low-cost prescriptive tuning measures, such as resetting water and air temperature for cooling systems and adjusting pump and fan schedules. The Retrofit pathway will also introduce financial assistance to help defray the cost of technical assistance to facilitate targeted systems tuning and process tuning to help meter and monitor energy savings for targeted system optimization. In addition, the NH Utilities will introduce a Whole Buildings and Process Tuning channel to the Retrofit pathway that will target facilities with existing functioning control systems.

### *Develop Tailored Services and Delivery Models for Market Segments*

For the 2021-2023 term, the NH Utilities will continue to develop segment-specific services and delivery models to target large C&I market sectors. For the Manufacturing sector, the NH Utilities will focus on promoting and incentivizing air compressors and chiller optimization as an entry point to work with new manufacturing customers. Air compressors and chillers provide highly cost-effective savings and the NH Utilities have found that the existing marketplace for these technologies is focused on selling high-efficiency components to large C&I customers. Once air compressors and chillers are installed, large C&I customers are encouraged by the cost-effective energy savings to participate in deeper energy efficiency projects, such as boiler optimization, process optimization, refrigeration measures, and VFDs. For the 2021-2023 term, another critical focus of the Large Business Energy Solutions program is retro-commissioning: encouraging contractors to look holistically at entire building systems rather than individual system components.

For the Healthcare sector, the program will focus on promoting the adoption of high-efficiency HVAC technologies and controls, water heating equipment, and commercial kitchen equipment. For the Retail sector, the NH Utilities will direct customers to advanced lighting and controls, commercial refrigeration equipment, and HVAC equipment and controls.

The NH Utilities have identified that tenant fit-outs and HVAC equipment are customized solutions for the Real Estate Management sector. For franchise businesses, the NH Utilities will continue to market high-efficiency commercial kitchen equipment, hot water equipment, HVAC equipment and controls, interior and exterior lighting and controls, and commercial refrigeration equipment to this customer segment.

### 3.4.4 New Equipment & Construction Pathway

The New Equipment & Construction pathway incentivizes major renovation and new construction projects, as well as the replacement of failed existing equipment or equipment at the end of its life with high-efficiency units. The NH Utilities created this pathway to encourage design teams, facility managers, and building owners to move beyond minimum building code compliance and integrate high-efficiency technologies and optimized building systems early in the design stage.

The program's New Equipment & Construction pathway allows the NH Utilities and contractors to reinforce the value that energy-efficient measures and design create for large C&I customers, including reduced energy costs, improved comfort of the building space, and increased worker productivity. It is vital that the NH Utilities and efficiency stakeholders play a role with new construction and renovation projects to ensure that incentives and the benefits of energy-efficient methods are considered at each of the design stages. Including the NH Utilities and efficiency contractors in cost-and-design deliberations with building owners and design firms will ensure that the Large Business Energy Solutions program's incentives and technical assistance are fully considered and not removed in an effort to reduce project costs.

For the 2021-2023 term, the NH Utilities are considering introducing several initiatives and design approaches to the New Equipment & Construction pathway, including revamping pathway offerings, expanding midstream rebate offerings, increasing trade ally education and trainings, and exploring opportunities to integrate Combined Heat and Power ("CHP") systems with energy-efficient projects.

## *Introduce New Equipment & Construction Pathway Offerings*

The NH Utilities will revamp the New Equipment & Construction pathway during the 2021-2023 term through the creation of four new paths:

1. Deep Energy Savings and Lower Energy Use Intensity;
2. Whole Building with Modeled Savings;
3. Simplified Whole Buildings Worksheet Model; and
4. Systems and Measures.

### Deep Energy Savings and Lower Energy Use Intensity Pathway

The NH Utilities will introduce a Deep Energy Savings and Lower Energy Use Intensity ("EUI") path over the next three-year period. The EUI path is designed to encourage new construction projects with a target of zero net energy or zero net emissions. For the 2021-2023 term, the NH Utilities are exploring offering a building commissioning incentive.

### Whole Building with Modeled Savings Pathway

The second path is the Whole Building with Modeled Savings path that is designed to provide intensive technical assistance and support for large C&I new construction and equipment projects. Customers will be guided through the decision-making process in determining the correct energy-efficient measures or designs that are right for their business' needs and priorities. Large C&I projects require a collaborative planning process that utilizes the expertise of architects, design teams, and contractors—often via a design charette. The Whole Building with Modeled Savings path will provide charette support, mid-design feedback, and guidance regarding setting EUI targets.

### Simplified Whole Buildings Worksheet Model Pathway

The Simplified Whole Buildings Worksheet Model is the third path introduced for the 2021-2023 term. This path is being introduced for fast-paced design and build projects and will require simplified spreadsheets versus detailed energy models.

### Systems and Measures Pathway

The fourth and final new path being introduced in 2021-2023 is the Systems and Measures path that will focus on capture projects in the late design stages. This path will integrate existing prescriptive and custom incentives, and the NH Utilities will provide technical assistance services typically not available for these fast-paced projects.

## *Expand Program Offerings*

The NH Utilities are consistently looking for new ways to simplify the process for C&I customers to engage in energy efficiency including offering different incentive models and pathways. For example, large C&I customers who install high-efficiency lighting can participate through downstream incentives

for prescriptive and custom projects, and the NH Utilities can shift downstream offerings upstream, such as commercial kitchen equipment. Throughout the 2021-2023 term, the NH Utilities will continue to develop new pathways and incentives to better align with contractor distribution models and customer engagement to better serve the large C&I customer market segment.

Similar to other C&I solutions, the Large Business Energy Solutions program is focused on expanding the availability of midstream offerings to increase the availability of, and stocking of, high-efficiency technologies. For the 2021-2023 term, the NH Utilities will expand beyond the lighting market to support new midstream incentives for commercial kitchen equipment and HVAC equipment, including HPWHs and high-efficiency condensing units. The NH Utilities will use the results of the Energy Efficiency Baseline and Potential study (see Chapters 10 and 11) as a guide to determine which technologies still have significant opportunities. The NH Utilities will continue to collaborate across the New England region to influence distributors to stock high-efficiency equipment.

In 2020, the NH Utilities added commercial kitchen and HVAC equipment to midstream offerings. During the 2021-2023 term, the NH Utilities will continue to actively evolve midstream initiatives to capitalize on multiple measures.

### *Support CHP System Installations*

In 2021-2023, the NH Utilities will continue to explore opportunities to incentivize CHP projects to target market segments with high-energy requirements for heat and power. CHP equipment uses waste heat from a building's generator for thermal needs, such as space heating or hot water. These types of projects have long lead times, typically one to three years, requiring a long-term commitment from participating customers.

Though any input fuel can be used with CHP projects, generally natural gas is the preferred choice due to the reliability of the equipment, less GHG emissions emitted, and the low cost of fuel. Other fuels could include liquid natural gas, propane, diesel, or biomass. CHP can also be used as a demand reduction resource and as a back-up generator. Typically, the market segments that are viable

candidates for CHP include: hospitals, hotels, manufacturers with a significant thermal process load, and nursing homes.

For the 2021-2023 term, both the NH Electric Utilities and NH Natural Gas Utilities will include and support CHP projects across the state. In addition, the NH Utilities will also develop a network of vendors to assist with screening CHP projects to determine qualifications and system performance, as well as establish partnerships with universities and other groups to assess CHP opportunities. Starting in 2021, the NH Utilities will begin to incorporate custom incentives for CHP installations.

#### *Building Codes and Standards*

The NH Utilities plan to pursue a codes and standards initiative as part of the C&I New Construction program. Please see the full description in the Residential New Construction section, Section 4.2.4.

### 3.4.5 Program Design

#### *Design*

There are three program delivery channels for customers to participate in the Large Business Energy Solutions program's Retrofit or New Equipment & Construction pathways.

**One-on-One Technical Assistance**

First, the NH Utilities offer one-on-one technical assistance, through account representatives and energy efficiency staff, to help large C&I customers identify energy-saving opportunities, complete applications, and generally guide them through the process.

**Energy Service Companies**

Energy service companies are firms that offer compressed air, electrical, HVAC, lighting certification, and other comprehensive energy efficiency services to large C&I customers such as state and local government, higher education institutions, hospitals, hotels, manufacturers, and ski resorts. This second program delivery channel allows energy service companies to provide holistic building services and comprehensive technical assistance to large C&I customers.

### Engineering Firms

Engineering firms are the third alternative channel for customers to participate in the Large Business Energy Solutions program. These firms provide whole building audits and individual building system performance checks and work directly with a customer's facility team and energy committee to identify energy behavioral changes, new equipment, renovations, retro-commissioning opportunities, and process improvements that could result in energy efficiency savings.

## *Incentives*

Similar to other C&I programs, the Large Business Energy Solutions program provides prescriptive, custom, and performance-based incentives to encourage the implementation of cost-effective, energy efficiency projects. The addition of a tiered incentive design in 2021-2023 will encourage advanced lighting and comprehensive energy efficiency projects for the Retrofit and New Equipment & Construction pathways. The NH Utilities will provide third-party review of savings for customers participating in performance contracting.

The NH Utilities note that flexibility is key for serving large C&I customers. Different market segments and energy-efficient measures have unique payback requirements and there are varying barriers to implementation. Flexibility in the incentive model encourages large C&I customers to invest in comprehensive energy efficiency projects and not focus on individual measure savings or payback thresholds. A dynamic incentive model allows the NH Utilities to increase incentives for some measures while not overpaying for others; thus, allowing for the implementation of cost-effective projects.

### Prescriptive Incentives

Prescriptive incentives allow customers to select equipment from a pre-qualified list of measures and receive an incentive designed to cover the incremental installed cost for New Equipment & Construction pathway projects and a percentage of the installed costs for Retrofit pathway projects. Incentives for prescriptive measures offer a standardized process for customers to integrate energy efficiency in their renovation or construction projects. Program trade allies can manage the prescriptive incentive process for large C&I customers, allowing them a streamlined pathway to energy

efficiency. Prescriptive incentives create a supply chain that includes distributors, manufacturers, key trade ally contractors, and the NH Utilities.

### Custom Incentives

The Large Business Energy Solutions program offers custom incentives for energy-efficient measures that are non-standard and not on the prescriptive list of approved products. This approach encourages comprehensive, long-term projects that the prescriptive incentive process cannot fully address. Project engineering calculations and analyses are reviewed on a case-by-case basis by the NH Utilities to determine project eligibility and incentive amounts.

### Performance-Based Incentives

In addition, performance-based incentives are also offered to customers to encourage comprehensive energy savings from multiple measures. These incentives are based on energy calculations, including watts saved per square foot, dollars per kWh saved, and energy savings achieved above code. Performance-based incentives encourage customers to move beyond installing just one piece of energy-efficient equipment to consider long-term, holistic building design and measures that optimize the energy performance of systems or buildings. For the 2021-2023 term, the NH Utilities will offer performance-based incentives for performance lighting, lighting controls, and whole building projects implemented through the New Equipment & Construction pathway.

### Tiered Incentives

For lighting projects beyond fixture replacements only, incentives may be increased to account for greater savings derived by the addition of one or more control strategies. For projects that have a minimum of one or more non-lighting end uses with each end-use defined as a natural gas or electric measure impacting heating, cooling, lighting, process, domestic water heating, refrigeration, motors and drives, etc., the incentives would be enhanced for each additional measure that increases savings beyond that single measure. Savings from each additional measure must be significant enough to warrant the additional incentives. To deliver tiered incentive measures, the NH Utilities will collaborate with energy service companies and other turnkey service providers who have staff or sub-contractors capable of installing multiple energy efficiency measures.

### Performance Contracting

As noted in the Municipal program section, the NH Utilities have observed an increased interest in performance contracting over the last few years. During the 2021-2023 term, the Large Business Energy Solutions program will continue to support large C&I customers who choose to follow the performance contracting path. The NH Utilities will collaborate with key performance contractor partners in the state on the development of energy efficiency projects. The NH Utilities provide a third-party review of calculated energy savings and help determine the right level of incentives to encourage the installation of highly cost-effective measures with lower savings to create a balanced, comprehensive suite of energy-efficient measures.

## *Measures*

The NH Utilities will incentivize prescriptive, custom, and performance-based measures for the Large Business Energy Solutions program during the 2021-2023 term. The NH Utilities will search for opportunities to achieve more energy savings through controls for building systems, such as energy management systems ("EMS"), lighting, HVAC equipment, and Wi-Fi thermostats.

### Prescriptive Measures

Incentivized prescriptive measures will include, but are not limited to: air compressors, chillers, commercial kitchen equipment, HPWHs, high-efficiency condensing equipment, hot water-saving equipment, HVAC equipment (e.g., heat pumps and unitary air conditioners) and controls, insulation and air sealing, LED lighting and lighting controls, motors, commercial refrigeration equipment, process equipment, and VFDs.

### Custom Measures

Many large C&I customers have complex technologies and specialty equipment and systems that require tailored solutions and custom measures. These custom measures will include, but are not limited to: chiller pump upgrades, CHP systems, EMS, injection molding machines, insulation and air sealing, integrated air compressors, large chillers and boilers, retro-commissioning, snowmaking equipment (e.g., low-energy snow guns and lift heater terminal controls), specialized equipment (e.g., polymer bead washing machines), and weatherization measures.

**Commissioning Assistance**

The NH Utilities provide commissioning assistance for existing equipment and facilities. Energy savings are either prescriptive or custom calculations based upon metering and monitoring. Currently, the NH Utilities do not envision offering incentives for the commissioning of new building systems as builders and owners are expected to ensure optimal equipment performance as part of the cost to deliver a new construction or new equipment project.

### 3.4.6 Program Budget and Goals

**Table 3-3: Large Business Energy Solutions Program—Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $24,938,645 | $34,018,730 | $46,779,278 | **$105,736,654** |
| Annual kWh Savings | 65,122,196 | 83,591,154 | 109,036,322 | **257,749,671** |
| Lifetime kWh Savings | 876,554,611 | 1,124,260,353 | 1,461,425,507 | **3,462,240,471** |
| kW Reduction | 8,203 | 10,464 | 13,572 | **32,239** |
| No. of Participants | 1,811 | 1,957 | 2,091 | **5,859** |
| **Natural Gas Programs** | | | | |
| Program Budget | $2,685,689 | $3,334,466 | $4,140,552 | **$10,160,707** |
| Annual MMBtu Savings | 95,778 | 112,738 | 133,548 | **342,064** |
| Lifetime MMBtu Savings | 1,195,081 | 1,443,530 | 1,707,340 | **4,345,950** |
| No. of Participants | 291 | 385 | 435 | **1,110** |

**Note:** kWh = kilowatt hours, kW = kilowatts, and MMBtu = million British thermal units.

## 3.5 Energy Rewards Program (Eversource Only)

### 3.5.1 Program Objectives

The Energy Rewards program encourages customers to propose energy efficiency retrofit projects as part of a competitive solicitation process and is designed to promote competitive market development in the energy efficiency industry by encouraging third parties to bid for energy-saving projects on a competitive basis. The program's objective is to generate market-driven demand for cost-effective electric savings by encouraging customers to bid in retrofit projects that meet their internal business objectives, rate-of-return requirements, and approval processes. The program was designed for industrial and other large customers who need several years to design, plan, approve, and implement large, comprehensive electric-saving projects.

### 3.5.2 Target Market

The target market for the 2021-2023 Energy Rewards program is C&I customers with electric demand greater than 200 kW, individually or in aggregate. Eversource has established a minimum estimated energy savings for all projects of 100,000 kWh per year (single site or aggregate) and project costs of $150,000 or greater. C&I customers of Eversource, energy service companies, and other third-party service providers representing an Eversource C&I customer are eligible to participate in the program.

### 3.5.3 Program Design

The Energy Rewards program offers customers and engineering consultants an opportunity to design and bid in cost-effective comprehensive projects with electric savings. The program allows customers to bundle less cost-effective and more cost-effective efficient measures together. This increases the chances for comprehensive energy-saving projects that are multi-year and implement multiple measures. Having a multi-year program structure gives large C&I customers the time to develop projects, obtain approval, and submit well-developed proposals for their internal planning process.

The design of the Energy Rewards program allows Eversource to engage large C&I customers, giving them the opportunity to tailor their own energy-efficient solutions. Over the years, the program has

allowed Eversource to provide a better customer experience and to develop project plans, such as Memorandums of Understanding ("MOUs"), with large C&I energy users across New Hampshire.

### 2021-2023 Changes

During the 2021-2023 term, Eversource will issue an open-bidding cycle held year-round with bids awarded two times a year. This program design change is in response to customer demand to align the issuance of an RFP with multiple accounting calendars, such as the fiscal year and a customer's annual accounting year (e.g., some state and local government calendar years end on June 30th, while some businesses' fiscal years end on October 31st). This program modification creates time for C&I customers to receive internal approvals, secure financing, and gain company support for efficiency projects. Eversource expects that this change will increase participation in the Energy Rewards program and create a continuous pipeline of electric-saving projects. In addition, this should help increase the number of submitted bids from large national companies and franchises that have counterparts in other states competing for the same funding sources to complete renovation projects.

During the 2021-2023 term, the NH Utilities will encourage Energy Rewards program participants to develop sustainable procurement policies and implement comprehensive energy efficiency projects.

### Incentives and Measures

The Energy Rewards program's incentive levels are market driven through a competitive bidding process. Customers submit their requests for incentives to implement energy efficiency projects through their bid submissions. Customers determine their requested incentive levels based upon internal calculations regarding rate of return and if management will approve the projects, project costs, and design plans. The program reviews all energy-efficient measures that cost effectively deliver electric savings.

Eligible measures include but are not limited to: high-efficiency lighting systems and controls, motor VSDs, process or air conditioning system improvements, and other measures that reduce annual electrical consumption. Non-eligible measures include new construction projects, any power-producing

projects such as cogeneration, fuel switching, and any repair or maintenance projects, and any technology with a measure lifetime of less than three years.

### Program Process

For each RFP issued, Eversource hosts an Energy Rewards bidders' conference to provide customers and contractors information regarding submission requirements and the criteria used to select projects. Potential bidders are invited to the bidders' conference to learn how to participate in the program. Eversource also promotes the Energy Rewards program to Eversource customers with greater than 200 kW peak demand who might qualify either individually or on an aggregated demand basis. Potential energy service companies and third-party service providers are notified, and the Energy Rewards program and bidders' conferences are promoted on the NHSaves and Eversource websites.[25]

In response to an RFP, customers must submit a request for the incentive amount needed to implement an individual project or a series of energy efficiency projects. Funds are awarded through the competitive RFP process to customers or third parties acting on behalf of a customer. Projects are screened through a preliminary evaluation and a final, more-detailed analysis by Eversource staff. The bids are evaluated on the projected electric savings, incentive levels (pricing determined by customer or third party), and other non-price variables. Non-price variables include such factors as whether the project includes measures other than lighting (e.g., HVAC and process measures) and whether the environmental impacts reduce on-site emissions or waste stream impacts. All projects are evaluated on the basis of established cost-effectiveness criteria.

[25] Energy Rewards Program. Available at: https://nhsaves.com/energy-rewards-rfp-program/.

### 3.5.4 Program Budget and Goals

**Table 3-4: Energy Rewards Program—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $2,997,161 | $5,611,934 | $9,172,068 | **$17,781,164** |
| Annual kWh Savings | 4,540,000 | 7,300,000 | 10,560,000 | **22,400,000** |
| Lifetime kWh Savings | 59,250,000 | 96,600,000 | 141,300,000 | **297,150,000** |
| kW Reduction | 424 | 657 | 924 | **2,005** |
| No. of Participants | 10 | 16 | 23 | **49** |

**Note:** kWh = kilowatt hours and kW = kilowatts.

# Chapter Four: NHSaves Residential Energy Efficiency Programs

**Since 2002, the NH Utilities have implemented residential programs to help improve the efficiency of single-family and multifamily homes across the state. The NHSaves Residential Programs are designed to help New Hampshire residents reduce their energy costs, engage in energy efficiency behaviors, purchase high-efficiency equipment and technologies, defer the need for additional generation on the electrical grid, and help protect the environment through reduced electricity, natural gas, and delivered fossil fuel consumption.**

## 4.1 Residential Programs Overview

In addition to serving customers, the NHSaves Residential Programs support a mature and robust network of stakeholders, including but not limited to: energy efficiency contractors, community action agencies, distributors, manufacturers, retailers, and other stakeholders that are the backbone of completing audits and installations of equipment and materials. The NH Utilities provide education, incentives, design and technical assistance, and contractor education to promote investment in energy-efficiency advancement and increase program participation.

For the 2021-2023 term, the NH Utilities are focused on scaling up participation and energy savings for the NHSaves Residential Programs. The NH Utilities will support these objectives by designing flexible and innovative programs, incentivizing emerging energy-efficient technologies, ensuring convenient customer access to capital, increasing workforce development efforts, and providing new “on-ramps” that allow customers varied pathways to participate in NHSaves Residential Programs. The flexibility built into NHSaves Residential Programs is

imperative to allowing the NH Utilities to adapt quickly to new federal and state laws, changing codes and standards, market transformation, emerging technologies, and customer demand.

### 4.1.1 2021-2023 Residential Program Priorities

For almost 20 years, the NH Utilities have designed and delivered valuable energy efficiency services to New Hampshire's residential customers. Historical efforts have prioritized energy efficiency projects that maximize cost effectiveness over serving the greatest number of customers. Due to increased 2021-2023 Plan program budgets and goals, the NH Utilities will shift the focus to providing market-friendly offerings that encourage greater customer participation and increased engagement. To realize these evolving goals in residential energy-efficient technologies and building design, the 2021-2023 Plan emphasizes the following NHSaves Residential Programs' priorities:

1. **Increasing Participation through New and Expanded Program Pathways.** The NH Utilities will continue to effectively scale up the NHSaves Residential Programs to drive deeper and broader energy savings by creating or reinforcing multiple market pathways or "on ramps" with varied levels of participation offered for different customer types. These may include but are not limited to: access to single-measure rebates, online platforms, visual audits, and code-plus initiatives for residential new construction projects. These on-ramps will provide residential home owners, home buyers, and tenants with easily accessible avenues to realize initial energy savings.

   The NH Utilities will use various marketing methods to attract and retain these customers, as they may be more inclined to further engage in energy efficiency with future home improvement projects. The NH Utilities will employ data analysis to determine how these new or reinforced pathways are utilized and will also track repeat program participation by contractors, home builders, homeowners, or landlords throughout the 2021-2023 term.

2. **Offering Effectively-Packaged Solutions to Engage Customers.** The NH Utilities will effectively market and package energy efficiency solutions to New Hampshire residents. These solutions will include expanded midstream and point-of-purchase rebates (ENERGY STAR® Products

program) and additional tiers and bonus incentives to encourage the design-and-build community to move beyond the current building code in residential new construction projects (ENERGY STAR Homes program).

3. **Increase Customer Education and Workforce Development Trainings.** To scale up participation and drive deeper energy savings for the 2021-2023 NHSaves Residential Programs, the NH Utilities must facilitate a thorough and targeted workforce development plan to educate contractors, distributors, manufacturers, community action agencies, home builders, and retailers regarding the benefits and availability of energy-efficient technologies and program offerings.

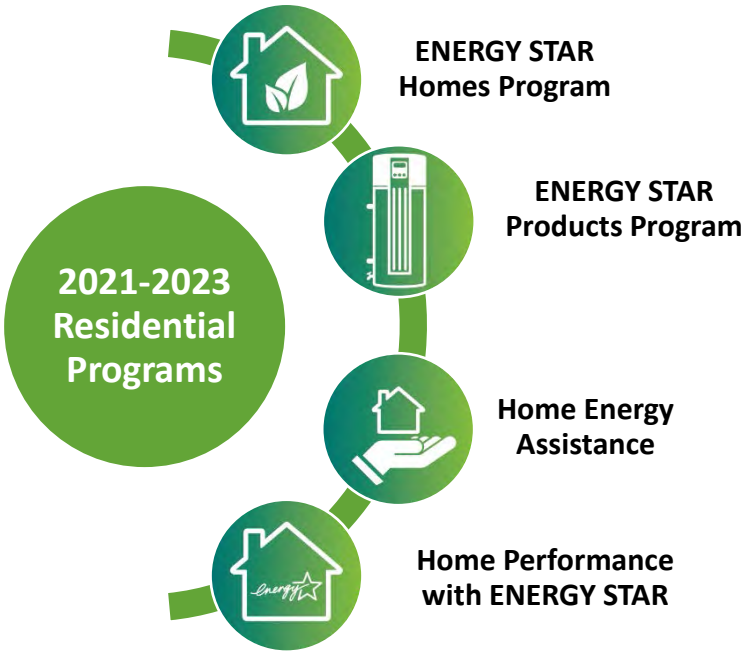
   Throughout the 2021-2023 term, the NH Utilities will expand the trainings offered for going beyond minimum code compliance, emerging technologies, and energy-efficient building techniques. These trainings will be delivered through several short-term and long-term workforce development channels, including but not limited to: interactive online training videos, in-field home builder trainings, hands-on equipment training, and lunch & learn sessions.

### 4.1.2 Residential Programs

For the 2021-2023 term, the NH Utilities will continue to deliver comprehensive NHSaves Residential Programs to help all New Hampshire residents regardless of income or home type, to reduce their energy consumption, save money, and protect the environment through reduced GHG emissions.

The 2021-2023 NHSaves Residential Programs will offer multiple pathways to engage residential customers with entrées to energy efficiency. In order to reach the ambitious EERS goals, the NH Utilities must offer multiple and varied pathways in order to scale up program participation and drive energy savings. By offering multiple new and reinforced pathways, the NH Utilities will engage a broad range of customers in energy efficiency programs at various levels of savings, while raising interest across the market overall regardless the degree of participation. Figure 4-1 illustrates the multi-entry point approach of the 2021-2023 NHSaves Residential Programs.

**Figure 4-1: 2021-2023 Residential Programs**




- **ENERGY STAR Homes Program.** This is the NHSaves energy efficiency solution for residential single-family and multifamily new construction homes. The program provides incentives and contractor support through two pathways: (1) Drive to ENERGY STAR and (2) ENERGY STAR 3.1. During the 2021-2023 term, the NH Utilities will for the first time explore providing incentives for new construction homes that are certified passive solar, solar photovoltaic ("PV") ready, EV ready, demand management ready, and for all-electric homes.

- **ENERGY STAR Products Program.** This high-volume program with broad reach is designed to help residential customers overcome the extra expense of purchasing and installing ENERGY STAR-certified appliances, electronics, HVAC equipment and systems, hot water-saving equipment, and lighting. This is accomplished through consumer education, point-of-sale marketing, active training, engagement of retailers and distributors, and a variety of incentives both at point of sale and through automatic markdowns.

- **Home Energy Assistance Program.** This fuel-neutral weatherization program is designed to reduce energy use from both electric and fossil fuel-consuming appliances, lighting, and HVAC

systems. The program serves New Hampshire's income-eligible homeowners and renters to help reduce their energy costs, optimize their home's energy performance, and make their homes safer, healthier, and more comfortable.

- **Home Performance with ENERGY STAR.** This energy efficiency solution provides comprehensive energy-saving services at significantly reduced cost to customers' existing homes, and covers lighting improvements, space heating and hot water equipment upgrades, weatherization measures, and appliance replacements.

### 4.1.3 Changes in the National Lighting Marketplace

Over the past two years, there has been great uncertainty regarding the implementation and enforcement of the Energy Independence & Security Act of 2007 ("EISA").[26] Phase 2 and Phase 3 of EISA's light bulb standards were slated to begin on January 1, 2020 ("EISA 2020 standard") and January 1, 2025 ("EISA 2025 standard"), respectively, to go into effect on those dates. Finally, on February 11, 2019, the US DOE published a Notice of Proposed Rulemaking ("NOPR") that proposed withdrawing the revised definitions of general service lamp ("GSL"), general service incandescent lamp ("GSIL"), and other supplemental definitions, that were originally set to go into effect on January 1, 2020. In a final ruling issued on September 5, 2019, the US DOE reversed its 2017 decision to expand the types of GSLs to be subject to the stricter standards, rescinded the expanded definition, and allowed exemptions for specialty lamps such as globes, candelabras, and reflectors, as well as other bulbs such as three-way and rough service lamps.[27]

With this ruling, the US DOE withdrew the prior final rules regarding the EISA 2020 standard published on January 19, 2017 (82 FR 7276 and 82 FR 7322) that were to become effective on October 7, 2019.

---

[26] Public Law 110-40. Energy Independence and Security Act of 2007. Dec. 19, 2007.

[27] 84 FR 46661. Office of Energy Efficiency and Renewable Energy. Energy Conservation Program: Definition for General Service Lamps, Published Sep. 5, 2019, pp. 46661-46676. Available at: https://www.federalregister.gov/documents/2019/09/05/2019-18940/energyconservation-program-definition-for-general-service-lamps.

The September 2019 final rule eliminated energy efficiency standards for about 50 percent of the six billion light bulbs used in the United States.[28] The standards would have covered a variety of light bulb shapes and sizes used in homes, including candelabra-based bulbs, candle- and globe-shaped bulbs, and reflector bulbs. These original standards were intended to phase out the incandescent bulb in favor of high-efficiency LEDs and fluorescent bulbs and fixtures. In a further rollback of earlier proposed lighting efficiency standards, the US DOE also issued a proposed determination on September 5, 2019, which if finalized, would eliminate the EISA 2020 standards for "A-lamps," the pear-shaped bulbs that make up the other 50 percent of light bulbs used in the United States.[29]

At the same time, lighting manufacturers, expecting the original rules to go into effect in 2020 and 2025, have largely already transitioned to designing and manufacturing long-lasting, energy-efficient LEDs, both ENERGY STAR-certified and otherwise. As a result, the lighting market continued to drive the transition to LEDs in the marketplace, a process that is expected to continue in spite of the federal roll-back of minimum-efficiency standards.

In order to help maintain and accelerate the strong demand for high-efficiency ENERGY STAR LED technologies, the NH Utilities will continue to aggressively support and incentivize energy-efficient bulbs and fixtures for the NHSaves Residential Programs through the end of 2021. Beginning in 2022

---

[28] ACEEE. DOE's Light Bulb Standards Rollback Will Cost Americans $14 Billion Each Year. Sep. 4, 2019. Available at: https://aceee.org/press/2019/09/doe-s-light-bulb-standards-rollback. 25 84 FR 46830. Office of Energy Efficiency and Renewable Energy. Energy.

[29] 84 FR 46830. Office of Energy Efficiency and Renewable Energy. Energy Conservation Program: Energy Conservation Standards for General Service Incandescent Lamps, Published Sep. 5, 2019, pp. 46830-46862. Available at: https://www.federalregister.gov/documents/2019/09/05/2019-18941/energy-conservation-program-energy-conservation-standards-forgeneral-service-incandescent-lamps.

and depending on how the marketplace responds to the relaxed federal standards, the NH Utilities will begin to transition program support to discount retailers focused on reaching the last-to-adopt and underserved customers.

### 4.1.4 Residential Building Codes

New Hampshire's current building energy code went into effect on September 15, 2019 when the State Building Code Review Board approved the adoption of the 2015 editions of the International Building Code, including the 2015 International Energy Conservation Code ("IECC 2015").[30] There were several legislative amendments to the code that will sunset in March 2022. As of January 1, 2019, the NH Utilities updated the ENERGY STAR Homes program's User Defined Reference Home ("UDRH") to reflect the current minimum standard from the IECC 2015. The UDRH will be updated again in March 2022 to reflect the end of the sunsetted amendments to the IECC 2015.

The NH Utilities are extensively researching current approaches for building code savings attribution in New England, specifically in Connecticut and Massachusetts. Based on the NH Utilities' analysis, the creation of a code savings attribution model for New Hampshire may be proposed during the 2021-2023 term.

### 4.1.5 Workforce Development

To scale up participation and drive deeper energy savings for the 2021-2023 NHSaves Programs, the NH Utilities and a consultant will develop a cohesive statewide Workforce Development Strategy for understanding workforce development needs and what training is needed for vendors, community action agencies, distribution contractors, building operators, and other energy efficiency stakeholders. For more information regarding the NH Utilities' Workforce Development Strategy, see Chapter Nine of the 2021-2023 Plan.

[30] New Hampshire Department of Safety—State Building Code Review Board. *New Hampshire Building Code.* Sep. 15, 2019. Available at: https://www.nh.gov/safety/boardsandcommissions/bldgcode/.

### 4.1.6 Financing

The NH Utilities recognize that technical assistance, incentives, and innovative financing tools are all important mechanisms to effectively encourage residential customers to invest in comprehensive energy efficiency. Effective financing mechanisms have supported the success of the NHSaves Residential Programs and can be leveraged further in the next term. During the 2021-2023 term, the NH Utilities will continue to offer on-bill and third-party financing options to encourage residential customers to pursue comprehensive and cost-effective energy efficiency projects in their homes. These include zero percent on-bill offerings for electric and natural gas customers, two percent loans offered in partnership with local lenders, and zero-percent moderate-income loans, also in partnership with local lenders.

#### *On-Bill Financing*

All NH Utilities have on-bill financing available for Home Performance with ENERGY STAR program customers to help cover their portion of a weatherization project. Customers with a qualifying project apply to their NH Utility for the loan. Lending criteria includes bill payment history (all NH Utilities) and credit score (Eversource only). For customers receiving an on-bill loan, the NH Utility will pay the customer's co-pay to the contractor directly and the customer will pay off the loan at zero percent interest on their utility bill[31].

The NH Utilities will continue to monitor customer interest in residential on-bill financing as well as capital available for loans and may make adjustments to maximum loan amounts if needed. On-bill loan offerings are governed by each NH Utility's tariff and changes are made by updating the tariff with the Commission.

[31] Liberty Electric and Gas, Unitil Electric and Gas, and NHEC all have a maximum on-bill loan amount of $4,000. Eversource has a maximum on-bill loan amount of $2,000. Unitil has a maximum on-bill loan amount of $7,500 for market-rate customers and $15,000 for moderate-income customers. Customers needing loans up to $15,000 can access the Residential Energy Efficiency Loan Program with third-party lenders.

## *Residential Energy Efficiency Loan Program*

Through the Residential Energy Efficiency Loan program, the NH Utilities partner with local lending institutions, banks, and credit unions to ensure capital and lending expertise is available to customers who want or need it to move forward with efficiency projects. The Residential Energy Efficiency Loan program allows qualified electric and natural gas customers to finance all or a portion of their share of approved energy efficiency upgrades through a low-interest loan in cooperation with local banks and credit unions. Loans cover a residential customer's co-pay portion of the work performed through the Home Performance with ENERGY STAR program (e.g., insulation, appliances, and health and safety measures) and some other approved energy efficiency measures.[32]

Customers can finance up to $15,000 for qualifying energy efficiency upgrades and the customer's lending institution will determine if a customer is eligible for a loan based on lending criteria. The NHSaves Programs subsidize a two percent APR home energy efficiency improvement loan to qualified customers. See Table 4-1 for loan amounts and repayment terms.

**Table 4-1: Residential Energy Efficiency Loan**

| Amount | Max Loan Repayment Term |
|---|---|
| $1,000 up to $2,000 | 2 Years |
| $2,001 up to $4,000 | 3 Years |
| $4,001 up to $6,000 | 4 Years |
| $6,001 up to $9,000 | 5 Years |
| $9,001 up to $12,000 | 6 Years |
| $12,001 up to $15,000 | 7 Years |

This third-party financing program is not designed to support a specific number of loans, but rather to ensure that customers have financing options available to cover the co-pay portion of their projects if

[32] Unitil Electric and Gas will give loans to Gas Networks customers.

needed. These financing dollars help drive more comprehensive projects. Throughout the 2021-2023 term, the NH Utilities will continue to offer the Residential Energy Efficiency Loan through the current lending partners for the 2018-2020 program cycle, and additional lenders will be introduced based on customer need and lender interest.[33]

### *Moderate-Income Customer Financing*

During the 2019 program year, the NH Utilities established a zero-percent moderate-income financial offering with local lenders. The NH Utility buys down the lender interest rate to zero percent and the lender additionally extends the maximum loan term to 10 years. These actions combine to result in a lower monthly loan payment for moderate-income customers compared to the payment for the typical Residential Energy Efficiency Loan. The lending partner determines whether the customer is within a moderate-income bracket and eligible for a loan based on income review and lending criteria. During the 2021-2023 term, this financing offering will continue.

### *Funding—NH Saves Partnership Initiative*

During the 2021-2023 term, the NH Utilities will continue to work with stakeholders, local non-profits, and foundations in order to procure funds to be used to enhance offerings or overcome barriers beyond what is typically funded by the NHSaves Programs. This could include pre-weatherization barriers for HEA customers, expansion costs for Community Action Agencies ("CAAs"), funding the co-pay of moderate-income customers, coordination with efforts that provide interactive benefits with energy efficiency, such as public health, or other identified opportunities. The NH Saves Partnership Initiative serves all of the NH Utilities' customers, however, this very much depends on the types of grants that are awarded.

[33] The current lending partners include: Merrimack County Saving Bank, Meredith Village Savings Bank, Northeast Credit Union, Woodsville Guaranty County Bank (Eversource and NHEC customers only), Claremont Savings Bank (Eversource customers only), Mills 42 Federal Credit Union (Eversource customers only), and the Savings Bank of Walpole (Eversource customers only).

Specific to income-eligible customers, in May of 2020, a grant was written and submitted on behalf of a CAA for a US Department of Agriculture Housing Preservation Grant. If awarded, this grant will be used for repairs and health and safety measures for single-family homes that the HEA program could not pay for and, therefore, the house would be classified as a "walk away."[34] Additionally, in May of 2020, a grant was written on behalf of a CAA and submitted to the Northern Borders Regional Commission, which provides economic and community development grants in Maine, New Hampshire, New York, and Vermont. This grant, if awarded, would pay for two trucks for a crew-based CAA that is expanding due to more HEA funds being available.[35]

Throughout the 2021-2023 term, the NH Utilities will continue to look for additional opportunities to apply for grants and leverage funding resources to promote energy efficiency.

### 4.1.6 Marketing and Outreach

The NH Utilities will market the NHSaves Residential Programs through a variety of channels, both as individual companies as well as through a statewide marketing approach. These channels will include but are not limited to: the website (NHSaves.com), program promotional materials ("collateral"), direct mail and e-mail, bill inserts, point-of-sale marketing, retailer engagement, social media campaigns, paid digital advertising, billboards, radio/TV/music streaming advertisements, trade shows, public relations efforts (statewide and utility-driven), hosting or providing speakers for trainings, forums, and events, and providing content for partners' blogs, newsletters, and websites.

The NH Utilities take advantage of market segmentation to effectively target customers and engage them in energy efficiency programs. Understanding what motivates a customer to participate in energy efficiency programs gives the NH Utilities insight into what marketing strategies will work when trying to increase NHSaves Residential Program participation. During the 2021-2023 term, the NH Utilities plan to scale up data analysis of customers' billing and demographic information to effectively market

[34] The grant request is for $100k.
[35] This grant request is for $70k.

new and existing program pathways and offerings to those customers who are most likely to respond to and benefit from the NHSaves Residential Programs.

In addition, the NH Utilities conduct significant community outreach through training such as the Button Up Workshops. This is a popular energy-saving workshop series sponsored by NHSaves and coordinated by the Plymouth Area Renewable Energy Initiative ("PAREI"). Participants attend a 90 minute presentation on how to optimize the energy performance of their homes and the workshop includes information about basic building science principles and how whole-house energy measures can help customers "button up" their homes for the heating and cooling seasons. Each workshop is presented by a knowledgeable Building Performance Institute ("BPI")-certified Building Analyst and a representative from the NH Utilities.

## 4.2 ENERGY STAR Homes Program

### 4.2.1 Program Objective

The ENERGY STAR Homes ("ES Homes") program is New Hampshire's energy efficiency solution for residential single-family and multifamily new construction homes. Residential new construction homes must meet strict building guidelines to earn the US Environmental Protection Agency's ("EPA") ENERGY STAR certification and are typically 15 to 30 percent more efficient than standard, built-to-code homes. The EPA's ENERGY STAR Home certification uses the Home Energy Rating System ("HERS") as a scoring mechanism, analogous to a miles-per-gallon sticker for new homes, giving current or future home owners insight into the home's energy performance. The lower the HERS Index Score the more energy efficient the home is compared to one built to standard building code.

The goal of ES Homes is to encourage homeowners, home builders, and contractors to build high-performance single-family and multifamily homes. This encouragement is provided through incentives and connecting home builders with third-party HERS Raters who provide support and verification services throughout the construction process. Over the past decade, ES Homes has seen 15 to 35 percent of New Hampshire's newly built homes achieve ENERGY STAR certification. ES Homes, the NH Utilities, participating home builders, HERS Raters, and contractors have also received numerous national ENERGY STAR awards and recognition for driving the New Hampshire residential construction market toward high-efficiency building designs, techniques, and technologies.

### 4.2.2 Target Market

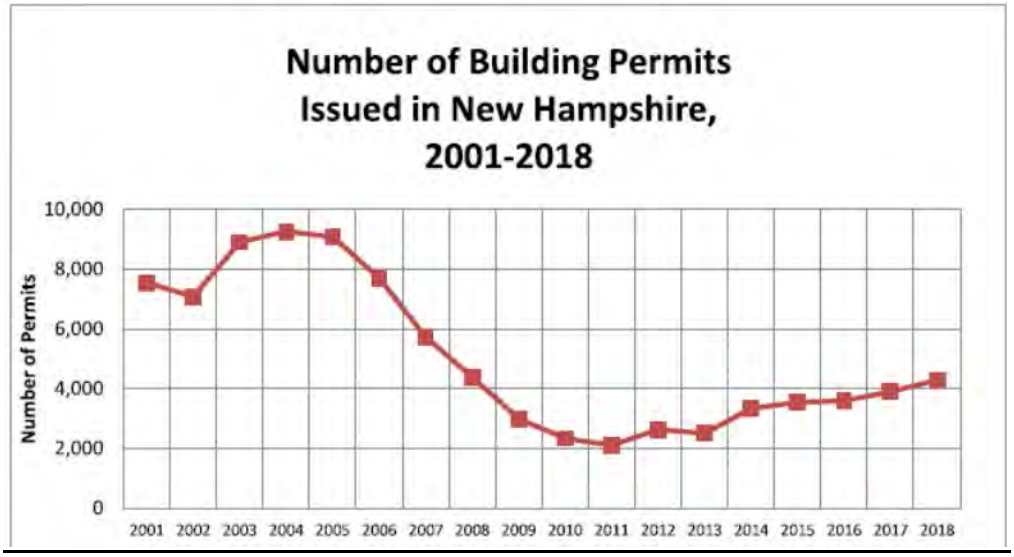
The target market for ES Homes is the entire residential new construction community across the state of New Hampshire. This includes architects, developers, home builders, homeowners, and HVAC contractors. All residential single-family and multifamily new construction projects are eligible to

participate in ES Homes, regardless of the fuel or system used in the home for space heating. ES Homes eligibility applies to manufactured, pre-fabricated, and site-built homes.

A secondary target market is homes with major additions or large portions of a home's structure undergoing a renovation. The goal of this offering is to encourage high-efficiency building practices and equipment for remodeled homes that are not eligible for the ENERGY STAR Homes Version 3.1 or Drive to ENERGY STAR pathways. For the 2021-2023 term, the NH Utilities will look to expand this strategy through greater marketing and by offering more robust incentives (based on the scale of the opportunity and cost-effectiveness) and increasing home contractor and homeowner awareness.

In 2018, the number of new construction permits filed statewide reached 4,285, an increase of approximately 18.5 percent from 2017 (3,625 permits pulled).[36] This is the fifth year in a row in which there was an increase in the total number of permits issued. The NH Utilities estimate that 4,500 permits will be filed in 2020, with 33 percent participating in the ES Homes program.

**Figure 4-2: Building Permits Issued in New Hampshire (2001-2018)**




[36] New Hampshire Office of Strategic Initiatives. *Current Estimates and Trends in New Hampshire's Housing Supply: Update 2010-2018.* Dec. 2019. Available at: https://www.nh.gov/osi/data-center/documents/housing-estimates-trends.pdf.

Over the next decade, the NH Utilities plan to foster an increase in the percentage of ENERGY STAR-certified homes built in New Hampshire through enhanced contractor outreach, in-person and online home builder trainings, and the creation of a flexible program design that encourages multiple points of entry and incentive levels for the home builder community.

### 4.2.3 2021-2023 Plans

For the 2021-2023 term, the NH Utilities will implement a number of new strategies to increase electricity, natural gas, and fossil fuel savings for residential customers. These include:

#### *Increase Reach of Existing Program and Serve More Customers*

Beginning with the 2021-2023 term, the NH Utilities plan to significantly ramp-up energy savings and participation in ES Homes. By 2030, an aspirational objective of the NH Utilities is to have 80 percent of new construction homes permitted in the state participating in ES Homes each program year.[37] During the 2021-2023 term, the NH Utilities will deploy a combination of training, technical support, and incentives to encourage home builders, renovation firms, and HVAC contractors to utilize the ES Homes' two performance-based pathways to integrate energy-efficient design and equipment into new construction or major rehab and renovation projects. For the 2021-2023 term, ES Homes will continue to offer performance-based incentives and high targets for energy efficiency savings for the residential new construction marketplace.

The Drive to ENERGY STAR Homes pathway provides an introduction to ES Homes by offering smaller incentives for home builders who construct homes above code but fall short of being eligible for ENERGY STAR certification. By slowly easing non-participating builders into ES Homes, the NH Utilities can encourage home builders to begin to practice more comprehensive design with the idea of moving them toward the higher efficiency ENERGY STAR Homes Version 3.1 pathway. In 2021-2023, the NH

[37] For the 2021-2023 term, the NH Utilities expect the number of residential permits pulled in New Hampshire that are enrolled in ES Homes to be between 15 and 30 percent. The 80 percent goal by 2030 is aspirational only and is not a PI metric.

Utilities will make the online enrollment form more accessible to builders and allow builders to submit the enrollment form and associated ES Homes paperwork online.

### *Increase Workforce Development, Education and Outreach*

To meet increased energy savings goals and to encourage greater participation in ES Homes, the NH Utilities will expand contractor education and outreach efforts during the 2021-2023 term. This includes providing more code and beyond code trainings for home builders, and lunch & learn sessions for architects, home builders, and HVAC contractors.

The NH Utilities will continue to deploy more in-the-field home builder trainings in which high-performance building specialists will provide on-site technical support during the installation of air sealing, high-efficiency insulation, and HVAC equipment and systems. These hands-on, interactive trainings will be supplemented with an enhanced NHSaves.com video library to serve as an online classroom for home builders, HVAC contractors, and home owners, as well as web links to the EPA's ENERGY STAR-certified home project checklists. In addition, the NH Utilities will create and post their own ES Homes checklists and guidelines for home builders, home owners, and contractors detailing the different aspects of designing and building an ENERGY STAR-certified home. These utility-generated checklists will feature "Top 10" tips and tricks of the trade (e.g., "Top 10 ways to ensure HVAC equipment is properly installed," etc.).

Throughout the 2021-2023 term, the NH Utilities will continue to engage with local building departments regarding current residential building codes, IECC 2015, and ES Homes. This includes ongoing meetings with building departments and delivering program literature to town halls and building code enforcement offices. The NH Utilities are researching current approaches for building code savings attribution in New England. This may include attribution of energy savings for increasing compliance with codes and standards, as well as conducting code trainings. Based on the NH Utilities' analysis, the creation of a code savings attribution model for New Hampshire may be proposed during the 2021-2023 term.

## *Design Program Tiers and Bonus Incentives to Encourage Sustainability*

During the 2021-2023 term, the NH Utilities will include multifamily new construction projects in the Drive to ENERGY STAR pathway. The NH Utilities will also offer additional program tiers and bonus incentives to encourage the design-and-build community to build to standards well beyond the current IECC 2015. In addition, the NH Utilities may offer bonus incentives for residential new construction projects that meet additional efficiency criteria or other sustainable guidelines, such as:

1. **US DOE Zero Energy Ready Home ("ZERH") Program.** This US DOE program is based on the building science requirements of ENERGY STAR for Homes Version 3.1 and promotes a comprehensive home performance-principled approach to residential new construction projects. ZERHs are high-performance homes that are so energy efficient that a renewable energy system can offset all or most of the home's annual energy consumption.

   The ZERH program has two pathways: Prescriptive and Performance. This allows the NH Utilities to offer more opportunities for home builders and homeowners looking for varied options to construct efficiently. The Performance pathway requires energy modeling (HERS) and qualifying measures include: thermal enclosures, domestic hot water equipment and distribution systems, high-quality HVAC installations, water management, certification by the EPA's Indoor airPLUS program, ENERGY STAR-certified appliances, lighting, and windows, and compliance with the US DOE's PV-ready checklist.

   A ZERH offering may also include incentives for "renewable energy-ready" homes. The NH Utilities will explore whether there is a need for separate or additional incentives to ensure that future homeowners can easily install renewable energy systems, such as PVs, without needing to alter their home's building envelope or electrical service.

2. **Passive House Certification.** The NH Utilities are closely watching the passive house ("Passive House") movement in Massachusetts and Connecticut and will apply any lessons learned in the development of a New Hampshire offering during the 2021-2023 term. The NH Utilities will

actively support Passive House trainings conducted by PHIUS in the region to the state's building community.

3. **EV-Ready Homes.** The NH Utilities may also add a bonus incentive for newly-constructed homes that are built as "EV ready". An EV-ready home ensures that customers have safe access to a dedicated 240 volt power supply for fast-charging Level 2 EV chargers. If a homeowner prewires their new home for EV charging during construction (even if it is not used immediately upon occupancy), they can save hundreds of dollars later. There are two paths to make a home EV-ready, both of which include a pre-installed conduit and wiring for a Level 2 EV charger.

   To design the EV-ready bonus incentive, the NH Utilities will benchmark other states' program designs, including Rhode Island's stretch code which includes requirements for upgraded service panels and a conduit for electricity to a garage or driveway from the home's service breaker.

4. **All-Electric Home Package.** For the 2021-2023 term, the NH Utilities will offer an all-electric home offering to encourage home builders and contractors to build all-electric residential homes outfitted with heat pump technologies to mitigate the environmental impact of fossil fuels and eliminate fuel combustion within the home. The Companies may provide incentives for the following measures: building envelope measures, thermal energy-efficiency measures, air-source or heat pumps, increased use of biofuels, biomass heating systems, EV readiness, and on-site renewable energy production and storage, including PV readiness.

5. **Above-and-Beyond Code Measures.** During the 2021-2023 term, the NH Utilities will explore offering incentives for energy-efficient measures that meet the next iteration of building codes for residential new construction, such as duct blaster thresholds and infiltration measures. In addition, the NH Utilities will explore implementing a pay-for-performance incentive for occupants of new homes to keep their home's energy consumption down.

### 4.2.4 Program Design

ES Homes is designed to serve all residential single-family and multifamily new construction homes, including site-built, manufactured, and pre-fabricated homes. The NH Utilities' Residential Program implementation staff will work closely with home builders, contractors, and certified HERS Raters across New Hampshire to encourage participation in the program's two primary pathways—ENERGY STAR Version 3.1 and Drive to ENERGY STAR.

#### *ENERGY STAR Version 3.1 Pathway*

The ENERGY STAR Homes Version 3.1 pathway ("ES 3.1") establishes a high-efficiency target for new construction homes to be built above code in the state. On average, ES 3.1 homes are designed to save 15 percent or more energy relative to homes built to the IECC 2015 standards. The NH Utilities use a robust HERS Rater contractor network to provide independent third-party inspection, verification, and diagnostic testing to help maximize the energy efficiency of single-family and multifamily homes. Once enrolled in ES Homes, a home builder submits design plans to a HERS Rater for review. The HERS Rater analyzes the submitted designs using HERS to determine and share with builders the energy-efficient features needed to ensure the home earns the ENERGY STAR certification. During the construction process, the HERS Rater is responsible for performing site visits and inspections.

To be eligible for incentives, a home must be enrolled in ES Homes and inspected prior to the installation of any sheet rock or other type of wall covering, to ensure that an insulation inspection can occur. Once a home is fully built, the HERS Rater will perform a final inspection and calculate the home's energy performance. For the 2021-2023 term, the NH Utilities will encourage the continued adoption of ES 3.1 through additional incentives and increased HERS Rater support and training.

#### *Drive to ENERGY STAR Pathway*

During the 2018-2020 Plan, the NH Utilities introduced the Drive to ENERGY STAR ("Drive to ES") pathway to recruit new builders, HVAC contractors, and single-family homeowners to ES Homes. The pathway was originally designed as an entry point into energy-efficient building design and practices to encourage home builders to go beyond code (code plus) in their new construction projects. Once a

home builder participates in the Drive to ES pathway, the NH Utilities have found that it eliminates an identified program barrier: the perception that committing to building an ENERGY STAR-certified home is a complex undertaking that requires multiple steps and interactions with other firms or contractors.

For the 2021-2023 term, the NH Utilities will continue to offer the Drive to ES pathway to builders of single-family homes and will expand the pathway offering to include builders of multifamily homes. The pathway will continue to provide smaller incentives (less than the ES 3.1's pathway incentives) to builders who have constructed new single-family and multifamily homes that are above code but do not meet ENERGY STAR certification requirements.

### *HVAC Contractor Training*

Through ES Homes, the NH Utilities will expand the workforce training opportunities and certification assistance for HVAC contractors during the 2021-2023 term. Currently, a third-party vendor trains HVAC contractors to understand the ES 3.1 requirements and checklists, how to conduct duct blaster tests, and how to properly seal duct work. The EPA requires builders to utilize a credentialed HVAC contractor trained in best practice HVAC design and installation services to qualify a home for ENERGY STAR certification. These trainings and technical assistance will allow the NH Utilities to build a robust network of HVAC contractors to support increased energy savings goals.

### *Measures*

An ENERGY STAR-certified home is designed and built so that all energy efficiency systems and features work together to create a high-performance home. This level of building performance is achieved through the installation of energy-saving measures and energy-efficient design, including high-efficiency HVAC systems, complete thermal enclosure (i.e., high-performance windows, properly installed insulation, and air sealing), ENERGY STAR-certified lighting and appliances, water protection systems (i.e., water management system checklist) to improve indoor air quality and durability, and well-insulated and sealed heating and cooling ducts.

## *Drive to Net Zero Home Competition*

The Drive to Net Zero Home Competition was designed to challenge homebuilders, architects, and home owners to build high-efficiency, net zero energy homes that generate more on-site energy than is used. Typically, net zero homes are 40 to 50 percent more energy efficient than standard homes and score a 10 or below on the HERS Index Score. The NH Utilities started the competition in 2017 and have seen considerable success in promoting beyond ENERGY STAR construction techniques to the New Hampshire residential home builder community.

The annual competition recognizes the top three homes across five categories, including: lowest overall HERS Index, lowest overall HERS Index prior to renewables, home's estimated annual operating costs, construction cost per square foot, and technological innovation. The competition is marketed to the state's home builder community and publicized through press releases, videos on the NHSaves website, and at an annual awards presentation. For program years 2020, 2021, and 2022, the NH Utilities have partnered with the New Hampshire Home Builders Association ("NHHBA") to recognize the Drive to Net Zero Home Competition winners at the NHHBA's annual Cornerstone Awards.[38] These awards are presented yearly to recognize excellence in the building industry.

Throughout the 2021-2023 term, the NH Utilities will continue to meet with the EPA to collaborate on how to continue integrating advancements in net zero homes in New Hampshire. The ES Homes program is performance based and uses HERS as a scoring mechanism to determine incentives on a dollar-per-point below the target HERS Index Score. Net zero homes have a low HERS Index Score (i.e., energy efficient); therefore, homeowners and builders who build a net zero home will earn a higher

[38] NHHBA. Website: https://nhhba.com/nhhbaevents/cornerstone-awards/.

performance-based incentive for building above code. During the 2021-2023 term, the NH Utilities may move toward offering a net zero homes option or pathway.

## *Building Codes and Standards*

New Hampshire's current building energy code went into effect on September 15, 2019 when the State Building Code Review Board approved the adoption of the 2015 editions of the International Building Code[29], including the 2015 International Energy Conservation Code ("IECC 2015"). There were several legislative amendments to the code that will sunset in March 2022. As of January 1, 2019, the NH Utilities updated the ENERGY STAR Homes program's User Defined Reference Home ("UDRH") to reflect the current minimum standard from the IECC 2015. The UDRH will be updated again in March 2022 to reflect the end of the sun-set amendments to the IECC 2015.

### Compliance Support for Base and Stretch Code

The NH Utilities can provide support to improve compliance with building energy codes and appliance standards. As codes change and become more stringent, the building community (owners, developers, designers, contractors) must understand how to interpret requirements in order to comply with building codes. The NHSaves Programs have a successful history of promoting, educating, and delivering energy-efficient measures and programs. For these reasons, the NH Utilities are in an advantageous position to support code compliance and code enhancement through energy codes training and education as they work closely with stakeholders and trade allies.

The NH Utilities would work with local builders, contractors and building enforcement officials to increase the number of homes and commercial buildings complying with the locally applicable energy code, generally either the International Conservation Code ("ICC") model code version adopted statewide, or New Hampshire's stretch code. Activities may include targeted trainings, outreach and technical support in the form of code ambassadors and circuit riders, compliance documentation tool development, and review support. Looking ahead to the 2021-2023 term, additional infrastructure will need to be developed to support the next iteration of requirements for residential and commercial new construction. For example, the IECC 2015 building code requires blower door testing for all

residential buildings. Starting in 2021, the NH Utilities plan to begin the strategic identification of jurisdictions that would benefit from code compliance support.

The NH Utilities' efforts can supplement the efforts of code enforcement officials who may be challenged to fully enforce the energy use provisions, as their focus is more on health and safety-related aspects of the code. Through their relationship with contractors and builders, the NH Utilities will be able to support the implementation of those improvements going forward. The NH Utilities could expand upon existing incentive-based new construction program outreach efforts to target various stakeholders.

**Stretch Code Development Support**

The NH Utilities can support the development of a stretch code that exceeds statewide minimum requirements and is adopted by local governments. A coordinated approach by the NH Utilities will provide technical support for the development of stretch code.

While the NH Utilities will focus their efforts in 2021-2023 on support for energy code compliance, another aspect of codes and standards includes supporting the adoption of updated versions as knowledge and technical capabilities related to building science applications improves. Codes and standards adoption work in other jurisdictions includes efforts on both appliance standards and on base energy codes. Energy efficiency programs can provide technical expertise and resources as state boards and legislative bodies review codes and standards updates.

**Evaluation Savings and Attribution**

Support for Energy Code Compliance should result in the realization of the energy savings that are lost when newly-constructed homes are not 100 percent compliant with the locally applicable building code. The NH Utilities will collaborate with stakeholders on the development of an evaluation plan that will enable the measurement and attribution of savings from these efforts to the NH Utilities for the 2021-2023 term. A detailed evaluation plan, along with an appropriate attribution methodology, will be developed in 2021. Qualitative as well as quantitative research would be planned for in 2021 and 2022 to evaluate ongoing initiative efforts and will be used for savings projections that can potentially be claimed within this three-year cycle (2021-2023 term) and future cycles.

### 4.2.5 Marketing

ES Homes will be promoted through a variety of marketing channels including social media updates (Facebook and Twitter), home shows, paid Internet searches, and circuit riders at Lowe's, Home Depot, and local hardware and lumber stores. The NHSaves.com website will continue to drive participation in the program through interactive online trainings regarding ENERGY STAR-certified homes, fillable online enrollment forms, customer testimonials, and Drive to Net Zero Home Competition case studies.

Throughout the 2012-2023 term, the NH Utilities will focus their marketing efforts on direct outreach to the program's existing network of builders, HERS Raters, and HVAC contractors, as well as reaching out to recruit new participants from the home builder community through the Drive to ES pathway. In addition, the NH Utilities have ongoing meetings with building departments and deliver ES Homes literature to town halls and building code enforcement offices.

The NH Utilities will continue to diversify marketing strategies to reach potential new construction home buyers. This may include utilizing data collected from consumer social media searches to target customers looking for property and residential developments, as well as promoting ES Homes at home improvement stores (brick-and-mortar and online) and lumberyards. In addition, the NH Utilities may extend educational opportunities beyond the new construction marketplace to the real estate, home inspection, and appraisal communities.

### 4.2.6 Program Budget and Goals

**Table 4-2: ES Homes Program—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $3,370,729 | $3,605,389 | $3,878,304 | **$10,854,423** |
| Annual kWh Savings | 1,614,972 | 1,753,735 | 1,944,116 | **5,312,824** |
| Lifetime kWh Savings | 38,239,860 | 41,507,492 | 45,841,807 | **125,589,158** |
| kW Reduction | 20 | 20 | 33 | **73** |
| No. of Participants | 797 | 764 | 837 | **2,398** |
| **Natural Gas Programs** | | | | |
| Program Budget | $1,346,744 | $1,592,055 | $1,823,272 | **$4,762,071** |
| Annual MMBtu Savings | 7,214 | 9,313 | 13,419 | **29,947** |
| Lifetime MMBtu Savings | 178,569 | 230,377 | 320,050 | **728,997** |
| No. of Participants | 198 | 256 | 306 | **760** |

**Note:** kWh = kilowatt hours, kW = kilowatts, and MMBtu = million British thermal units.

**This page intentionally blank.**

## 4.3 ENERGY STAR Products Program

### 4.3.1 Program Objective

The ENERGY STAR Products ("ES Products") program's objective is to increase the purchase and installation of high-efficiency appliances, lighting, heating and cooling systems, and water heating equipment. ES Products is focused on targeted consumer education and a robust network of distributors, manufacturers, installation contractors, and retailers to promote the purchase of energy-efficient products over standard-efficiency equipment. The NH Utilities also provide appliance recycling rebates that give customers an incentive to recycle certain old, inefficient appliances, such as refrigerators and freezers, and dispose of them in an environmentally-friendly manner.

### 4.3.2 Target Market

The target market for ES Products is New Hampshire's 520,000 households which utilize a multitude of energy-consuming devices. The program's incentives are designed to encourage customers to replace old, inefficient products with high-efficiency ENERGY STAR-certified technologies.

### 4.3.3 2021-2023 Plan Priorities

The NH Utilities have established several priorities for ES Products to increase energy savings and customer participation during the 2021-2023 term. These priorities include:

#### *Introducing New Products to the Energy Efficiency Marketplace*

The NH Utilities will expand ES Products during the 2021-2023 term by offering incentives for additional high-efficiency products, such as advanced power strips, freezers, electric-heated water-saving devices, and Wi-Fi thermostats (for oil and propane-heated homes). In addition, the NH Utilities will expand appliance recycling rebates to include room air conditioners and will investigate adding dehumidifiers during the 2021-2023 term. This expansion may be integrated into the current appliance recycling pick-up offering (see Section 4.3.4: Program Design) for freezers and refrigerators. Alternatively, some of the NH Utilities may host local and regional recycling events in collaboration with municipalities or waste managers.

In addition to the above-referenced new measures, the NH Utilities will evaluate the cost effectiveness of smart home energy management systems and connected products for inclusion in the 2021-2023 ES Products program. The NH Utilities work with organizations and vendors such as the Massachusetts and Connecticut Technical Assessment Centers, EPA, Northeast Energy Efficiency Partnerships ("NEEP"), E-Source, and contracted vendors who are experts in the appliance field (i.e., retailer circuit riders and product fulfilment vendors) to identify new and emerging technologies for ES Products.

## Residential Lighting

During the 2021-2023 term, the NH Utilities will continue to incentivize general service LED bulbs and fixtures in order to prevent backsliding that may otherwise result from recent reversals in federal standards for general service bulbs (see Section 4.1.3). The NH Utilities have been implemented retailer point-of-purchase markdowns for energy-efficient lighting beginning in 2016. Since that time, the number of participating retailers has increased each year, while some smaller retailers have continued to offer mail-in rebates.

During the 2021-2023 term, the NH Utilities will conduct strategic marketing promotions and incentives to ensure that hard-to-reach and income-eligible customers, who are the most up-front value conscious consumers, have high-efficiency choices in the lighting marketplace.

## ENERGY STAR Retail Products Platform

During the 2021-2023 term, the NH Utilities will look into introducing the ENERGY STAR Retail Products Platform ("ESRPP"), a collaborative marketing and upstream initiative facilitated by the EPA, ENERGY STAR, energy efficiency program sponsors (i.e., utilities), retailer partners, and other stakeholders to the New Hampshire marketplace. The ESRPP gives program sponsors a national-level structure to offer minimal direct retailer incentives to big-box retail stores, such as Best Buy, Home Depot, Lowe's, Wal-Mart, Target, and small independent stores (as part of the Nationwide Marketing Group) to increase the sale, promotion, and stocking of high-efficiency appliances.

Incentivized measures may include, but are not limited to: clothes dryers, clothes washers, freezers, refrigerators, and room air conditioners. This new product channel will be designed to generate increased energy savings as more energy-efficient products are stocked and sold at big-box and small independent retail stores. In preparation, 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.

#### *Expand Midstream Rebate Offerings*

The NH Utilities will expand the list of measures offered by the existing midstream distributor network to include HPWHs and Electronically Commutated Motor ("ECM") circulating pumps. The NH Utilities will continue to investigate if and when to include heat pumps for heating and cooling in midstream offerings.

### 4.3.4 Program Design

The NH Utilities have designed ES Products for 2021-2023 to promote the purchase of ENERGY STAR-certified appliances, lighting, heating and cooling systems, and water-heating equipment. The NH Utilities will continue to utilize varied incentives and delivery mechanisms to reach New Hampshire's households at multiple retail entry points.

#### *Lighting Products*

The primary mechanisms to promote ENERGY STAR-certified LED products are point-of-purchase product markdowns and online rebates. The NH Utilities partner with numerous retailers, distributors, and manufacturers ("Retail Partnerships") to promote LED light bulbs and fixtures. Recently, five new Retail Partnerships with discount stores have been established to better serve the limited-income and hard-to-serve markets. Over the next three-year period, the NH Utilities will continue to negotiate the special placement of products and promotions at various retail partners' locations throughout the state to help fully transform the market toward high-efficiency LED lighting.

## *Appliances*

### Rebates

ES Products provides rebates for the purchase of ENERGY STAR-certified electric appliances, including: clothes dryers, clothes washers, dehumidifiers, pool pumps, refrigerators, room air conditioners, and room air purifiers. These rebate forms are available online and at retail partner locations. For online rebates, customers must first purchase the energy-efficient item, then complete an online rebate form, and provide supporting documentation (i.e., receipts) through the ES Product online system. The NH Utilities' rebate fulfillment vendor then processes and verifies online rebate submissions. Once an online rebate submission has been approved, the vendor sends the NHSaves incentive check to the customer. The rebate fulfillment vendor sends detailed rebate fulfillment data to each NH Utility along with an invoice for the cost of all customer rebates fulfilled during the period.

Point-of-sale rebates result from collaborations between the NH Utilities, a retailer, and a manufacturer. These partners agree to offer special promotions combined with program incentives for targeted high-efficiency products. The on-sale products are displayed at end-caps and retail shelves with prominent NHSaves and ENERGY STAR signage promoting the discounted prices. Upon checkout, the product is automatically marked down without the need for the customer to fill out a mail-in rebate: thus, removing a participation barrier for customers and retailers. Point-of-sale rebates and instant discount e-rebates are available for measures such as dehumidifiers, room air conditioners, and room air purifiers. The NH Utilities will monitor new and emerging technologies that could be introduced during the 2021-2023 term.

### Appliance Recycling Program

The NH Utilities offer appliance recycling rebates to encourage customers to dispose of their under-utilized freezers and refrigerators wasting energy that are typically located in the basement or garage.

These old, inefficient appliances are then disposed of in an environmentally-friendly manner. The appliance recycling process begins when a customer schedules a pick-up time for the appliances through an online request form or via telephone. The third-party vendor will pick up the old refrigerator or freezer at the customer's home and will then issue an incentive payment.

During the 2021-2023 term, the NH Utilities will expand ES Products recycling to include room air conditioners and will evaluate the cost effectiveness of offering dehumidifier recycling rebates. This expansion may include integration into the current program design (third-party pickup) or recycling events at central locations.

### *HVAC Systems*

The NH Utilities offer mail-in and online submission rebates for high-efficiency heating and cooling equipment, including central air conditioning systems, air-source heat pumps, ductless heat pump mini-splits ("DHPMS"), natural gas boilers and furnaces, and Wi-Fi thermostats. The HVAC offerings are heavily promoted through periodic e-mail blasts to over 500 contractors across the state and New England area, as well as through bill inserts, newsletters, and social media.

Contractor response has been extremely positive to these rebates, especially for air-source heat pumps, as the incentives significantly help them to sell high-efficiency heating and cooling equipment to customers. To complement these rebates, the NH Utilities will continue to support contractor education and training on high-efficiency HVAC equipment.

To receive an incentive, midstream or upstream, the NH Utilities require that central air conditioning ("A/C") systems and heat pump systems meet nationally-recognized energy efficiency specifications, including:

- **Energy Efficiency Ratio ("EER").** An EER rating measures how efficient a central A/C or heat pump system will operate when the outdoor temperature is at a specific level (95°F). The higher the EER, the more efficient the system.
- **Heating Seasonal Performance Factor ("HSPF").** The HSPF measures the efficiency of a heat pump and shows the total heating output of the heat pump during a normal heating season, in

BTUs, as compared to the total electricity consumed (in kWh) during the same period. The higher the HSPF, the more efficient the heat pump.

- **Seasonal Energy Efficiency Ratio ("SEER").** A SEER rating measures the efficiency of a central A/C or heat pump system over an entire cooling season. The SEER rating indicates the cooling output of a central A/C or heat pump system in BTUs during the normal cooling season as compared to the total electricity consumed (in kWh) during the same period. The higher the SEER rating, the more efficient the central A/C or heat pump system.

### *Domestic Water Heating Equipment*

ES Products provides rebates for the purchase of ENERGY STAR-certified water heating equipment, including natural gas water heaters, combination units (providing both heat and hot water), and HPWHs. Natural gas water heater incentives are available through mail-in and online rebate submissions.

HPWHs are considerably more efficient than traditional electric water heaters. HPWHs concentrate the warmth of ambient air around them to heat water for domestic hot water consumption. For the 2021-2023 term, HPWH technology rebates will be offered through three channels: (1) mail-in rebates, (2) instant discount e-rebates offered through participating Retail Partners, and (3) a midstream offering.

In 2020, the NH Utilities introduced a midstream rebate to encourage retailers and distributors to stock their shelves with ECM circulating pumps and high-efficiency HPWHs and market the technologies to contactors. To support the newly-introduced midstream rebates, the NH Utilities will continue to partner with big-box retail stores and distributors to conduct contractor trainings regarding the benefits of high-efficiency water heating equipment.

## 4.3.5 Marketing

For the 2021-2023 Plan, the NH Utilities plan to market ES Products through a variety of marketing channels, including retail and equipment distributor partner promotions, bill inserts, e-mail communications, social media updates (Facebook and Twitter), and paid internet searches. The NH Utilities will also continue to work closely with Retail Partners to market high-efficiency appliances,

HVAC systems, water heating equipment, and lighting products to the residential marketplace. This may include special promotions, end-cap displays, distribution of marketing collateral, and in-store educational presentations.

### 4.3.6 Program Budget and Goals

**Table 4-3: ES Products Program—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $11,931,356 | $10,230,869 | $9,465,526 | **$31,627,751** |
| Annual kWh Savings | 22,405,241 | 14,574,410 | 11,770,086 | **48,749,738** |
| Lifetime kWh Savings | 141,057,761 | 133,362,831 | 141,898,573 | **416,319,165** |
| kW Reduction | 3,421 | 2,226 | 1,854 | **7,500** |
| No. of Participants | 442,076 | 250,791 | 102,196 | **795,062** |
| **Natural Gas Programs** | | | | |
| Program Budget | $1,463,811 | $1,634,490 | $1,808,383 | **$4,906,684** |
| Annual MMBtu Savings | 17,493 | 19,791 | 21,456 | **58,740** |
| Lifetime MMBtu Savings | 296,615 | 334,790 | 362,488 | **993,893** |
| No. of Participants | 11,216 | 12,930 | 13,231 | **37,377** |

**Note:** kWh = kilowatt hours, kW = kilowatts, and MMBtu = million British thermal units.

**This page intentionally blank.**

## 4.4 Home Energy Assistance Program ("HEA")

### 4.4.1 Program Objective

HEA is a fuel-neutral weatherization program designed to reduce energy use from both electric and fossil fuel-consuming appliances and HVAC systems. The program serves New Hampshire's income-eligible homeowners and renters to help reduce their energy costs, optimize their home's energy performance, and make their homes more comfortable. The primary objective of HEA is to reduce the energy burden of limited-income households, which often incur a significantly higher share of household income from energy costs.

High energy burdens, often called *energy poverty*, are when a household spends 10 percent or more of its income on energy-related expenses. Often, these households are older homes where maintenance improvements have been deferred and there is insufficient insulation to keep the home comfortable, safe, and efficient. HEA measures, such as air sealing, insulation, heating system upgrades, and LED lighting provide long-term solutions that help these households reduce energy consumption, lower their bills, and provide significant non-energy-related benefits.

HEA covers the cost to improve the efficiency of customers' homes and provides practical solutions about how to modify how they use their homes and equipment without sacrificing their comfort or quality of life. In addition to energy-efficient measures, the HEA program may provide services to address health and safety barriers in the home, such as inadequate ventilation, old wiring, and damaged insulation, if the energy efficiency project is deemed as cost effective.

### 4.4.2 Target Market

A baseline potential study currently being undertaken estimates that approximately 22 percent of New Hampshire's households meet the income-eligible criteria for HEA, some of which have been served

over the past two decades through the NH Utilities' collaboration with the CAAs.[39] The HEA program targets income-eligible residential customers who live in single-family buildings (1 to 4 units) and multifamily buildings (greater than 4 units).

To receive HEA services, a household's income must meet the eligibility criteria for participation in the New Hampshire Fuel Assistance Program ("FAP"), the New Hampshire Electric Assistance Program ("EAP"), or anyone residing in subsidized housing or municipal or nonprofit organizations serving those in need. The current guidelines include:

- **FAP Guidelines.** Participants must have an income that is at or below 60 percent of the state median income for their household size; or
- **Electric Assistance Guidelines.** This statewide utility assistance program has general guidelines for discounts on bills based on household income, household size, and electricity or natural gas usage. Applications are processed by the CAAs.

The NH Utilities also coordinate closely with the US DOE's Weatherization Assistance Program ("WAP") to identify HEA participants and to leverage funding for energy efficiency projects. WAP participants must have an income that is at or below 200 percent of the federal poverty guidelines for their household size.

HEA applications are reviewed, and income eligibility is verified before customers can receive services. HEA effectively leverages multiple funding sources, like WAP and FAP, to fund additional energy efficiency measures, such as heating system replacements. WAP provides federal funding to income-qualified homeowners who want to optimize the energy performance of their home. The New Hampshire FAP is funded by the federal Low Income Home Energy Assistance Program's ("LIHEAP") funds and assists the state's low-income customers in paying for heating costs. The New Hampshire Office of Strategic Initiatives ("NH OSI") and New Hampshire's CAAs distribute FAP benefits.

[39] Itron, Inc. *New Hampshire Residential Energy Efficiency Baseline Study*. Jun. 11, 2020.

### 4.4.3 2021-2023 Plans

For the 2021-2023 Plan, the NH Utilities will implement a number of new initiatives to increase participation in HEA, including supporting workforce development, addressing program design constraints, developing new "on ramps" to program participation, introducing new energy-efficient measures, and improving the program's data sharing and data tracking systems.

#### *Improving Weatherization Tracking Systems*

Currently, the NH Utilities are working to upgrade weatherization tracking and referral systems to streamline information sharing between the NH Utilities, CAAs, NH OSI, and other contractors. The new software will allow the NH Utilities to perform energy modeling more easily; allowing them to review more projects for cost effectiveness and provide better energy savings information to customers. By 2021, the NH Utilities' data tracking system should be upgraded and operational.

#### *Modifications to HEA*

During the 2021-2023 term, the NH Utilities will make several modifications to HEA, including:

1. **Increasing or Eliminating Current Incentive Cap.** The NH Utilities have increased the previous incentive cap of $8,000 to $20,000, including heating systems, and will allow exceptions to exceed that cap when there is not enough other funding available to complete all cost-effective measures. Due to the limited amount of WAP funds available, once the incentive threshold is reached, HEA contractors cannot install additional energy-efficient measures or address further health and safety barriers. The previous threshold did not always support the installation of all energy efficiency measures that could optimize each home's energy performance. The increased incentive cap of $20,000 will ensure that more homes are addressed comprehensively, consequently driving energy savings in HEA. If the project cap is reached ($20,000), the NH Utilities will review each home on a case-by-case basis to determine the cost-effectiveness of the project.
2. **Implement New Screening Methodologies.** By 2021, the structure of the new Granite State Test for cost-benefit analysis of the portfolio of programs, as well as a PI structure that places

the benefit-cost threshold at the portfolio level, will allow the NH Utilities more flexibility in applying the benefit-cost test requirements for HEA which in turn will allow more projects to qualify, including those that need health and safety repairs. For the 2021-2023 term, the NH Utilities will also continue to allocate HEA incentive dollars toward fixing health and safety barriers, such as roof repair, removal of knob and tube wiring, and vermiculite remediation, as part of the energy improvements.

3. **HEA Implementation Manual.** During the 2021-2023 term, the NH Utilities will revise and update the HEA implementation manual to record the standard processes and guidelines the NH Utilities follow to administer the program. This will eliminate some inconsistencies in HEA design, procedures (e.g., invoice processing, which measures are funded, etc.), and operations across the NH Utilities.

4. **Introduce New Pathways and Measures.** To scale up energy savings and serve more customers through HEA, the NH Utilities will offer additional "on ramps" for income-eligible customers to participate in the program during the 2021-2023 term. These additional pathways will include, but are not limited to: visual audits, standalone appliance vouchers, and the distribution of energy efficiency kits.

In addition to the new HEA pathways, the NH Utilities will introduce new energy-efficient measures during the 2021-2023 term, including, but not limited to: clothes dryers, clothes washers, dehumidifiers, HPWHs, and air conditioning equipment. Some of these measures may be included with the standalone appliance vouchers referenced above.

## *Increase Education, Training, and Trade Ally Relationships*

In order to ramp-up HEA activity, the NH Utilities recognize the need to increase workforce capacity in parallel through CAA and qualified contractor training. This will ensure the CAAs can train and retain contractors who have the expertise to specify, install, and optimize energy-efficient technologies. In addition, the NH Utilities plan to allocate a portion of NHSaves funds to allow CAAs to support capacity building, such as hiring and training new CAA staff due to attrition in the workforce and purchasing

weatherization equipment.[40] The NH Utilities will focus efforts on conducting CAA and qualified contractor education and training to increase the knowledge-level and expertise regarding high-efficiency technologies and comprehensive energy savings. Building an educated workforce will allow the program to serve more customers and drive increased energy savings.

### 4.4.4 Program Design

The HEA program provides fuel-neutral weatherization services to income-eligible homeowners and renters across the state. These energy-efficient measures reduce customers' energy costs, improves their homes' energy performance, and ensures their homes are comfortable. For the 2021-2023 term, the NH Utilities have established four pathways for HEA: (1) direct-install weatherization services, (2) visual audits with limited weatherization measures, (3) appliance vouchers offered to visual audit participants or as standalone rebates, and (4) the distribution of energy kits. The NH Utilities have created these pathways to scale up energy savings and make it easier for income-eligible customers to participate in NHSaves Programs.

#### *Customer Intake*

The NH Utilities partner with the CAAs, NH OSI, housing authorities, and other nonprofits across the state to identify and verify eligible customers and projects for the HEA program. This collaboration is important to ensure that the HEA program fully qualifies, prioritizes, and serves income-eligible customers who have a variety of complex needs. The HEA program's partners are consistent and reliable presences within the low-income community and have established relationships with multiple service providers that help promote trust and social acceptance, and have access to a variety of local, state and federal funding sources that improve services and outcomes for the same income-eligible customers.

[40] RSA 374-F. http://www.gencourt.state.nh.us/rsa/html/XXXIV/374-F/374-F-mrg.htm. Energy efficiency programs should include the development of relationships with third-party lending institutions to provide opportunities for low-cost financing of energy efficiency measures to leverage available funds to the maximum extent and shall also include funding for workforce development to minimize waiting periods for low-income energy audits and weatherization.

## *Energy Efficiency Audit and Direct-Install Pathway*

Verification screenings determine if customers are eligible for HEA based on their income. HEA contractors will perform an energy assessment of the eligible home to identify the most cost-effective improvements needed to optimize the energy performance of each customer's home. Then, a team of energy technicians installs the recommended improvements. Once a home has received HEA direct-install services, an energy auditor will perform a post-work inspection and explain the energy savings to the customer. Services are fully paid for by the NHSaves HEA budget or collaborating partner funding (e.g., WAP), and there are no costs incurred directly by the customer.

For the 2021-2023 term, the NH Utilities will continue to offer the CAAs the right of first refusal to deliver HEA direct-install program services, provided they meet a set of statewide standards for bidding, pricing, and timely program delivery. In 2020, the HEA measure incentives were increased based on updated pricing. Should a CAA not be able to provide HEA program services in accordance with the approved weatherization plan or declines to deliver the services, the work will be assigned to other qualified contractors who meet the NH Utilities' standards for pricing, customer service, and work quality.

### Direct-Install Measures

HEA contractors will direct-install a number of cost-effective energy efficiency measures, such as:

- Air sealing;
- Building shell insulation;
- Duct sealing;
- Freezer replacements;
- High-efficiency lighting;
- Hot water-saving devices (hot water temperature setback, faucet aerators, low-flow showerheads, and water pipe insulation);
- HVAC system cleaning;

- Refrigerator replacements;
- Window and door replacements; and
- Health and safety measures that are required for weatherization services to be performed.[41]

HEA also replaces HVAC equipment with high-efficiency technologies if the current model is at the end of its useful life, deemed potentially unsafe, or is otherwise in need of replacement. The NH Utilities may install ductless heat pumps for customers currently using electric resistance heat or electric cooling when it is deemed cost-effective. In addition, the NH Utilities will continue to offer HPWHs to encourage homeowners to replace old, inefficient oil and propane water heaters with these high-efficiency technologies.

For the 2021-2023 term, the NH Utilities will continuously evaluate the cost effectiveness of adding new measures to the program.

### *Visual Audit Pathway*

A visual audit offering has been deployed through the Home Performance with ENERGY STAR ("HPwES") program (see Section 4.5) and is being reviewed for its efficacy and cost effectiveness within the 2020 HEA framework. The Visual Audit pathway in HPwES is utilized for electric and natural gas customers who applied for energy efficiency services through the Home Heating Index ("HHI") tool but did not meet the heating fuel threshold for participation in the full HPwES program. If a visual audit customer is identified by their NH Utility as income-qualified, that customer is eligible to receive a visual audit through HEA.

In the Visual Audit pathway, the contractor will perform an on-site assessment of the home to determine energy-saving opportunities and the customer will receive basic measures, such as Wi-Fi or programmable thermostats, flow-control showerheads and faucet aerators, up to six feet of domestic

[41] For the 2021-2023 term, the basic health and safety measures will include basic ventilation requirements, as well as smoke and carbon monoxide detectors needed to safely conduct weatherization services. Additional health and safety measures that are typically high-cost barriers to weatherization will continue to be included in HEA, including but not limited to: roof repair, knob and tube wiring replacement, and wet basement mitigation.

hot water pipe insulation, and LED bulbs without the need for a full on-site energy audit. The contractor will also determine if there are other opportunities that can be implemented through the full HEA pathway (direct-install). If sufficient opportunity exists, then the contractor will notify the customer's NH Utility to enroll the customer in the full HEA offering.

### *Appliance Vouchers*

During the 2021-2023 term, the NH Utilities plan to offer appliance vouchers (rebates) to income-qualified customers, including those with high electric usage. These vouchers will be offered through the Visual Audit or may be standalone appliance rebates to encourage customers to replace their old, inefficient appliances with high-efficiency models.

Prior to implementation, the NH Utilities will finalize the pre-qualification conditions for appliance vouchers, which may include requiring the customer to receive a Visual Audit or processing qualified customers that have been on a wait list for an extended period of time for HEA direct-install weatherization services. The appliance voucher offering will allow the NH Utilities to reach more income-eligible customers and drive energy savings for HEA.

### *Distribution of Energy Kits*

For the 2021-2023 term, the NH Utilities will expand the distribution of energy kits to targeted groups of income-eligible customers across the state to broaden access to low cost measures for eligible customers. The distributed energy kits will include items such as LED bulbs, power strips, and program literature. Energy kits may be distributed to targeted customers (i.e., EAP customers) through direct marketing, after they have participated in the Visual Audit pathway, or at Button Up Workshops (see Section 4.4.5 for more details).

Energy kits are an effective tool to offer quick and easy energy savings to customers, particularly if they are on a wait list for an extended period of time for HEA direct-install weatherization services.

### *Coordination with Other Fuel Assistance Programs*

HEA is closely coordinated with the EAP and FAP (which as noted previously is funded by LIHEAP). The NH Utilities work with EAP and FAP participants to help make their homes more energy efficient and help them save on their energy bills. This stretches EAP and FAP funding to include other New Hampshire residents in need of assistance, while improving the comfort and efficiency of their homes.

### *Coordination with WAP*

The CAAs and the NH OSI administer WAP. The NH Utilities collaborate closely with these HEA partners to maximize the number of projects that are jointly funded by HEA and WAP. Leveraging other energy efficiency funding allows the NH Utilities to serve more income-qualified customers and help decrease these customers' energy burdens.

### *Coordination with Other NHSaves Programs*

When a customer qualifies for the HPwES program (see Section 4.5), the NH Utility checks to see if the customer is receiving EAP benefits to determine if they qualify for HEA. In addition, the NH Utilities work closely with building owners and developers building new homes or multifamily buildings for low-income communities (e.g., Habitat for Humanity, affordable housing projects, etc.) to ensure that these homes are built efficiently to decrease the energy burden on the new tenants or occupants. Residential new construction projects are budgeted for and energy savings goals are tracked through ES Homes (see Section 4.2).

## 4.4.5 Marketing

Program participants are primarily recruited through referrals from the CAAs, social service agencies, housing authorities, nonprofit groups, the EAP and FAP programs, and the NH Utilities' customer care and energy efficiency departments. These groups are well-trusted and serve the target market year round. By partnering with these entities, the NH Utilities have direct access to communicate HEA benefits to the right market segment. For the 2021-2023 term, the NH Utilities may market HEA through a variety of marketing channels, including bill inserts, periodic e-mail updates and newsletters, events, social media updates (Facebook and Twitter), targeted direct mail, and paid Internet searches.

### 4.4.6 Program Budget and Goals

**Table 4-4: HEA Program—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $18,555,949 | $23,025,028 | $28,273,056 | **$69,854,034** |
| Annual kWh Savings | 2,631,229 | 3,336,262 | 4,030,680 | **9,998,172** |
| Lifetime kWh Savings | 36,575,964 | 45,155,878 | 54,156,758 | **135,888,600** |
| kW Reduction | 365 | 458 | 549 | **1,372** |
| No. of Participants | 1,974 | 2,531 | 2,982 | **7,487** |
| **Natural Gas Programs** | | | | |
| Program Budget | $2,066,275 | $2,356,050 | $2,713,815 | **$7,136,139** |
| Annual MMBtu Savings | 9,550 | 10,606 | 12,028 | **32,184** |
| Lifetime MMBtu Savings | 207,193 | 230,583 | 262,398 | **700,173** |
| No. of Participants | 453 | 490 | 540 | **1,483** |

**Note:** kWh = kilowatt hours, kW = kilowatts, and MMBtu = million British thermal units.

## 4.5 Home Performance with ENERGY STAR Program

### 4.5.1 Program Objective

The HPwES program is a comprehensive, fuel-neutral whole house approach to improving energy efficiency and comfort in existing residential single-family and multifamily homes. The objective of HPwES is to help customers who live in existing homes reduce their energy costs, reduce their dependence on fossil fuels, and improve their home's energy performance through the implementation of weatherization and energy-efficient measures. HPwES provides lighting upgrades, heating and hot water equipment upgrades, weatherization measures, and appliance replacements.

### 4.5.2 Target Market

The target market for HPwES is existing residential single-family homes where the homeowners or landlords want to reduce energy bills, improve a home's energy performance, and increase the comfort of the home.

#### *Program Eligibility*

There are a number of eligibility guidelines for participation in HPwES. Single-family homes (1 to 4 units) are eligible to participate regardless of how a home is heated. If a home is primarily served by its natural gas utility (residentially-metered home heated by natural gas), it participates in HPwES through its natural gas utility and if it is a non-natural gas home, it participates through its electric utility.[42]

HPwES reviews multifamily homes and evaluates them for cost effectiveness using the standard benefit-cost test to determine the home's eligibility.

[42] For single-family and multifamily homes that are natural gas-heated, the customer's NH Gas Utility pays for weatherization and health and safety measures and the customer's NH Electric Utility pays for the electric savings measures.

- **Natural Gas-Heated Homes.** Individually-metered residential units are serviced through HPwES. If a project reaches the customer's cap $(8,000), the customer's electric utility will incent the customer up to $8,000 more. Centrally-heated residential units that are on a commercial or master-meter account are primarily served by the NH Natural Gas Utilities through the NHSaves C&I programs (see Chapter Three).

- **Other Fuel-Heated Homes.** These homes are eligible for all services, which are provided by the respective NH Electric Utility.

Regardless of heating fuel, utility territory, or which program the project falls into, customers undertaking a multifamily project will have a streamlined single point of contact, through their Home Performance Contractor, Community Action Agency, or other vendor working with the NH Utilities.

### 4.5.3 2021-2023 Plans

For the 2021-2023 term, the NH Utilities will implement a number of new initiatives to continue the success of HPwES while making program design modifications to serve more customers and help drive more energy savings.

#### *Improving Weatherization Tracking Systems*

As noted in the HEA section (Section 4.4), the NH Utilities are working to upgrade weatherization tracking and referral systems to streamline information sharing between the NH Utilities, CAAs, NH OSI, and other contractors. The new software will allow the NH Utilities to perform energy modeling more easily; allowing them to review more projects for cost effectiveness and provide better energy savings information to customers. By 2021, the NH Utilities will have upgraded the program's data tracking systems.

#### *Increase Program Participation and Savings*

The NH Utilities will increase HPwES participation levels and energy savings by expanding the entry points to the program for customers and contractors. This drive toward increased energy savings and participation will include the following initiatives:

- **Prioritize Workforce Trainings.** The NH Utilities will focus efforts on conducting contractor education and training workshops to increase the knowledge level and expertise regarding high-efficiency technologies and comprehensive energy savings. Building an educated workforce will allow the program to serve more customers and drive increased energy savings.

- **Implement New Screening Methodologies.** The structure of the new Granite State Test for cost-benefit analysis of the portfolio of NHSaves Programs, as well as a PI structure that places the benefit-cost threshold at the portfolio level, will allow the NH Utilities more flexibility in applying the benefit-cost test requirements for HPwES. The upgraded tracking software will allow more timely and accurate energy modeling that is expected to allow the NH Utilities to expand HPwES offerings to more customers.

- **Expand Visual Audit Pathway.** To ensure that HPwES energy efficiency services reach more customers, the NH Utilities will expand the program to offer more HPwES Visual Audits. This ensures that all customers have a pathway to participate in the program, even if they do not qualify through the HHI screening models.

- **Add New Pathways.** The NH Utilities are exploring adding more pathways for customers who do not meet the HHI screening tool to participate in HPwES. This may include appliance vouchers for prescriptive measures, such as high-efficiency appliances or self-installed insulation. For the 2021-203 term, the NH Utilities will continue the Virtual Assessment pathway to HPwES that was introduced in 2020.

### Addressing Program Design Constraints

For the 2021-2023 term, the NH Utilities have resolved to refine several HPwES design constraints, including:

- **Increasing Current Incentive Cap.** For the 2021-2023 term, the NH Utilities have increased the previous HPwES incentive cap from $4,000 to $8,000, including heating system incentives. Increasing project costs restrict, HPwES contractors' ability to drive deeper energy savings

through the installation of holistic energy-efficient measures under the previous incentive cap. The previous threshold did not always support the installation of all energy efficiency measures that could optimize each home's energy performance. The increased incentive cap of $8,000 will ensure that more homes are addressed comprehensively, consequently driving energy savings in HPwES. If the project cap is reached ($8,000), the NH Utilities will review each home on a case-by-case basis to determine the cost effectiveness of the project.

- **Addressing More Health and Safety Barriers.** In 2021, the NH Utilities will begin to make financing options available to those homes with health and safety barriers, such as knob tube wiring and vermiculite for projects requiring this remediation to move forward.

**Introduce Additional Measures to HPwES**

To increase energy savings and better serve customers, the NH Utilities will introduce new energy-efficient measures during the 2021-2023 term, such as additional appliances and HPWHs (that are already part of the ES Products program). In addition, the NH Gas Utilities will work to identify and evaluate new natural gas space and water heating measures throughout the 2021-2023 term.

### 4.5.4 Program Design

#### *Contractor Eligibility*

HPwES supports a robust network of local energy efficiency professionals who provide a number of implementation services including: raising customer awareness of the program, recruiting participants, conducting the home energy audits, recommending energy-saving improvements, installing energy-efficient measures, and tracking the energy savings and project progress. The NH Utilities provide a contractor vetting process to ensure all HPwES contractors meet the following qualifications: (1) be a registered business in New Hampshire, (2) have weatherization experience, (3) have BPI Building Analyst certification and lead training, (4) pass an enhanced quality assurance ("QA") review of their initial three jobs performed within HPwES, and (5) agree to the HPwES program's pricing and the NH

Utilities' terms and conditions.[43] A third-party QA contractor reviews a percentage of homes serviced and provides feedback to the NH Utilities and HPwES contractor.

## Program Qualifications

Customers can determine if their home qualifies to participate in HPwES through the NHSaves.com website. Here, customers can self-qualify via the HHI Tool. Customers are asked for the following information: (1) zip code, (2) conditioned square footage of the home, and (3) annual heating fuel use (one year of fuel history; system accepts up to two different types of heating fuel).[44] Interested residential customers can also work directly with their respective NH Utility to enroll in the HPwES program.

### Home Heating Index

The HHI is used as a customer intake system for the program and includes a behavioral component of raising customer awareness regarding their energy consumption. The HHI Tool determines if a customer is considered a low, moderate or higher energy usage per square foot customer (normalized for size of house) and if the customer is eligible for full HPwES services. Eligibility for full HPwES services is based on a high proportion of heating fuel usage per square feet of the home to help identify if there is potential for cost-effective measures or actual energy savings. In limited cases, a NH Utilities program administrator may waive the HHI qualification if it can be determined that the project potentially has significant energy-saving opportunities.

The HHI qualification was put in place several years ago to identify the homes with the most opportunity for energy savings. In an effort to better serve residential customers who wish to engage in energy efficiency but who have low to moderate energy consumption in the home. The NH Utilities

[43] Customers can choose their own contractor provided the contractor meets meet the HPwES program's minimum qualifications. If the contractor is not already approved for work in the program, they can be brought in, provided they agree to all the program rules that participating contractors must follow.

[44] The NH Utilities do allow customers with less than 12 months of fuel data to participate in the program, as long as their usage still meets the HHI threshold for HPwES.

introduced the Visual Audit during the 2018-2020 term. For the 2021-2023 term, the NH Utilities will expand the Visual Audit offering and Virtual Assessment to more customers.

### *Full Program Services*

The NH Utilities use a streamlined whole-home approach from the energy audit through installation to inspection and allows customers to choose their HPwES contractor from a qualified list, or to ask their respective utility to assign them a contractor based on location and workload. Once a customer qualifies for HPwES, a qualified contractor will perform an energy audit of the customer's home to identify energy efficiency opportunities, calculate potential savings, and provide QA for any services performed. A nominal fee is paid upfront for the energy audit, which includes diagnostic testing (blower door test) for air leakage. If a customer decides to move forward with any of the HPwES contractor's recommendations, this fee is applied toward the customer's cost share of the project costs.

The energy audit report provides the project cost, rebate availability, and payback or Return-on-Investment ("ROI") estimations. When presented with the recommendations and energy audit report, customers must decide within 45 days if they want to proceed further with the energy-efficient improvements.[45] For customers who decide not to proceed further with energy-efficient improvements, the contractor will provide some no cost, direct-install measures.

If a customer decides to proceed with the home improvements, energy efficient measures are installed by the qualified HPwES contractor. Incentive payments are typically paid directly to contactors by the NH Utilities once the project is complete. Customers are responsible for paying their share of the project costs ("Co-pay") either directly to the contractor or via the loan program. Qualifying energy-efficient measures allow for comprehensive, fuel neutral weatherization, and typically include:

- Air sealing;

[45] All pricing of recommendations is good for 45 days and can be extended by the contractor if necessary. The HPwES contract gives customers an initial 45 days to commit and the NH Utilities note that contracts are often extended to give customers as much time as they need to make a decision regarding what energy-efficient measures (if any) they will install.

- Building shell insulation;
- Duct sealing;
- High-efficiency lighting;
- Hot water pipe insulation and hot water temperature setback;
- Refrigerator replacements;
- Water-saving devices (low-flow showerheads and faucet aerators);
- Wi-Fi thermostats; and
- Health and safety measures[46] that serve as barriers to energy efficiency projects.

During the energy audit, the HPwES contractor will also evaluate the efficiency of the home's appliances to determine if they are cost effective to replace. These appliances include: clothes dryers, clothes washers, dehumidifiers, refrigerators, room air purifiers, and other measures.

For homes that need more energy-efficient improvements than those listed above, HPwES also offers incentives for custom measures. Custom measures are proposed and evaluated as individual projects, separate from the customer's HPwES energy-efficient improvements. These custom measures can include but are not limited to:

- Air source or ductless heat pumps;
- HVAC optimization; and
- Smart home energy management systems.

In addition, if an oil or propane heating system is at the end of its life, the HPwES contractor can recommend that the customer bring in an HVAC contractor to replace the unit with a new ENERGY

[46] For the 2021-2023 term, the basic health and safety measures will continue to be limited to basic ventilation requirements, as well as smoke and carbon monoxide detectors needed to safely conduct weatherization services and will be limited to ensure the project is cost effective.

STAR-certified model. HPwES provides an additional rebate to lower the incremental cost between the standard equipment and high-efficiency model. Customers that receive a recommendation from the contractor to install a new natural gas heating system or electric heat pump system will be served via ES Products.

### *Visual Audit Approach*

For the 2021-2023 term, the NH Utilities will continue to offer the Visual Audit pathway to electric and natural gas customers who do not meet the current HHI threshold (typically high to moderate usage customers) and therefore are not eligible to participate in HPwES. The contractor performs a visual audit of the home and the customer will receive measures, including Wi-Fi thermostats, flow-control showerheads or faucet aerators, up to six feet of domestic hot water pipe insulation, and LED light bulbs. Additional appliance vouchers may also be considered. The contractor will also determine if there are opportunities for weatherization measures that can be implemented through the full HPwES offering. If sufficient opportunity exists, then the contractor will notify the customer's NH Utility to evaluate the customer for full HPwES.

### *Virtual Assessments*

The NH Utilities are continuously exploring new offerings for customers to participate in HPwES. In 2020, the NH Utilities designed and implemented a temporary virtual HPwES audit offering ("Virtual Assessment") to provide an opportunity for contractors to engage with customers who have already expressed an interest in an audit while on-site services were suspended due to the COVID-19 pandemic.

### *Pre-Screening Tool*

The NH Utilities believe that the Virtual Assessment is a useful pre-screening tool for a home, allowing contractors to better prepare for a more efficient on-site visit. Virtual Assessments could potentially identify weatherization barriers (e.g., improper ventilation, etc.) in advance of an on-site Visual Audit, thus reducing the need for a second visit which should reduce costs. In addition, a Virtual Assessment can help contractors better ascertain the opportunity and scope of work so the optimum contractor crew compliment and the length of scheduled on-site visit time (through the direct-install or visual

audit pathways) is more precise. This could result in more efficient scheduling and perhaps more effective utilization of existing contractor resources. During the 2021-2023 term, the NH Utilities will integrate Virtual Assessments into the HPwES program as appropriate.

Customers who elect to receive a Virtual Assessment will have a convenient way to understand the likely energy-saving opportunities in their homes. Together, the customer and an experienced contractor will identify energy efficiency opportunities in the home, get the customer access to immediate energy-saving measures, and define additional savings opportunities and appropriate follow-up actions.

Through a combination of reviewing information about the customer's home from publicly-available online resources, pictures submitted by the customer, and through virtual interactions with the customer, a contractor will identify the energy efficiency savings opportunities and recommend solutions. The contractor will educate the customer about the opportunities and the value proposition for moving forward to implement certain measures.

Customers participating in the Virtual Assessment may be eligible to receive the following:

- **Energy Kits.** Customers may receive Energy Kits (similar to those offered through HEA) containing energy-saving measures, such as LED lighting, power strips, and NHSaves Residential Programs information. The customer will be asked if they are comfortable with installing any of these measures on their own. For measures where the customer affirms their ability to self-install, the customers will be required to attest that they will install the identified applicable products upon receipt. Once an attestation is signed, the products will be shipped directly to the customer for self-installation within an agreed-upon timeframe.

- **Appliance Rebates.** During the Virtual Assessment, the contractor will identify potential opportunities, within reason, for upgrades to mechanical equipment (e.g., heating, air conditioning, hot water, etc.) and appliances. For the 2021-2023 term, the NH Utilities will consider allowing the contractor to offer appliance rebates through the Virtual Assessment pathway. This would encourage customers to replace their old, inefficient appliances with high-

efficiency models. Prior to implementation of appliance rebates, the NH Utilities will finalize the pre-qualifications, which may include requiring the customer to still receive a Visual Audit (on-site service). The appliance rebate offering would allow the NH Utilities to reach more customers and drive energy savings for HPwES.

Participating customers will be emailed a report that discusses the energy-saving opportunities identified by the HPwES contractor during the Visual Assessment. This report will direct customers to the appropriate informational resources for all applicable rebates, incentives, and financing options.

#### *Appliance Rebates*

For the 2021-2023 term, HPwES may offer standalone rebates for the following appliances: clothes dryers, clothes washers, dehumidifiers, room air purifiers, and other measures. This offering would encourage customers to replace their old, inefficient appliances with high-efficiency models. Prior to implementation of these rebates, the NH Utilities will finalize the pre-qualifications for appliance vouchers, which may include requiring the customer to receive a Visual Audit (on-site service). The Appliance Rebate offering would allow the NH Utilities to reach more customers and drive energy savings for HPwES.

### 4.5.5 Marketing

For the 2021-2023 term, the NH Utilities plan to market HPwES through a variety of marketing channels, including bill inserts, direct mail, e-mail blasts, events, newspaper and magazine advertisements, NH Utilities call center referrals, paid Internet searches, and social media updates (e.g., Facebook and Twitter). The NH Utilities will continue to work to increase the number of natural gas customers enrolled in HPwES over the next three years especially since low natural gas prices have historically limited participation.

The NH Utilities will continue to explore avenues to partner with and support community-based initiatives to encourage weatherization projects during the 2021-2023 term. This includes partnering with local energy committees, community organizations, and environmental groups to promote the

benefits of HPwES through workshops and outreach events. The NH Utilities will work with community partners to deliver online trainings to create grassroots "boots-on-the-ground" outreach.

### 4.5.6 Program Budget and Goals

**Table 4-5: HPwES Program—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Programs** | | | | |
| Program Budget | $8,607,418 | $9,696,828 | $10,758,305 | **$29,062,551** |
| Annual kWh Savings | 1,610,469 | 1,695,769 | 1,786,000 | **5,092,237** |
| Lifetime kWh Savings | 19,877,078 | 21,260,740 | 22,657,112 | **63,794,930** |
| kW Reduction | 245 | 259 | 274 | **778** |
| No. of Participants | 3,094 | 3,132 | 3,171 | **9,397** |
| **Natural Gas Programs** | | | | |
| Program Budget | $1,448,128 | $1,600,824 | $1,791,511 | **$4,840,463** |
| Annual MMBtu Savings | 12,472 | 13,584 | 15,013 | **41,069** |
| Lifetime MMBtu Savings | 229,868 | 249,787 | 276,564 | **756,219** |
| No. of Participants | 843 | 887 | 947 | **2,676** |

**Note:** kWh = kilowatt hours, kW = kilowatts, and MMBtu = million British thermal units.

**This page intentionally blank.**

# Chapter Five: Active Demand Reduction Programs

## 5.1 Program Objective

For the 2021-2023 term, the NH Utilities have designed several ADR offerings to reduce customer costs and provide benefits to the ISO-NE electric grid. Through the new Residential and C&I ADR programs, the NH Electric Utilities seek to reduce peak demand and capture benefits as quantified in the regional Annual Energy Supply Components ("AESC") study. The goals of the Residential and C&I ADR programs are to flatten peak loads, improve system load factors, and reduce long-term system costs for all grid-tied New Hampshire customers. Active Demand savings (kW) are realized by dispatching resources during the ISO-NE peak demand period. Reducing load during ISO-NE peak hours also has the effect of reducing New Hampshire's share of the installed capacity ("ICAP") cost allocation.

## 5.2 Target Market

The target market for the 2021-2023 ADR programs includes residential and C&I customers with controllable equipment that can be called upon to reduce electricity demand when an "event" is called during peak times. C&I program participants typically include customers with interval meters and demand charges, summer average annual peak demands of 250 kW or higher, and the ability to curtail at least 50 kW during an event. Residential ADR program participants typically include customers with controllable behind-the-meter ("BTM") equipment such as batteries, Wi-Fi thermostats controlling central air conditioning, or EV chargers.

## 5.3 2021-2023 Plans

For the 2021-2023 term, Eversource, Unitil Electric, and Liberty Electric will build upon the ADR demonstrations offered by Eversource and Unitil in 2019 and 2020 and in other jurisdictions and transition the ADR pilots to full programs in 2021. Liberty Electric will also offer a C&I ADR program for the first time.

**Table 5-1: ADR Program Offerings for 2021-2023**

| Offering | Participating Utilities | Targeted Peaks | Event Window |
|---|---|---|---|
| **Wi-Fi Thermostat DLC Residential)** | Eversource, Unitil Electric | ISO-NE annual system peak. Benefits based on ISO-NE top 62 days (Max. 15 events, 3 hour duration each). | June – Sept. (2-7 p.m., non-holiday weekdays) |
| **Battery Storage (Residential)** | Eversource | ISO-NE annual system peak. Benefits based on ISO-NE top 62 days (Max. 60 events per season, 2 or 3 hour events). | Daily dispatch program. June – Sept. (2-7 p.m., non-holiday weekdays) |
| **Load Curtailment (C&I)** | Eversource, Unitil Electric, Liberty Electric | ISO-NE annual system peak. Benefits based on ISO-NE top 62 days (Max. 8 events per season, 3 hour events). | Targeted curtailment/shedding. June – Sept. (2-7 p.m. non-holiday weekdays) |
| **Storage Performance (C&I)** | Eversource, Unitil Electric | ISO-NE annual system peak. Benefits based on ISO-NE top 62 days (Max. 60 events per season, 2 or 3 hour events). | Daily dispatch program. June – Sept. (2-7 p.m., non-holiday weekdays) |

### 5.3.1 Program Design – Commercial ADR Offerings

The Commercial ADR program has two main offerings: Load Curtailment (i.e., Interruptible Load) and Storage Performance.

#### *Load Curtailment*

The Load Curtailment offering provides an incentive for verifiable shedding of load by participants in response to communication from the NH Utilities or utility-vendors, curtailment service providers ("CSPs"). This offering is based upon the design of the Eversource and Unitil Electric pilots implemented during the 2018-2020 term. The Load Curtailment offering is technology agnostic, which means that customers are able to use any technology or strategy and earn an incentive based on their summer seasonal average curtailment performance.

With a technology agnostic approach, customers with on-site generation are allowed to participate in the Load Curtailment offering. However, the NH Utilities have established certain criterion in order to not increase emissions, including prohibiting participation by "emergency only" back-up generators.

Allowed generators in the program must pass local, state, and federal guidelines for participation in demand response programs. These permitting procedures mean this class of generator (typically EPA Tier 4) can operate a higher number of hours per year and produce little emissions, especially when compared to electrical grid emissions during peak hours.

The Load Curtailment offering provides an incentive to C&I customers to temporarily reduce facility load upon a signal from their NH Electric Utility or CSP during times of peak electric demand (referred to as "events"). Generally, curtailment events will last three hours and occur during July and August. Typically, there will be between one to eight events per summer season depending upon ISO-NE load conditions.

The NH Utilities (with assistance from CSPs) identify customers with curtailable load, assess curtailment opportunities, process and approve customer enrollment applications, manage the relationship with participants, call and manage curtailment events, oversee customer performance, and calculate payments. Unitil Electric, Eversource, and Liberty Electric plan to offer curtailment incentives to customers beginning in 2021 and throughout the 2021-2023 term.

### Storage Performance

Storage Performance is a BYOD pay-for-performance ADR offering, which provides an incentive to customers with BTM storage at their facilities, based on the measured kW discharge from a storage device when responding to an NH Utility event signal. The performance-based incentive only rewards the actual performance of storage systems during events and does not provide compensation for other project costs such as the installation or maintenance of such systems. The technologies chosen by customers tend to be battery storage and thermal storage. Unitil Electric and Eversource plan to offer this to customers beginning in 2021 and throughout the 2021-2023 term.

### Customer Outreach and Integration with Other Efficiency Offerings

Eversource, Liberty Electric, and Unitil Electric will utilize a variety of methods to conduct customer outreach for the Commercial ADR offerings, including leveraging touchpoints and relationships from the other NHSaves Program offerings. Many of the NH Utility staff focused on managing the standard

efficiency programs, including account executives and NHSaves C&I Program staff, will also help deliver the ADR offerings to C&I customers. Customers can speak with their account executive or NH Utility contact about all of the offerings that may apply to their business and develop an implementation plan that works best for them. The direct expertise and relationships developed by CSPs and storage system vendors will also serve as an entryway to the program for customers.

### 5.3.2 Program Design – Residential ADR Offerings

The residential ADR program consists of two main BYOD offerings: Battery Storage and Wi-Fi Thermostat DLC. For the 2021-2023 term, the NH Utilities will also explore EV load management as a potential third offering for residential customers.

#### *Battery Storage*

The residential Battery Storage offering encourages the utilization of energy storage systems during peak events through a pay-for-performance approach. Under this offering, participating customers are incentivized to decrease their demand on the electric grid and rely instead on stored energy from their residential batteries in response to a signal or communication from their NH Utility's intermediary partner(s). Lowering daily summer peak demand may lower the distribution company's associated capacity costs. Eversource intends to provide this offering to its customers beginning in 2021 and throughout the 2021-2023 term, while Unitil Electric continues to explore this offering.

#### *Wi-Fi Thermostat Direct Load Control*

The Wi-Fi Thermostat DLC offering will target customers who own a qualified, wirelessly communicating thermostat that controls a central A/C system (including heat pump technology). As is the case with the current pilot being offered by Eversource and Unitil Electric, participants agree to allow their NH Utility to make brief, limited adjustments to their Wi-Fi thermostats during periods of peak electric demand (referred to as "events").

There will be a minimum of one event per summer season, and a maximum of 15 events. Customers who enroll in the program may opt out of any or all events depending on their needs. Customers receive an incentive at the time of enrollment and an annual participation incentive. There is no

minimum number of events for customers to receive a participation incentive, however, customers with low participation may be removed from the program.

Eversource and Unitil have offered a similar Wi-Fi Thermostat DLC program for several years in neighboring jurisdictions and will draw upon third-party evaluations as well as in-market experience to optimize customer recruitment, retention, as well as performance for New Hampshire residential customers. Having established relationships with partnering vendors, both Eversource and Unitil Electric intend to begin the full program in 2021 and continue throughout the 2021-2023 term. Multiple evaluations of Wi-Fi Thermostat DLC programs across Massachusetts and Connecticut have repeatedly verified programs' performance in reducing peak utility system demand, as detailed in Section 5.3.4 below.

### EV Load Management

The NH Electric Utilities will explore possible EV Load Management offerings throughout the various service territories and may implement this offering if deemed feasible and cost effective. If implemented, the EV Load Management measure would focus on events that limit or stop EVs from charging during ISO-NE peak hours. The NH Electric Utilities expect that best practices involving EV load management will evolve concurrently with the EV marketplace as other jurisdictions and energy regulatory proceedings begin to offer EV Load Management solutions. In particular, Eversource MA and CT are currently piloting EV load management offerings, and evaluation results from those pilots are expected in early 2021, which will inform the potential development of such an offering in New Hampshire. The NH Electric Utilities will collaborate with colleagues and vendors in other states that are considering or offering EV Load Management solutions in conjunction with other ADR programs.

### Customer Outreach and Integration with Other Efficiency Offerings

For the Residential ADR program, Eversource and Unitil Electric can leverage marketing efforts from the other energy efficiency programs to introduce the ADR offerings. For example, when a customer receives an incentive for a Wi-Fi thermostat purchase, they can also sign up for a Residential ADR program offering at the same time. Eversource and Unitil Electric Residential program staff, customer services representatives and others who provide customers information on efficiency offerings will be

provided information on the residential ADR offerings as well. Eversource and Unitil Electric will partner with technology manufacturers and battery integrators as another means to inform and enroll potential customers in the Residential ADR program.

### 5.3.3 Cybersecurity

Eversource and Unitil Electric have undertaken a thorough cybersecurity risk review for ADR offerings as described in depth in the 2020 Demand Reduction Initiatives Supplemental Information compliance filing submitted as part of the 2020 Plan Update in DE 17-136.[47] Liberty Electric plans to undertake the same level of cybersecurity risk review.

### 5.3.4 Evaluation

In 2019, Eversource's and Unitil Electric's NHSaves C&I ADR pilots were evaluated as part of a multi-state evaluation, and the NH Utilities are applying the impact results from the study to the ADR programs for 2021, as described in the 2020 Demand Reduction Initiatives Supplemental Information filing, and as reflected in the TRM.[48] This study also included a process evaluation, which is informing the NH Utilities on how to improve program processes as the initiative expands and matures. Recent ADR program evaluations have been conducted in Massachusetts and Connecticut on residential offerings, including a cross-state evaluation of the Wi-Fi Thermostat DLC offered by Eversource and Unitil Electric, which produced impact results that are being applied in estimating load reductions for the New Hampshire offering, as detailed in the TRM.[49] These and other evaluations shown in Table 5-2 below have validated the load reductions of ADR programs and provided insight into program processes in other states that have helped the NH Utilities fine-tune the proposed programs. The NH

---

[47] DE 17-136. 2020 Demand Reduction Initiatives Supplemental Information. Feb. 28, 2020. Unitil and Eversource's cybersecurity review process is described in Section 4, pp. 10-14. https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2020-02-28_EVERSOURCE_UES_SUPP_INFORMATION.PDF.

[48] Cross-State C&I Active Demand Reduction Initiative Summer 2019 Evaluation Report. Prepared for Eversource, National Grid and Unitil https://puc.nh.gov/Electric/Monitoring%20and%20Evaluation%20Reports/Cross-State-CI-DR-S19-Evaluation-Report_04-15-2020.pdf

[49] Navigant Consulting. 2019 Residential Wi-Fi Thermostat DLC Offering Evaluation. Prepared for Eversource, National Grid, and Unitil, Apr. 1, 2020. http://ma-eeac.org/wordpress/wp-content/uploads/2019-Residential-Wi-Fi-Thermostat-DLC-Evaluation-Report-2020-04-01-with-Infographic.pdf.

Utilities have included with this filing New Hampshire-specific ADR benefit-cost models detailing the planning assumptions and program goals for all offerings described in this section.

**Table 5-2: Evaluations of ADR Programs**

| Evaluation Focus | State and Year | Evaluator | Title | Link |
|---|---|---|---|---|
| C&I Load Curtailment and Targeted Battery Storage, Impact and Process Evaluation | MA, CT, NH, 2019 | ERS | Cross-State C&I Active Demand Reduction Initiative Summer 2019 Evaluation Report. Prepared for Eversource, National Grid and Unitil | https://puc.nh.gov/Electric/Monitoring%20and%20Evaluation%20Reports/Cross-State-CI-DR-S19-Evaluation-Report_04-15-2020.pdf |
| C&I Manual Curtailment, Controls, Thermal and Battery storage, Impact and Process Evaluation | MA, 2019 | ERS | 2019 Consolidated Demand Demonstration Project Evaluation Report (Eversource) | http://ma-eeac.org/wordpress/wp-content/uploads/2019-Consolidated-Demand-Demonstration-Project-Evaluation-Report_04-15-2020_clean.pdf |
| C&I Battery Storage, Impact and Process Evaluation | MA, 2019 | ERS | C&I Daily Dispatch Battery Project Evaluation Report (Eversource) | http://ma-eeac.org/wordpress/wp-content/uploads/Daily-Dispatch-Battery-Post-Summer-2019-Report_2-3-2020.pdf |
| Residential Wi-Fi Thermostat DLC, Impact and Process Evaluation | MA, CT, 2019 | Navigant Consulting | 2019 Residential Wi-Fi Thermostat Direct Load Control Offering Evaluation. Prepared for Eversource, National Grid, and Unitil. MA and CT | http://ma-eeac.org/wordpress/wp-content/uploads/2019-Residential-Wi-Fi-Thermostat-DLC-Evaluation-Report-2020-04-01-with-Infographic.pdf |
| Residential Energy Storage, Impact and Process Evaluation | MA, 2019 | Navigant Consulting | 2019 Residential Energy Storage Demand Response Demonstration Evaluation | http://ma-eeac.org/wordpress/wp-content/uploads/MA19DR02-E-Storage_Res-Storage-Summer-Eval_wInfographic_2020-02-10-final.pdf |
| Residential Wi-Fi Thermostat, Impact and Process Evaluation | MA, 2018 | Navigant Consulting | 2018 Residential Wi-Fi Thermostat Demand Response Evaluation. Prepared for National Grid. MA. | http://ma-eeac.org/wordpress/wp-content/uploads/2018-NGrid-DR-Eval-Report-2019-03-28-Final.pdf |
| Residential Wi-Fi Thermostat, A/C Smart Plugs and HPWH Controls, Impact and Process Evaluation | CT, 2018 | GDS Associates, Inc. | Eversource CT Residential Demand Response Pilot - Second Year Evaluation | http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/8525797c00471adb8525840b005c200c/$FILE/GDS,%20Eversource%20Connecticut%20Residential%20Demand%20Response%20Pilot,%20February%2020,%202019.pdf |

### 5.3.5 Program Budget and Goals

**Table 5-3: ADR Programs—Energy Savings and Budgets**

| | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|
| **Electric Residential Programs** | | | | |
| Program Budget | $139,875 | $199,665 | $286,832 | **$626,372** |
| Active kW Reduction | 1,025 | 1,538 | 2,275 | **4,838** |
| No. of Participants | 1,655 | 2,483 | 3,693 | **7,830** |
| **Electric C&I Programs** | | | | |
| Program Budget | $1,059,735 | $1,524,233 | $2,191,526 | **$4,775,494** |
| Active kW Reduction | 13,655 | 19,983 | 29,175 | **62,813** |
| No. of Participants | 139 | 202 | 296 | **636** |

**Note:** kW = kilowatts.

# Chapter Six: Behavioral-Based Strategies

**Utilities and energy efficiency program administrators are increasingly exploring new innovative ways to utilize data-driven and behavioral-based strategies to engage customers in energy efficiency. During the 2021-2023 term, the NH Utilities plan to diversify and expand their behavioral-based strategies to determine optimal engagement channels.**

The NH Utilities' Behavioral-Based Strategies are designed to make customers aware of how much energy they consume and empower them to adopt energy-efficient technologies and behaviors. The concept behind behavioral-based strategies is that most customers are neither engaged, nor knowledgeable, regarding their energy consumption and habits. However, when a customer is made aware of how much energy they consume via digital, print, or visual communications, they are more empowered and motivated to adopt energy-efficient behaviors or technologies. Since 2014, one or more of the NH Utilities have utilized a behavioral-based strategy in the form of Home Energy Reports ("HER") as a component of the NHSaves Programs.

For the 2021-2023 term, the NH Utilities will diversify program offerings in order to test new behavioral-based strategies to determine if varied approaches work better for certain customer segments, utility service territories, and even fuel types. Though these approaches vary, the NH Utilities are all working toward a common goal of maintaining behavioral-based strategies as an integral part of the NHSaves Programs and to drive customer engagement in energy efficiency.

## 6.1 Home Energy Reports (Unitil and Liberty)

For the past several years, the primary behavioral-based solution for the NH Utilities has been HERs. HERs are communications (e-mails and printed reports) that provide energy consumption information and energy-saving tips to residential customers in an effort to raise awareness and change behavior. These reports provide customer-specific information in easy-to-understand language and with easy-to-read graphics. The primary objective of HER is to induce customers to conserve energy by providing

easy-to-understand paper and e-mail communications comparing their household energy consumption with that of their neighbors or other customers. The 2021-2023 program will continue to be implemented by Liberty (Electric and Natural Gas) and Unitil (Electric and Natural Gas). HER is a well-established behavioral-based strategy offered across North America by utilities and energy efficiency program administrators to help customers better understand and control their energy use.

### 6.1.1 Liberty Electric and Gas HERs

The initial launch of the Liberty Gas HER program was in the fall of 2014 and currently includes approximately 30,000 customers. Paper-based HERs are sent out approximately four times a year and six e-mail-based HERs are distributed during the heating months (November-March) when natural gas consumption is higher for space heating.

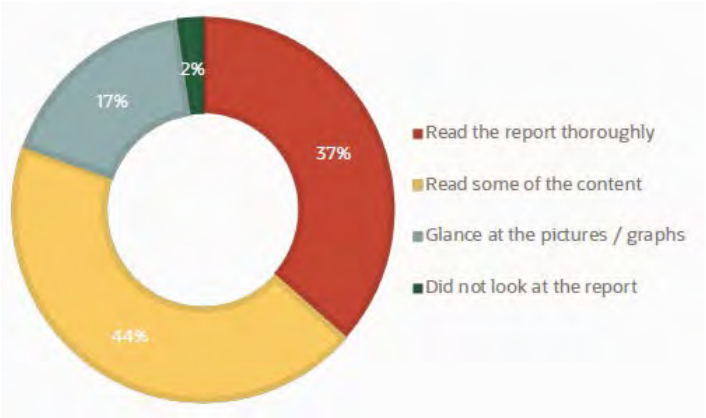
The Liberty Electric HER program was launched in January 2018 and currently includes approximately 12,000 electric customers. The program components and structure are identical to that of the Liberty Gas HER program, with the exception of communication frequencies. Liberty Electric customers receive year-round HER via print and e-mail alternating every other month in frequency for a total of six of each medium per year.

Customers receiving either the paper or email-based reports have the ability to view their reports and profiles online via a web-based platform. The online platform allows customers to view their reports and energy consumption data, as well as provide additional data about their residences and energy consumption patterns that then enables Liberty to benchmark a customer more accurately against an appropriate peer comparison group.

Liberty Electric and Gas completed an online customer engagement survey of the program in June of 2020 which showed that the overall response to HER has been favorable, with over 80 percent of

program recipients actively reading their reports and 82 percent stating positive (60 percent) or neutral (22 percent) opinions of the program.[50]

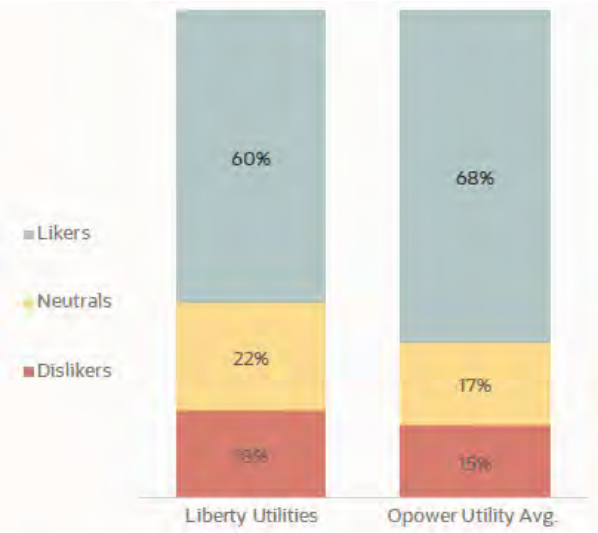
**Image 6-1: Home Energy Report Reading[51]**




[50] Online survey of 479 Liberty customers in Home Energy Report program: 286 recipients of the HER communications; 193 "control" customers (non-recipients to be used as baseline); ~4.5% margin of error; Random sample of customers from across overall program population, gas and electric; survey fielded between June 5 and June 26, 2020 by California-based provider Interviewing Service of America. ~4% overall response rate (email invitations sent to ~13k customers).

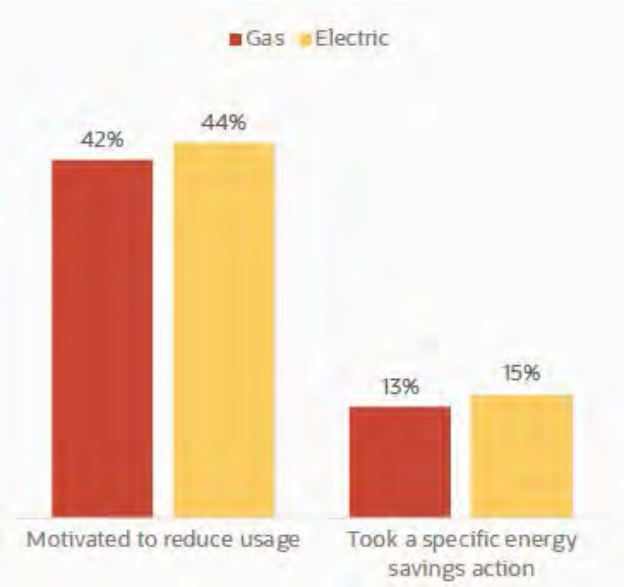
[51] Survey question: "In the past six months, do you remember receiving a Home Energy Report from Liberty Utilities about your in-home energy use? Thinking of all the reports you have received, in general, what have you done with them?"

**Image 6-2: Home Energy Report Liking (all customers who have read reports)** [52]




Nearly half of report recipients (42 percent – Liberty Gas; 44 percent- Liberty Electric) also cite being motivated to save energy from the program.

**Image 6-3: Energy Savings Action (all customers who have read reports)**[53]




[52] Survey question: "Thinking about the Home Energy Reports you've received; how much do you agree or disagree with each of the following statements: I like the Home Energy Reports."

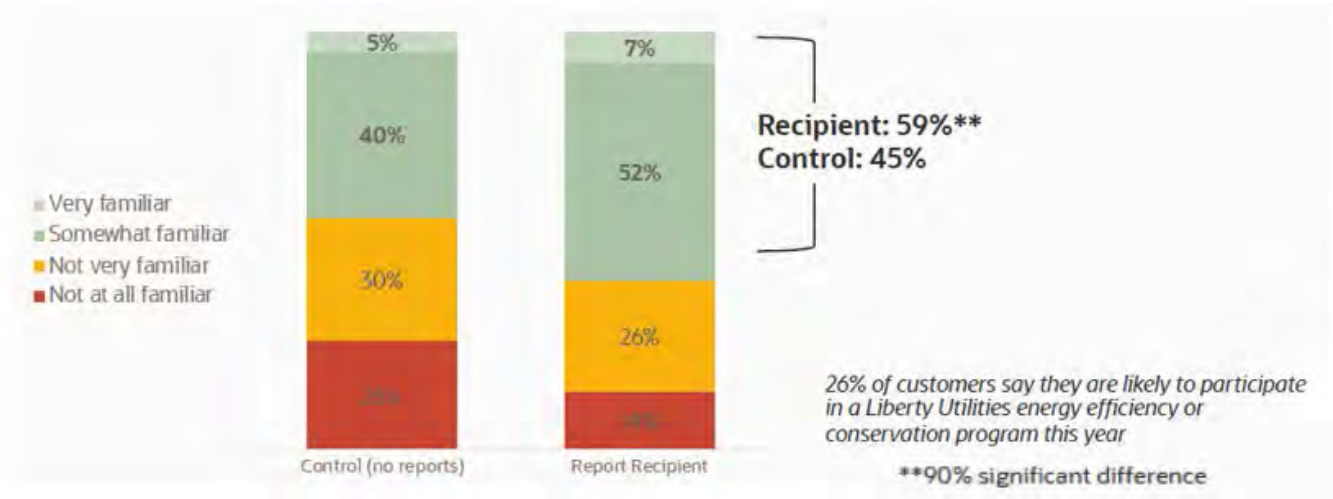
[53] Survey question: "After reviewing your reports, do you… Take a specific energy-savings action. Did the Home Energy Report motivate you to reduce your energy usage?

**Image 6-4: What Actions Did You Take? (sample of open-ended customer responses)[53]**

- *"Lowered temp on water heater."*
- *"Turn down water heater. Bought hi-tech thermostat."*
- *"More careful about using televisions and lights in the house."*
- *"Started using the timer feature on my dehumidifier."*
- *"Storm window. Keeping heat at 62."*
- *"Made people aware of the amount our bill had gone up, shutting off lights, to keep bill down."*
- *"I bought an Ecobee. I talked to my daughters about their energy use and its costs."*
- *"Adjusting thermostat, consideration of purchasing better windows to be more efficient, be more diligent about turning off lights when not in use/unplug things when not in use and consider purchasing more energy efficient light bulbs."*

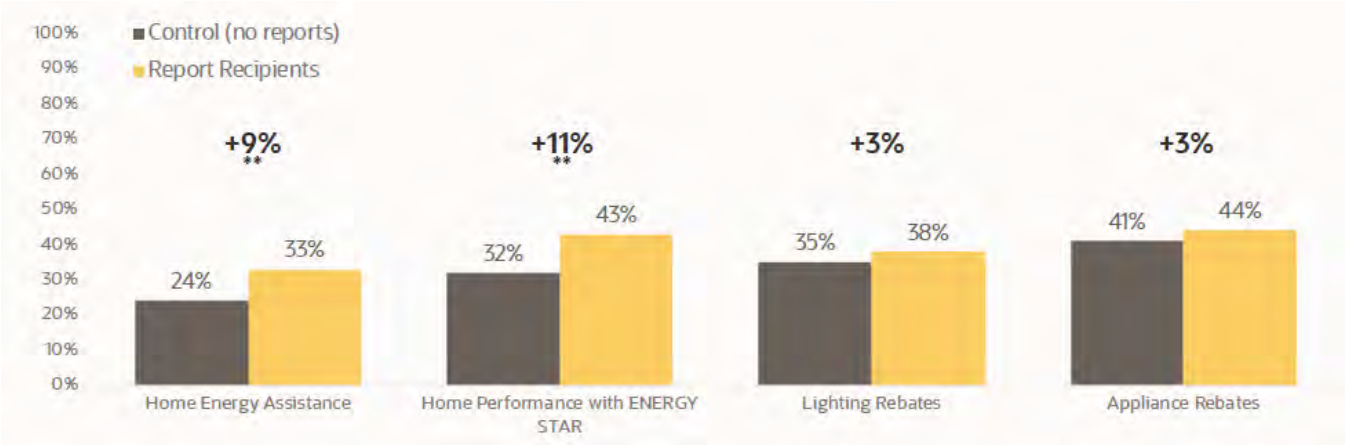
Liberty extensively uses the HER program to cross promote its other NHSaves Program offerings and finds a number of customers who sign up for HPwES or HEA referencing their HER when asked about how they found out about the programs. The recent engagement survey results support this where report recipients were shown to be more familiar with energy efficiency programs.

**Image 6-5: Energy Efficiency Program Familiarity[54]**




[54] Survey question: "How familiar are you with energy efficiency or conservation programs from Liberty Utilities that help you use less energy?"

**Image 6-6: Energy Efficiency Program Familiarity by Offering[55]**




## *Savings*

As the program continues to mature, for the 2021-2023 Plan, Liberty Electric and Gas will attempt to capture more relative savings out of the program by cycling its recipient pool, adjusting the frequency of reports distributed, and continuing to tailor report and tip messaging via the printed and web-based reports.

Liberty Electric and Gas have decided to change the accounting methodology for computing energy savings for the program. The current methodology uses a three-year measure life and accounts for persisting savings year to year. Liberty Electric and Gas intend to switch to a single-year measure life, which is recommended by the implementation vendor to simplify accounting, improve forecasting, and remove the savings variability that occurs with a multi-year measure life scheme.

Ultimately in a single-year methodology, annual savings will be equal to measured savings in a given year. With the shift from multi-year measure life comes a transition period where Liberty Electric and Gas must take into account persisting savings that have already been claimed, which will not count toward annual savings in the new methodology. This will affect cost effectiveness in the first year of the new triennial, bringing the program benefit-cost ratios under the Granite State Test below 1.0 in

[55] Survey question: "Which of the following Liberty Utilities energy efficiency initiatives are you familiar with?"

2021. Because the program will stop counting new persistence in the new methodology, this already-claimed persistence will phase out over time, and cost effectiveness will be above 1.0 under the Granite State Test in 2022 and 2023, and will also be above 1.0 under the Granite State Test when looking across the cumulative three-year period.

Given the benefits of moving to a single-year measure life and the focus on a true three-year planning process for the next triennial, Liberty Electric and Gas believe a single transition year with a benefit-cost ratio below 1.0 under the Granite State Test is reasonable and appropriate.

### 6.1.2 Unitil Electric and Gas HERs

Launched in October 2018, the Unitil Electric and Gas HER programs are run concurrently with Unitil's Massachusetts territory to take advantage of economies of scale. The Unitil Electric and Gas HERs are sent to approximately 25,800 electric customers and 11,000 natural gas customers. Unitil Gas HER program participants receive e-mail HERs year round (12 per year) and four paper HERs are distributed during the heating months (November-March). Unitil Electric HER participants receive year-round e-mail HERs and six print HERs a year with higher frequency during the summer months.

For the 2021-2023 Term, the Unitil Electric and Gas HER programs are projected to save 25 percent and 9 percent of the residential sector annual savings, respectively. Unitil Electric and Gas will continue to offer the HER program through at least the end of its current contract with its vendor for both its natural gas and electric customers and will assess appropriate next steps for behavioral-based strategies for 2022-2023 and beyond.

## 6.2 Customer Engagement Initiative (Eversource)

For the 2021-2023 term, Eversource will undertake behavioral-based marketing strategies to engage its electric customers in understanding how they consume energy in their homes and move them toward adoption of energy efficiency measures through the Residential program offerings. Additional description of the marketing approach can be found in Section 8.4.

The Customer Engagement Initiative marketing approach will not generate behavior-based energy savings. However, Eversource will continue to investigate additional opportunities for behavior-based

savings. Such communication efforts will involve statewide evaluation contractors early in the design process to ensure that the methodologies used meet requirements for future savings evaluations. If Eversource develops an offering for behavior savings it will be proposed through a Midterm Modification.

## 6.3 Aerial Infrared Mapping Program (Liberty Gas)

### 6.3.1 Objective

For the 2021-2023 term, Liberty Gas will implement an innovative behavior-based initiative called the Aerial Infrared Mapping ("AIM") program. The objective of the AIM program is to efficiently capture detailed building weatherization information about Liberty's residential natural gas customer base at scale in order to:

- Drive customer behavior change savings through promoting literacy on the specific opportunities for improved building efficiency;
- Engage and motivate customers to participate in the HEA and HPwES programs by providing a more detailed, visual profile of their heat loss; and
- Better identify, rank and prioritize, and qualify weatherization projects without having the need to go onsite.

### 6.3.2 Market Challenge

Heat loss arguably suffers from an invisibility problem, in that it is inconspicuous in everyday activities. Further, few customers have easy access to view, let alone understand, the weatherization conditioning of their home or how it compares to others. From a psychology perspective, having the opportunity to see something that is typically invisible can attract attention and create more of an emotional connection, as well as make things easier to understand. In fact, consumer research shows

that homeowners are five times more likely to implement energy efficiency measures after seeing a thermal image of their home.[56]

### 6.3.3 How It Works

Liberty will deliver the AIM program in partnership with MyHEAT Inc., a technology company that generates aerial thermal images to produce unique and proprietary building HEAT Maps.[57] The MyHEAT Maps provide customers a resource to help identify and target building weatherization improvement areas. MyHEAT also provides customers personalized and proprietary HEAT Ratings that enable customers to compare a home's heat loss to others in their town or city.

MyHEAT is able to collect aerial Thermal Infrared ("TIR") imagery of buildings via a super high-resolution TIR camera with a plane flying over a geographical area at night, under strict environmental conditions at approximately 4,000 feet. MyHEAT's process uses Geographic Object-Based Image Analysis and machine learning to detect, map, and create powerful visualizations of the heat waste escaping from buildings. The TIR sensors do not detect temperature, rather they detect emitted long-wave thermal radiation (i.e., relative temperature), which when 'corrected' to kinetic temperature is used to present heat loss data.

MyHEAT's process has the ability to automatically correct for local changes in temperature, microclimate, and elevation, meaning all buildings can be compared as if they were collected at a single instance in time. Data for each building is extracted and standardized so that different buildings can be compared and rated using a scale of 1 (least heat loss measured) to 10 (most heat loss measured). The information collected can determine the inefficiency of poorly insulated attics and walls, energy loss from windows, and air leaks around mechanical vents.

MyHEAT's solution has been deployed across numerous cities and utility territories in the United States and Canada and is based on six years of award-winning, peer reviewed research in Urban Thermal

---

[56] Goodhew, J. et al. (2014). Making Heat Visible: Promoting Energy Conservation Behaviors Through Thermal Imaging. Sage Journals, 1059–1088. Retrieved from: https://doi.org/10.1177%2F0013916514546218.

[57] MyHEAT Inc. website: http://myheat.ca.

Remote Sensing from the University of Calgary. MyHEAT's information is typically presented to end-users via a private online platform and utilized in a variety of marketing communications such as direct mail and email.

### 6.3.4 Thermal and Ancillary Data Collection

At a high-level, several data elements are required and will be captured in order to deploy the AIM program:

- **MyHEAT Data.** Aerial thermal capture data, building polygons generated from thermal data, proprietary HEAT Ratings and HEAT Maps; and
- **Third-Party Data.** Open data, such as land parcel details, and purchased data such as market demographics.

MyHEAT will perform two flyovers of Liberty's territory, in the Spring of 2021 and Spring of 2023. The flyovers will cover the specified geography as shown in Image 6-7 to collect the aerial thermal data in order to generate HEAT Maps and HEAT Ratings.

**Image 6-7: Depiction of AIM Program Fly-Over Geography**


Additional geospatial datasets, such as building shapes and customer address details, will also be generated and/or compiled at this time. MyHEAT estimates that it will take approximately three nights to capture the majority of Liberty's natural gas service territory for each flyover cycle. After capturing the relevant data from Liberty, third-party data sources, and with the collected aerial thermal data,

MyHEAT will process the combined data to generate personalized customer HEAT Maps and HEAT Ratings. Simultaneously, a unique customer-facing platform will be designed.

### 6.3.5 Customer Experience

As part of the AIM program, Liberty will provide residential customers a visual HEAT Map depiction and HEAT Rating of their home via a private access code protected web-based platform, where customers can view the heat loss details for only their own home. The HEAT Map and HEAT rating information will be provided alongside calls-to-action that direct customers toward ways they can save energy, including participating in NHSaves Programs.

Image 6-8 provides a visual example of the information that a customer would see when viewing the online platform:

**Image 6-8: AIM Program Customer Home Profile**


The online platform will also allow customers to compare their home's HEAT Map visual depiction to what is publicly available via Google Maps, as shown in Image 6-9.

**Image 6-9: Comparison of Heat Map View to Google Maps View**


Liberty and MyHEAT consider user privacy to be of utmost importance and we recognize the growing societal concerns about privacy in general. The MyHEAT thermal images are very benign; nothing about the HEAT Maps, as depicted in the image above, suggests or show anything with regards to occupants. In fact, there is more that someone could glean about occupants from the publicly available Google Maps images of a home. That said, similar to the protocol that has been implemented for the HER program, any customers who prefer to opt-out of the program will have the ability to do so.

### 6.3.6 Eligibility and Enrollment

Liberty will offer the AIM program to customers free of charge, via an opt-out basis, meaning customers will not have the ability to opt-in if they so choose in order to maintain the proper participant control group for evaluation and measurement purposes. Rather, customers will have the ability to opt-out if they do not want their home mapped and rated.

### 6.3.7 Marketing and Promotion

The AIM program will be promoted via personalized direct mail and e-mail, which will encourage customers to visit the customized Liberty/MyHEAT private online platform, where customers can view their unique, personalized profile. Communications will be distributed periodically, with an anticipated

four direct mailings per year, and eight e-mail distributions per year, primarily during the heating season months. The first customer communications of the AIM program will be in September of 2021, following the initial data capture, analysis and final configuration of implementation details.

### 6.3.8 Target Market & Evaluation

The AIM program will be implemented under a randomized control trial ("RCT") to measure the impact on energy consumption and program participation from customers. The AIM program will also be deployed alongside Liberty Gas' HER program, where both programs will be in the market at the same time, but each will be distributed to separate treatment groups. For reference, the current Liberty Gas HER program includes:

**Table 6-1: Liberty Gas HER Program**

| Group | No. of Homes |
|---|---|
| **Treatment Group** | 33,000 homes[1] |
| **Control Group** | 14,000 homes[1] |
| **Remaining Customers** | 37,000 homes[1] |
| [1]Approximate quantities. Exact counts can vary slightly from month-to-month based on report deliverability and periodic opt-outs. | |

The AIM program will use the existing Liberty Gas HER program control group and will have a separate treatment group of approximately 33,000 customers. The AIM program treatment group will be sourced from both the available balance of customers who would not be part of the treatment group of the HER program. As the creation of balanced treatment groups depends on the inclusion of MyHEAT's HEAT Loss dataset, the exact details around the overlap between the AIM Initiative and the HER program won't be confirmed until the thermal data is collected by MyHEAT and the HEAT Ratings are created. Also, this approach factors in that an adequate group of customers that are statistically similar to those in the existing control group can be identified. Liberty Gas will work with its HER vendor to ensure that no conflicts exist between the two programs for the purposes of evaluation and implementation integrity.

MyHEAT will assess annual natural gas energy consumption reduction based on a statistical analysis of the targeted homes change in billing consumption data. The evaluation will consider pre-and-post treatment consumption details, measuring the impact versus the control group. Additionally, Liberty Gas' other program participation details will be incorporated to measure uplift attributed from the treatment group efforts.

### 6.3.9 Expected Results

The expected results for the AIM program are extrapolated from another recent MyHEAT pilot project, which found that customers achieved greater energy savings as their HEAT Ratings and potential dollar savings increased. For every $100 in potential annual savings, customers in the MyHEAT treatment reduced their natural gas consumption by 2.9 percent. At the mean savings of $150 per year,

participants reduced natural gas consumption by 4.4 percent. Based on previous implementations by MyHEAT, the AIM program is also expected to lead to nearly a 30 percent increase in applications submitted to relevant incentive programs. For the 2021-2023 program term, Liberty is projecting the potential impact range of the AIM program to be an average 2.2 percent reduction in natural gas for targeted homes.

### 6.3.10 Initial Customer Feedback

Liberty Gas performed an online survey of its residential customers to gauge their initial reaction and feedback on the AIM program concept to inform its consideration and planning of the program. The survey was fielded between March 30 and April 13, 2020 and 1,133 unique customer responses were captured with a margin of error of plus or minus three percentage points. In summary, the survey results found:

- The AIM program would be popular with customers:
    - Three out of four customers think the AIM program would be useful to them and 79 percent say they would access the information if they received a link to the site where they could see their HEAT Map and HEAT Rating.
    - Curiosity and desire to save money are the top reasons for customer interest. Many of those who don't think the program would be useful to them are renters and/or customer living in multifamily dwellings.
    - Very few (only 1 percent of the entire sample) say they would not be likely to access the information via a private platform due to privacy concerns.
- Customers have a clear preference for a private platform:
    - By a 2-to-1 margin, customers prefer that the AIM program is offered via a private platform.
    - Concerns about privacy are the dominant reason customers prefer the private platform. Among those who gave specifics, there are worries that they could be vulnerable to sales and marketing based on their rating, as well as potential shaming from neighbors; some are even worried that their HEAT Rating could negatively affect their home's value if the information were publicly available.

- Most who prefer the public platform think it would help facilitate comparisons, or better legitimize, their home's rating with other homes.

**Image 6-10: Residential Customer Survey—Likelihood to Access AIM Data[58]**

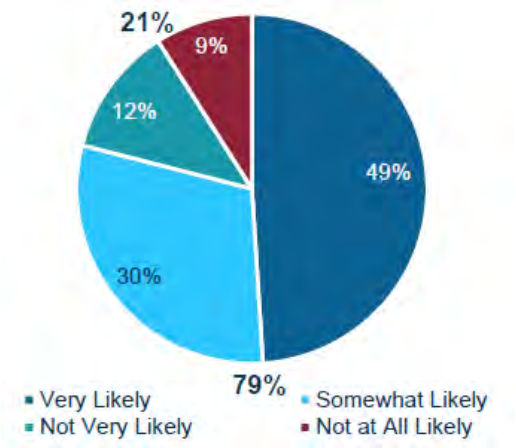
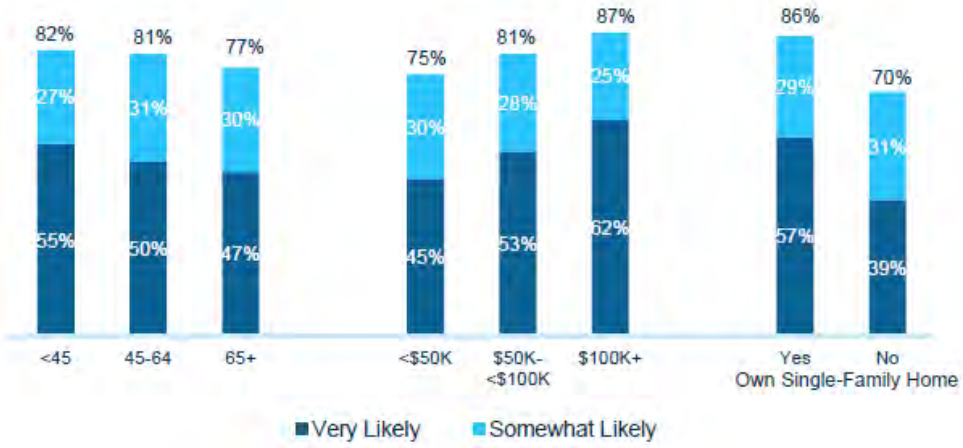



**Image 6-11: Residential Customer Survey—Likelihood to Access AIM by Demographics[58]**




58 Survey Question: "If you received a link to the site where you could see the HEAT Map and HEAT Rating for your home, how likely would you be to access the information?" Base: Total (n=1,133), <45 years old (n=192), 45-64 years old (n=449), 65+ years old (n=492), <$50,000 household income (n=260), $50,000-<$100,000 household income (n=352), $100,000+ household income (n=227), Own single-family dwelling (n=639), Do not own single-family dwelling (n=494.)

**Image 6-12: Residential Customer Survey—Why Likely to Access AIM?[59]**

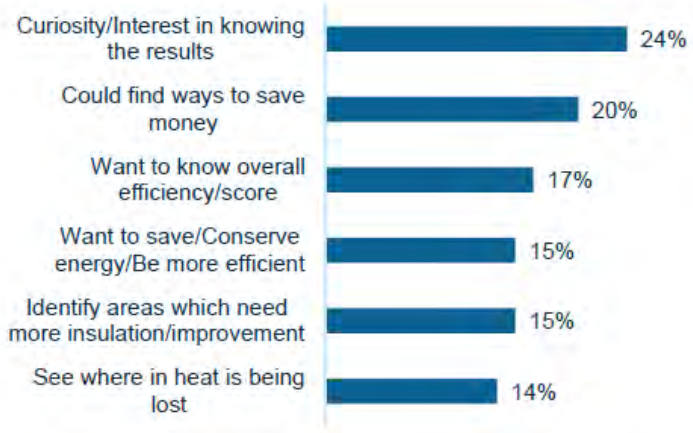



**Image 6-13: Residential Customer Survey—Why Likely to Access AIM? Customer Quotes[59]**


[59] Survey Question: Q:"Why would you be likely to access the HEAT Map and HEAT Rating for your home?" Base: Likely to access HEAT Map and HEAT Rating for home (n=893).

**Image 6-14: Residential Customer Survey—Why Prefer Private Platform?[60]**

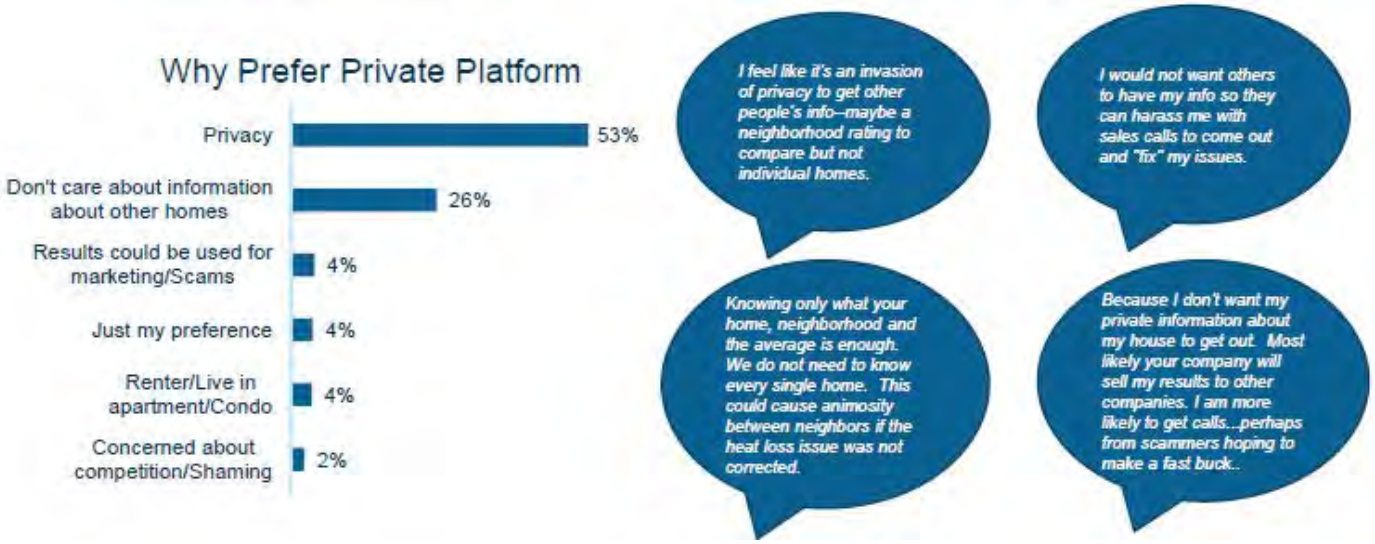
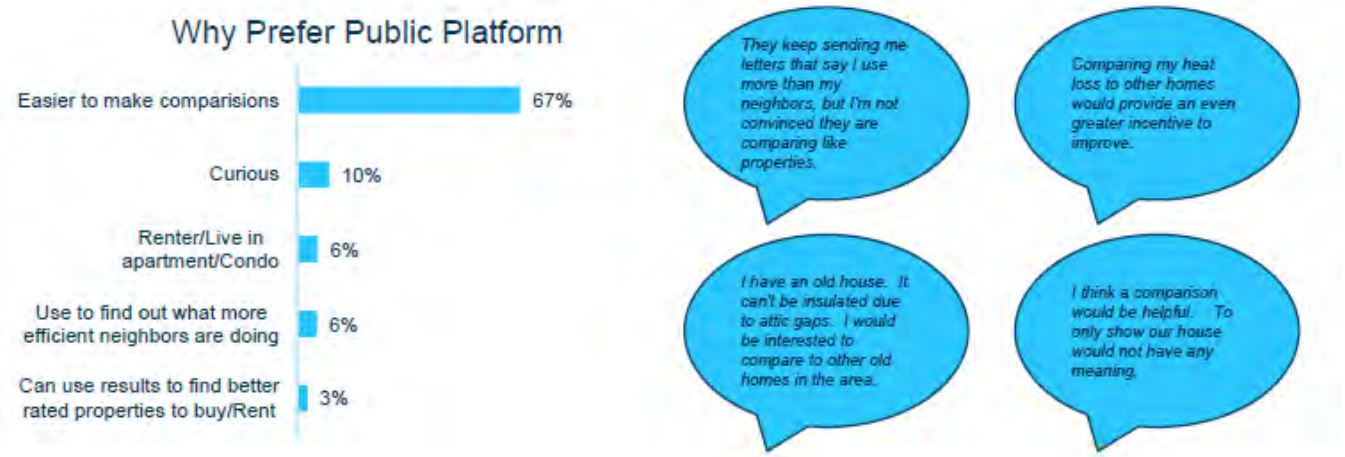



**Image 6-15: Residential Customer Survey—Why Prefer Public Platform?[61]**




[60] Survey Question: "Why would you prefer a private platform, where you could only view heat loss details for your home using unique access information." Base: Prefer private platform (n=603).

[61] Survey Question: "Why would you prefer a public platform, where you could view heat loss details for any residence across your city to help you compare your home's heat loss to others?" Base: Prefer public platform (n=268).

**This page intentionally blank.**

# Chapter Seven: Energy Optimization

**Energy Optimization ("EO") is an energy resource framework that seeks to minimize customers' total energy usage across all energy sources while maximizing customers' benefits. In particular, EO often focuses on conversions from delivered fossil-fuel heating systems to higher efficiency electric systems. EO strategies account for both equipment efficiency, as well as the mix of fuels used, which distinguishes it from fuel switching and beneficial electrification, which focus primarily on fuel type but do not necessarily prioritize overall energy efficiency.**

For the 2021-2023 term, the NH Utilities are proposing an EO pilot based on the NHEC Social Responsibility Heat Pump program as well as offerings in other New England states. The NHSaves EO pilot will focus on displacing residential delivered fossil fuel through the adoption of cold climate air source heat pumps ("ASHPs"), including central and mini-split systems. The pilot will provide the NH Utilities with a more comprehensive understanding and experience of the benefits of heat pumps to the electric system, as well as the impact on emissions from GHGs and nitrogen and sulfur oxides. The NH Utilities will also investigate customer experience and optimal program delivery standards related to this offering.

To be eligible for the EO pilot, customers must be willing and able to displace their existing heat source for at least one heating zone(s) of their home for a substantial portion of the heating season (see requirements below regarding switchover set points). For the EO pilot, the NH Utilities will recommend, but not require, that the home be weatherized in advance of participation to ensure optimal sizing of the ASHP. The NH Utilities will also recommend that customers maintain a backup automatic feed heating system. In these cases, customers must allow for the installation of integrated controls that will automatically assign the most efficient heating system to operate during the heating season, based on the outdoor temperature. Homes in which a backup heating system is deemed unnecessary will not be required to have integrated controls. Since the vast majority of the

installations in the pilot are projected to have a backup system, the narrative focuses on these installations.

## 7.1 Existing Heat Pump Program

For more than a decade, the NH Utilities have provided incentives for the installation of high-efficiency ASHPs and have adopted best practices when cold climate heat pumps became commercially available. To date, heat pump units have typically been treated as a "lost opportunity" in which it was assumed that the customer was making a choice between the program-incented high-efficiency unit and a less expensive, standard-efficiency unit. The kWh and kW savings were therefore calculated based on a comparison between the high-efficiency and standard-efficiency unit and assumed both heating and cooling savings.

## 7.2 Purpose

The EO pilot is designed to gather information on both program design elements and key regulatory questions, including how the NH Utilities should account for fossil fuel and electricity savings (positive and negative). The EO pilot will be accompanied by an impact and process evaluation to guide future program design should the NH Utilities elect to expand the pilot to a full-scale program. The evaluation will also assess issues raised by the Commission in Order No. 26,322, as described in Section 7.6.

## 7.3 Target Population

The pilot has a goal of 100 participants per year over the 2021-2023 term. The pilot will target homes with existing HVAC configurations that are well-suited for ASHP conversions, but where the homeowners are not already planning to install ASHPs for heating (which are already incented by the existing ES Products program). The pilot will target customers heating with oil and propane furnaces and boilers. The target population will include:

- Customers who are not actively considering heat pumps but who have central A/C systems, that are failing or old;

- Customers who are not actively considering heat pumps but who use window A/C units;
- Customers who are actively considering the installation of a central A/C system and who currently have window A/C units or no cooling system; and
- Customers who are currently interested in heat pumps only for cooling, but not heating.

While not part of the target population, those heating with auto-fed wood pellet stoves and boilers will also be eligible on a limited basis provided they meet other pilot requirements for integrated controls and provision of fuel data.

## 7.4 Customer and Contractor Outreach

The EO pilot will leverage existing pathways for incentivizing high-efficiency heat pump technologies, as well as design new outreach efforts for the target population and technologies. The NH Electric Utilities will engage customers through online and in-person education, targeted incentives, marketing, and financing solutions (e.g., on-bill financing and third-party loan programs). Customer education will focus on how to optimize their heating system's efficiency and proper maintenance and upkeep.

A cornerstone of the NH Utilities' EO pilot will be a broad promotional outreach effort, including training for HVAC and energy efficiency contractors on the benefits of ASHP technologies, and the need for integrated HVAC controls to optimally operate the ASHP with the building's existing heating system. Customers' existing heating systems will generally be expected to provide backup heating during the heating season's coldest temperatures while the ASHP will meet customers' full heating needs for the rest of the season.

The NH Utilities will market the program to the following customers through personal outreach, direct marketing, collaboration with interested stakeholders, and other methods:

- HPwES program customers (past, present, and future);
- Existing customers of HVAC contractors;
- NH Electric Utility net metering Solar PV customers; and

- Customers who have installed battery storage

## 7.5 Customer Eligibility

Customers may participate in the EO pilot if they meet the following eligibility guidelines:

- Are willing to allow for the installation of integrated controls (not required if a customer removes the existing heat source for a whole zone(s) within the home);
- Are willing to provide data on their delivered fuel consumption, including data from no less than one year prior to the installation of the heat pump. This data will enable evaluation of fossil fuel and electricity usage, both before and after the installation of the heat pump technology. The customer can provide the fossil fuel records directly, or sign a release form that allows evaluators to obtain the data directly from the customer's fuel company;
- Agree to meet a maximum outdoor temperature set point (determined by the Utilities) for the switch over from the backup heating system to ASHPs; and
- Agree to implement a full heating zone(s) displacement. Partial heating zone installations are not eligible.
- Backup heating systems must be automatic feed systems. These include boilers, certain types of stoves, and furnaces.

## 7.6 Incentive Structure

Incentives for EO are designed to move a customer away from their current primary fossil fuel heat source to use high-efficiency ASHPs as their primary heat source instead. This proposition differs from a standard ASHP program offering, which incentivizes a customer who is already purchasing an ASHP to buy a more efficient unit, rather than a typical unit. In the EO framework, the customer cost barrier is higher and the overall MMBtu savings are greater than a standard ASHP program offering. The incentive levels for the EO pilot are designed to help overcome the customer barriers and achieve the displacement of the fossil fuel heating source. The initial incentive level for the EO pilot will be $1,250/ton, which aligns with a similar offering in Massachusetts. This level may be adjusted as the NH Utilities gain experience and customer feedback during the pilot.

## 7.7 Post Inspections and Survey

Post-installation inspections will be conducted for all EO pilot participants. An EM&V survey will be provided during each inspection. The inspectors will collect the following information:

- If the number of installed HP tons (1 ton = 12,000 Btuh) meets the customer's heating needs;
- If the existing heating system and heat pump set points are within the pilot parameters;
- If there are working integrated controls (if required as listed above); and
- If the heat pump technologies installed were designed to provide heat to a whole heating zone(s).

## 7.8 Evaluation Plan

The NH Utilities' pilot will be accompanied by an evaluation to measure the impacts on total energy consumption (for both heating and cooling, and across all fuels) and to assess program processes, customer behavior, and workforce capacity. Results of the evaluation will guide future decisions on expanding the pilot to a full-scale program. Design of the evaluation can leverage experience gained through similar evaluations happening in other states, such as the EO Impact and Process evaluation currently underway in Massachusetts. The NH EO evaluation will include both impact and process components:

- **Pilot Impacts.** The evaluation will measure impacts and refine methods for accounting for unregulated fuel savings and electric load increases for fuel-to-electric measures, to support modelling net MMBtu savings that could be claimed under a holistic accounting framework. The evaluation may include analysis of heat pump usage data from integrated control systems, delivered fuels billing data, where available, and whole home electric usage data from the NH Utilities. Requirements for integrated controls and customer releases to obtain delivered fuel records will support these efforts. This analysis will also help determine the extent to which EO could, at scale, lead to load factor improvements by increasing load during times when the transmission and distribution systems are not operating at peak capacity. As noted by the Commission in Order No. 26,322, such load factor improvements may present an opportunity

for ratepayers, as non-participants may stand to benefit from increased electricity sales that do not significantly increase transmission and distribution system costs.

- **Pilot Processes.** The evaluation will assess the pilot design and offerings for tailored ASHP measure bundles, including weatherization and integrated controls, to understand customer behavior and satisfaction, contractor technical capacity and training needs, and equipment configurations and baselines. Post-inspections will be utilized to confirm installation configurations and setpoints, and to survey customers on their plans for using the heat pumps and modifying set points, alternative equipment baselines they considered, and their satisfaction with contractors, the installation processes, and the rebate fulfillment process. The evaluation is also expected to include surveys or interviews with contractors to obtain feedback on issues such as training or capacity needs.

Although the pilot is not subject to cost-effectiveness requirements and the NH Utilities have not modelled planned savings, average project savings are expected to be in line with those from the EO study done under the oversight of the NH Benefit Cost Working Group.[62] This study and its associated planning model were based on a Massachusetts EO model and adapted to include New Hampshire specific inputs such as fuel cost data, weather data, saturation of various air conditioning technologies, and the regional electric generation mix. Table 7-1 provides estimated fossil fuel and electric impacts for the four scenarios expected to comprise the majority of pilot projects: oil and propane furnaces displaced by a central ASHP and oil and propane boilers displaced by ductless heat pumps.

[62] Navigant, Energy Optimization. Sep. 12, 2019. See https://puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_NH_ENERGY_OPTIMIZATION_STUDY.PDF and https://puc.nh.gov/Electric/Reports/20190805-PUC-Electric-NH-Energy-Optimization-Model.xlsx.

## Table 7-1: EO Estimated Energy Impacts

| Baseline Equipment | Replacement Equipment | Annual Energy Savings on MMBtu Basis (MMBtu/yr) | Propane Annual Savings (MMBtu/yr) | Oil Annual Savings (MMBtu/yr) | Electric Annual Savings (kWh/yr) | Electric Heating Savings (kWh/yr) | Electric Cooling Savings (kWh/yr) | Electric Heating Peak Demand Savings (kW) | Electric Cooling Peak Demand Savings (kW) |
|---|---|---|---|---|---|---|---|---|---|
| **Oil Furnace + Baseline A/C Blend** | Central HP + Oil Furnace | 37.81 | 0.00 | 49.02 | -3285 | -3963 | 678 | -1.630 | 0.610 |
| **Propane Furnace + Baseline A/C Blend** | Central HP + Propane Furnace | 51.67 | 68.83 | 0.00 | -5027 | -5705 | 678 | -1.630 | 0.610 |
| **Oil Boiler + Room A/C/No A/C Blend** | Ductless HP + Oil Boiler | 46.11 | 0.00 | 57.82 | -3433 | -4231 | 799 | -1.090 | 0.970 |
| **Propane Boiler + Room A/C/No A/C Blend** | Ductless HP + Propane Boiler | 63.53 | 81.19 | 0.00 | -5176 | -5975 | 799 | -1.095 | 0.970 |

**Note:** Negative savings values reflect increased consumption. Cooling baselines are based on a statewide blend of A/C penetration for central and room A/C systems.

**This page intentionally blank.**

# Chapter Eight: Marketing and Education

**Marketing and education strategies are administered to increase awareness of the benefits of energy efficiency. They are also used to drive increased participation in NHSaves Programs. The NH Utilities will promote and implement marketing strategies that motivate residential, municipal, and C&I customers to participate in program offerings made available by NHSaves.**

During the implementation of the 2021-2023 Plan, the NH Utilities will continue to increase customer awareness and participation in energy efficiency programs and to encourage behavior changes that save energy and reduce GHG emissions. Successful marketing and education strategies move customers through a long-term transitional process beginning with awareness that develops attitudinal changes and action. Over the past three years, the NH Utilities have focused marketing communications efforts toward making customers aware of the benefits of energy efficiency, as well as working through a strategic brand redesign of NHSaves and realigning marketing messages specific to target audiences. The primary objective during the 2021-2023 term is to take customers' heightened awareness of energy efficiency and turn it into tangible results by engaging customers' participation in NHSaves Programs in order to save energy, save money and realize non-energy benefits.

## 8.1 Background

### 8.1.1 2018-2020 Market Assessment

During the 2018-2020 Term, the NH Utilities launched a significant redesign of the NHSaves approach to marketing in order support the increased program budgets and goals under the EERS. Prior to the EERS framework implementation, NHSaves Programs budgets and goals had remained relatively flat since beginning in 2002 and NHSaves brand marketing was primarily focused on the mass market ES Products program at retail store locations and for jointly branding commercial forms.

In 2018, the NH Utilities established a statewide marketing team and issued an RFP to engage a marketing partner to develop and execute NHSaves marketing and outreach campaigns. Once selected,

the marketing partner collaborated with the NH Utilities to establish three broad objectives for a strategic 2018-2020 Marketing Plan:

- **One:** Build awareness and demonstrate the value of energy efficiency;
- **Two:** Drive deeper customer participation in the programs; and
- **Three:** Increase trade and channel participation in the programs.

In 2018, the NH Utilities initiated a soft launch of an umbrella marketing campaign with a refresh of the NHSaves logo and brand, a brand descriptor, digital platform activation, and enhancements to the NHSaves.com website. Included in this scope of work was a deep dive into the brand essence and definition of NHSaves to balance key messages of practical savings while inspiring energy conservation and efficiency.

The NH Utilities' statewide marketing team worked with the EM&V Working Group during 2018 to undertake a New Hampshire Energy Efficiency Market Assessment ("Market Assessment") to determine the general awareness of energy efficiency across the state, establish a benchmark awareness level of the NHSaves brand, and to identify effective marketing channels to communicate with customers and market segments.[63] This research deepened the understanding of the drivers and barriers related to energy efficiency participation, and helped identify general attitudes, perceptions, and behaviors concerning energy efficiency, and more specifically the NHSaves Programs, in New Hampshire.

The Market Assessment gathered primary data through population surveys of residential and small and mid-size business customers, residential customer focus groups, and non-residential customer interviews.[64] Completed in 2019, the Market Assessment found that one-third of residential customers

[63] Navigant Consulting. *New Hampshire Energy Efficiency Market Assessment*. Apr. 19, 2019 Presentation. Available at: https://www.puc.nh.gov/EESE%20Board/Meetings/2019/0419Mtg/20190419-EESE-Board-NHSaves-Market-Assessment-Presentation.pdf.

[64] *New Hampshire Energy Efficiency Market Assessment*. The Study received feedback from 1,072 residential customers (response rate of 11%) and 304 C&I customers (response rate of 4%).Two residential customer focus groups and 30 large C&I customer interviews were held.

and one-half of non-residential customers had seen or heard the term "NHSaves". Additionally, of those aware of the brand, 60 percent and 30 percent of residential and non-residential customers, respectively, were aware that NHSaves was associated with their electric or natural gas utility. Among those who were aware of NHSaves, program participation levels were only around 30 percent for both residential and non-residential customers.

### 8.1.2 2018-2020 Marketing Activities

In 2019, the NH Utilities launched phase one of a fully-integrated marketing campaign guided by insights from the Market Assessment's findings and recommendations. The theme of the marketing campaign that resulted was: "Live Free, Live Smart." The NH Utilities focused on several key strategies to increase awareness of the NHSaves brand and the benefits of participating in the programs, including:

- Expanded use of social media to build and engage a larger audience with targeted messaging across all the NH Utilities service areas. A variety of social platforms were added to the existing mix, including Facebook, Instagram, Twitter, and LinkedIn;
- Enhanced User Experience Design ("UX") on NHSaves.com with application of UX best practices including: ongoing support and maintenance, beta testing, Search Engine Optimization ("SEO"), navigational improvements, refreshed content and feature updates, and streamlined calls-to-action and consumer access points;
- Deployed consistent customer communication materials (e.g., collateral, display materials, etc.) and resources across the NH Utilities leveraging the NHSaves brand;
- Expanded use of paid media for the purpose of building brand awareness and driving traffic to the NHSaves website for program participation. The NH Utilities developed and implemented a full media plan including: digital, social media, and traditional marketing platforms.
- Expanded, increased, and improved the library of customer case studies and testimonials that can be promoted via social media platforms and on the website to educate customers on the benefits of energy efficiency;

- Created specific brand guidelines to ensure appropriate use and placement of the NHSaves logo by contractor trade allies; and
- Continued leverage of national and regional energy efficiency partnership campaigns, such as ENERGY STAR, to promote programs and services.

Throughout 2019 and 2020, the NH Utilities received monthly data reports with detailed information on website traffic and conversions. These reports, along with data that will be collected during the next Market Assessment will help the NH Utilities to gauge the effectiveness of the marketing efforts to date and guide new strategies for increasing awareness and participation in the NHSaves Programs over the coming term.

## 8.2 Customer Attributes and Market Research

### 8.2.1 Understanding What Influences Customers in their Energy Decisions

The overarching marketing strategy for the NH Utilities is to leverage what we know about how our customers use energy and how they make decisions about purchasing energy using equipment to design simple "on ramps" for them to engage with the NHSaves Programs. Understanding what motivates a customer to engage or not engage in energy efficiency programs helps the NH Utilities craft the appropriate messages, determine the right marketing tactics, and design effective communications that focus on solving a customer's needs or problems. As referenced throughout the 2021-2023 Plan, the NHSaves Programs have many benefits; however, the key to successful marketing is to understand what influences or drives a customer's energy decisions the most. Cost savings may be the most important thing for one customer to participate in an energy efficiency program, while improving the comfort of the home may be another person's primary motivator.

#### *Customer Segmentation*

To reach target audiences more effectively, the NH Utilities have utilized the Market Assessment research and subsequent data to categorize residential and C&I customers into groups or market segments. For the 2021-2023 term, the NH Utilities will build on this work and leverage a number of psychographic and behavioral segmentation strategies to refine the marketing tactics used to engage

customers. This segmentation combined with demographic-based data (e.g., customer characteristics, housing type and age, business type, number of employees, etc.) provides the NH Utilities with insight into customers' decision making process, world views, what motivates them to purchase high efficiency products or engage in efficient practices, and what they perceive as barriers.

The Market Assessment categorized customers into market segments using target metrics, such as awareness of NHSaves Programs and attitudes toward energy and the environment. The following four key factors were used to segment the marketplace: (1) concern for the environment, (2) environmentalism, (3) responsibility, and (4) behaviors. These factors helped to sort customers into the following four categories.

- **Engaged Greens.** This market segment (24 percent) has high levels of familiarity with energy efficiency programs and have participated in NHSaves Programs. Engaged greens have the highest level of concern with environmental issues, perceive a high-level of responsibility to take energy-saving actions, and frequently engage in energy conservation behaviors.
- **Aspiring Greens.** This market segment (27 percent) has moderate levels of awareness of NHSaves Programs, energy-efficient technologies, and has participated in energy efficiency programs. Aspiring Greens have a high level of concern for environmental issues, frequently engage in energy efficiency, and perceive a higher level of personal responsibility to take action.
- **Peripherally Aware.** Customers in this market segment (25 percent) are less likely to be concerned about environmental issues and to take responsibility to act and then in engage in energy-efficiency behaviors. Peripherally Awares are generally aware of NHSaves Programs; however, they do not understand their program options and have never participated in an energy efficiency program.
- **Disconnected.** This market segment (24 percent) shows the lowest levels of awareness of energy efficiency and participation in NHSaves Programs. Disconnected customers have a lower level of concern with environmental issues, perceive a lower level of responsibility to take energy-efficient actions, and do not frequently engage in energy-saving behaviors.

### *Recommendations*

The Market Assessment identified two key customer segments that presented immediate opportunity for the NHSaves brand and program engagement—the Engaged Greens and Aspiring Greens. These customer segments were identified as already having moderate levels of awareness of the NHSaves brand and more likely to have already participated in NHSaves Programs.

These customers are more likely to respond positively to the NH Utilities' communications, given that they are already interested in taking action to save energy and perceive it as their responsibility to do so. A key recommendation from the study was to increase utility-generated communications, including but not limited to: bill inserts, e-mails, or a separate postcard mailing to these customers.

**C&I Customers**

The NH Utilities utilize market segmentation to effectively target C&I customers and engage them in the NHSaves Programs as well. Understanding what motivates a business customer to adopt energy efficiency equipment and practices gives the NH Utilities insight into what communications strategies are most effective to increase C&I customer participation in the NHSaves Programs.

The Market Assessment determined that the largest energy consuming C&I customers have a higher level of concern for environmental issues than small to mid-size businesses. This is due to the need for many large businesses to meet and uphold environmental sustainability commitments in order to satisfy customer and shareholder priorities. This extrinsic motivation provides the NH Utilities an opportunity to effectively target large C&I customers for high efficiency equipment and behaviors, and to encourage their participation in the NHSaves program offerings. The Market Assessment also shed light on the decision-making constraints of four large C&I market segments and identified viable solutions the NH Utilities should implement. These market segments and strategies were discussed in Section 3.4 of this document.

## 8.3 2021-2023 Marketing Strategies

While looking toward the 2021-2023 Plan's implementation, the NH Utilities recognize that this is a great opportunity to build on the lessons learned and Market Assessment recommendations

implemented in the 2018-2020 term. The primary focus of the NH Utilities' marketing efforts is to take customers' heightened awareness of energy efficiency and turn it into participation in the NHSaves Programs. Increased participation and energy savings will be achieved through increased and targeted customer engagement and by implementing comprehensive, multi-measure projects that save energy and money. Marketing strategies harness the strong association between the NH Utilities and the NHSaves brand, which builds credibility given that the NH Utilities are already viewed as trusted energy advisors for customers across the state.

### 8.3.1 Marketing Communication Efforts

The NH Utilities will focus on motivating customers to engage in energy efficiency through a diverse mix of push-and-pull tactics that connect them back to relevant conversion points. A "conversion point" is the point at which the recipient of a marketing message performs a desired action. "Pull tactics" are designed to effectively draw customers into the programs and will include television and print and brand advertising, as well as utility communications (e.g., bill inserts, direct mail and e-mail, etc.) to leverage customers' trust with their utility.

The NH Utilities will also continue to place an emphasis on engagement through public relations and social media. These channels will help to expand the "brand story" in authentic, relatable ways. This will include balancing brand, program and product offerings, lifestyle, and education-based content on social media advertising to attract customers' attention indirectly, and then work to motivate customers to find out more about the NHSaves Programs and how they can make their home or business more energy efficient. Positive stories about how local businesses, municipalities, and customers are saving energy and money will serve as a conversion point to engage a customer, turning a potential actor into one who actually engages with the programs and energy efficiency behaviors.

#### Brand Awareness

Presentation of both the NHSaves logo and the NH Utility logos in marketing and promotional materials is a key approach in the effort to increase both awareness and uptake of energy efficiency offerings. Co-branding allows customers to recognize the statewide nature of energy efficiency offerings, provides assurance that the offerings are connected to trusted, regulated entities that they

already have a relationship with, and makes the connection between interest in energy efficiency and contacting their NH Utility to take action.

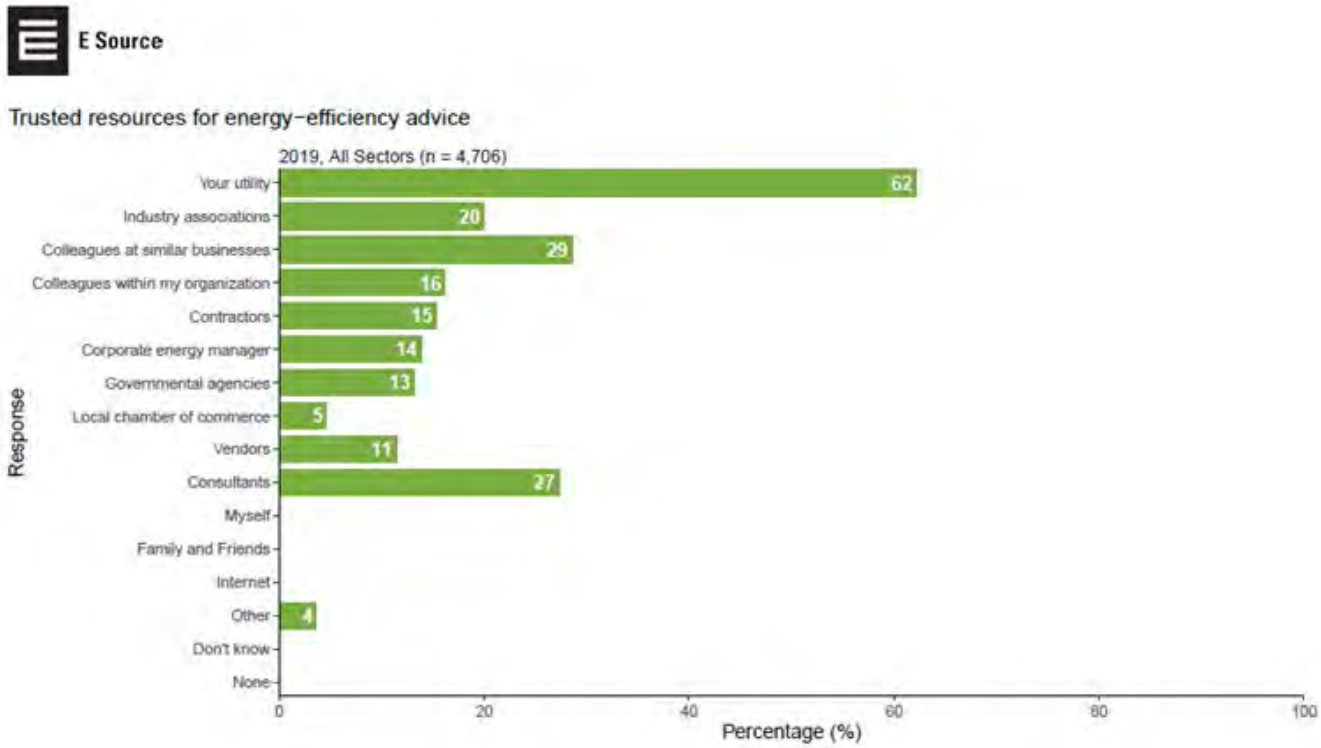
The NH Utilities began utilizing "NHSaves" in 2002, starting with program brochures and the website, and expanded over time as joint utility coordination on NHSaves Program offerings solidified and became the primary approach to energy efficiency in New Hampshire. As an umbrella brand, NHSaves became a way to connect the energy efficiency programs offered by each individual NH Utility to the joint planning and approval process. With NHSaves, customers can recognize that energy efficiency is available to all NH Utility customers across the state.

While the NHSaves logo and brand helps to reinforce the statewide nature of efficiency program offerings, NH Utility brands are featured in conjunction with the NHSaves logo in order to leverage the awareness and trust that customers have in the NH Utilities. Consumers today take in a constant flow of marketing and messaging across every aspect of their lives and activities. Consumers consistently have to analyze those messages to determine whether they are valid and from a trusted source. The initial impression of an advertisement or offer as something legitimate and trustworthy helps to determine whether the customer is willing to engage further in the information that the message contains.

Studies have shown that customers overwhelmingly view their utility as the trusted resource for energy efficiency advice. In fact, a recent study by E-Source surveyed respondents on trusted resources for energy efficiency advice and found that out of 4,706 respondents in all sectors in 2019, 62 percent of respondents selected "Your Utility" as the most trusted resource. See Figure 8-1 for the results from the E-Source study.[65]

[65] E Source (2020). E Source Small and Midsize Gap and Priority Study & Large Business Gap & Priority Study (Business Customer Insights Center).

**Image 8-1: Trusted Resources for Energy Efficiency Advice (E-Source)[66]**




Additionally, a survey of New Hampshire customers by Eversource found that 62 percent of residential customer respondents preferred a residential advertisement with both the utility and NHSaves logos, noting the advertisement emphasizes collaboration and comes from a business they trust. 21 percent preferred the advertisement with just the utility logo, and 17 percent preferred just the NHSaves logo. Similarly, 68 percent of commercial customer respondents preferred a commercial advertisement with both the utility and NHSaves logos, 24 percent preferred the advertisement with just the utility logo, and 8 percent preferred just the NHSaves logo. Based on research, and the overall desire to leverage customers' existing awareness of the NH Utilities as legitimate regulated entities and trusted energy advisors, co-branding strategies are a critical element of supporting and enhancing the NHSaves brand.

[66] E Source (2020). E Source Small and Midsize Gap and Priority Study & Large Business Gap & Priority Study (Business Customer Insights Center).

In addition to trust and awareness of energy efficiency programs, co-branded marketing serves to encourage the customer to take action toward implementing energy efficiency by providing a direct link to the service provider. In order to move from awareness to action the customer must have a clear understanding of what steps they can take and who they can contact. The utility is integrally connected to implementing energy efficiency projects, so it is vital that customers understand the linkage in order to move forward with energy efficiency. Call centers, energy efficiency employees, and business account executives all provide critical pathways for customers to gather information, begin a project, or resolve questions. Understanding the connection between statewide energy efficiency offerings and a customer's utility provides the full circle of information that the customer needs in order to take action and implement energy efficiency improvements. Additionally, linking the utility logo with NHSaves enables customers to see that programs are administered by the NH Utilities, thereby ensuring transparency of funding by ratepayers.

The NH Utilities recognize the benefits of the statewide NHSaves brand in promoting energy efficiency programs to customers. In order to protect the brand and ensure that it represents high standards of delivery and customer service, the NH Utilities will monitor and control the word and logo service marks in order to maintain their value and to prevent inferior services from diminishing them. The NH Utilities have stepped up these efforts, including initiating the federal service mark registration and monitoring efforts, in order to identify unauthorized uses of the service mark and protect the integrity of NHSaves.

In addition to utility-led marketing efforts, the NH utilities are also working to provide enhanced opportunities for contractors to market and support the programs through a trade ally logo. During the third quarter of 2020, this logo will be created specifically to incorporate the NHSaves logo, while differentiating it in order to signify the trade ally relationship. Contractors will be able to receive the benefit of NHSaves brand awareness and visually demonstrate that they have met the requirements to participate in the NHSaves Programs. The use of a trade ally logo will increase the visibility of NHSaves across the state and leverage marketing campaigns funded by contractors to reach more customers. The trade ally logo will be licensed to qualified contractors through an agreement that provides for

review of materials by the NH Utilities and detailed brand guidelines in order to ensure proper use of the mark and protect its integrity.

Throughout the 2021-2023 Plan, the NH Utilities will continue to use branding strategies designed to leverage customer trust and awareness and promote energy efficiency in New Hampshire.

### Residential Customers

Residential marketing communications will target residents of single-family and multifamily homes, especially limited-income customers, as well as home builders and buyers, contractors, distributors, property managers, realtors, and retailers to inform these stakeholders about NHSaves' high-efficiency products and technologies. The NH Utilities will also increase outreach to rural and hard-to-serve customers to engage them in energy efficiency through Button Up Workshops, community forums and partnerships.

During the 2021-2023 term, the NH Utilities will include more midstream and point-of-purchase rebate offerings for the NHSaves Residential Programs, as well as include additional tiers and bonus incentives for the residential new construction marketplace. These new offerings are designed to both expand and simplify the opportunities for participation in NHSaves programs by residential customers. Through program-specific marketing communications efforts, the NH Utilities will make more customers aware of these easy-to-access on-ramps to energy efficiency.

Throughout the 2021-2023 term, the NH Utilities will market the NHSaves Residential Programs through a variety of channels, including the website (NHSaves.com), bill inserts, program materials, direct mail and e-mail, active social media campaigns, paid digital advertising, billboards, radio/TV/music streaming advertisements, trade shows, public relations efforts (statewide and utility-driven), hosting or providing speakers for trainings and events, and providing content for partners' blogs, newsletters, and websites.

### C&I and Municipal Customers

For non-residential customers, the NH Utilities will focus marketing efforts on a variety of industry segments and facility types and will leverage utility account representatives' and customer service

personnel's relationships with these customers. The Market Assessment found that C&I customers, especially large C&I customers, attributed their engagement with energy efficiency to their strong relationships with their utility representatives. The NH Utilities will continue to foster these relationships to encourage long-term, multi-measure efficiency projects with their C&I customers. In addition, the NH Utilities will work closely with various trade ally and channel partners, including but not limited to: architects, builders, contractors, developers, electricians, engineers, equipment manufacturers and suppliers, facility managers, and trade associations. For municipalities, the NH Utilities will continue to work closely with town, school, and local community officials and leverage the NH Utilities' internal resources to market the NHSaves Programs.

For the 2021-2023 term, the NH Utilities will focus on making it easier for customers to participate in NHSaves C&I Programs. The NH Utilities will create standard offer marketing pieces, such as sell sheets and presentations, specifically developed for target C&I market segments and end-use equipment. These tailored marketing collateral packages will make it easier for customers to understand the potential incentives and estimated energy savings associated with installing the types of energy-efficient equipment common to businesses like theirs. Through case studies and customer testimonials, the NH Utilities will enhance efforts to use the success stories of other local businesses to recruit newcomers to the NHSaves Programs.

The NH Utilities will work to spread the energy efficiency message further to local communities, municipalities, and small businesses through outreach efforts, such as the main street initiative described in the C&I Programs section of this document (see Chapter 3).

### 8.3.2 Marketing Strategy Components

The primary focus of the NH Utilities marketing efforts over the coming three-year term is to convert customers' heightened awareness of energy efficiency resulting from NHSaves marketing efforts over the 2018-2020 term and motivate them to take action. For the 2021-2023 term, the NH Utilities have designed programs to allow for multiple, easy-access program pathways to serve as on ramps to engage customers in energy efficiency. The NH Utilities' marketing strategies also focus on delivering communications through multiple and diverse marketing channels to increase customer touch points

and to increase conversion rates. The NH Utilities will focus on three broad marketing objectives for the 2021-2023 NHSaves Programs:

1. Continue to build awareness and demonstrate the value of energy efficiency;
2. Convince customers to take action and participate in NHSaves energy efficiency offerings; and
3. Increase education and outreach efforts to both customers and trade allies.

These marketing strategies, along with a comprehensive set of program solutions, are designed to overcome specific barriers to energy efficiency program participation.

### Continue to Build Awareness and Demonstrate the Value of Energy Efficiency

The brand awareness research and marketing efforts conducted during the 2018-2020 Plan have helped the NH Utilities to better understand New Hampshire customer behaviors and to assess the overall knowledge of energy efficiency, NHSaves Programs, and the motivators and barriers to participation. During the 2021-2023 term, the NH Utilities will continue to leverage this knowledge to inform marketing campaign strategies and to focus on program-specific marketing campaigns.

The NH Utilities will continue to keep the NHSaves website up to date and engaging throughout the 2021-2023 term to increase awareness of programs, and to provide an online platform for customers to engage with energy efficiency. The website is currently an information source for customers and energy service providers wanting to learn about energy efficiency programs and technologies. The next step is for the NH Utilities to expand the website into a digital marketing platform that directly engages customers with energy efficiency offerings. This will include the creation of multiple digital conversion points where customers may redeem appliance vouchers, sign up for a program, learn about energy-efficient equipment and building design through a digital video library, or even purchase an energy-efficient product through a digital rebate redemption platform.

### Convince Customers to Take Action and Participate in NHSaves Programs

The NH Utilities will continue to use established social media platforms to build a larger audience and to target messaging to select customer groups, using a social media content calendar of planned

campaigns and promotions to be implemented through the 2021-2023 term. The NH Utilities will continue to track social media metrics to measure change over time and gauge progress toward meeting key performance indicators.

**Increase Contractor and Public Education Efforts**

For the 2021-2023 term, the NH Utilities will increase the number of contractor and customer education trainings and events across the state. These activities are described in more detail in the NHSaves Residential Programs section (Chapter Four) and the NHSaves C&I Programs section (Chapter Three). Contractor and customer education is an important component of the NH Utilities' marketing efforts to inform the public about the benefits of energy efficiency and the NHSaves Programs.

The NH Utilities recognize that educating K-12 students on energy efficiency has the double benefit of empowering students to help their schools set and achieve energy efficiency goals, while also arming them with information to improve efficiency and performance where they live. During the 2021-2023 term, the NH Utilities will continue to partner with schools to instill an energy-efficient ethic in school-aged children across the state. All K-12 schools in the NH Utilities' service areas are eligible to participate in New Hampshire Energy Education Project ("NHEEP") presentations and workshops to learn about energy efficiency. The NH Utilities have worked with NHEEP to support additional flexible options for teachers and students who may be participating in virtual education. Recognizing the challenges schools are facing related to COVID-19 and health risks, offerings include virtual workshops with hands-on components, home learning lessons and additional custom curriculum support, as well as virtual professional development workshops. The student education and professional development workshop curriculum is aligned with Next Generation Science Standards ("NGSS").

### 8.3.3 Key Performance Indicators

Throughout the 2021-2023 term, the NH Utilities will build upon the successful 2018-2020 marketing research and strategies developed to increase awareness of and participation in NHSaves Programs. To track the success of these efforts, the NH Utilities have developed several key performance indicators for the 2021-2023 term, including:

- **Awareness.** In 2021, the NH Utilities anticipate having the results of a new Market Assessment, which will show the change over time in NHSaves brand awareness. The new Market Assessment will also provide better understanding of which customer segments have been reached through marketing efforts over the last three years.
- **Interest.** The NH Utilities will track the engagement of visitors to the NHSaves.com website, including the time spent on-site, pages viewed, and bounce rates. In addition, the NH Utilities will track social media account metrics, including social follows, reactions, and general engagement.
- **Intent.** This metric will track the intent of customers to engage in NHSaves Programs, including gathering the following information: visits to key NHSaves.com pages, sponsor and contractor click-throughs, and event engagement (e.g., Button Up Workshops and contractor trainings).
- **Conversion.** This key metric will measure if customers are taking action and participating in NHSaves Programs. The NH Utilities will track the following conversion metrics: rebate submissions, HHI Tool submissions, online store purchases, and e-news sign-ups. Throughout the 2021-2023 term, the NH Utilities will look to add new conversion tools to track the success of all marketing communications efforts.
- **Word-of-Mouth.** Another key metric for marketing communications efforts is advocacy for the NHSaves Programs. Word-of-mouth recommendations and customer-driven testimonials are positive marketing tools to promote the NHSaves Programs. The NH Utilities will track the customer referrals, social shares, and positive reviews of the NHSaves Programs to determine if they can attribute increased program engagement and awareness with advocacy.

## 8.4 Customer Engagement Initiative (Eversource)

For the 2021-2023 term, Eversource will undertake behavioral-based marketing strategies to engage its electric customers in understanding how they consume energy in their homes and subsequently move them toward adoption of energy efficiency measures through the Residential program offerings

### 8.4.1 CEI Marketing Objective

Eversource's customer engagement initiative ("CEI") is a streamlined approach to providing customers with data-driven insights and targeted recommendations to motivate behavior change and participation in energy efficiency programs. The initiative will leverage expertise gained through previous experience with traditional behavioral programs and digital customer engagement in the areas of data analytics, informational design, behavioral science, and communication delivery.

In July 2020, Eversource released an RFP to determine what types of customer engagement services and solutions are offered in the marketplace for consideration across its three-state service territory (Connecticut, Massachusetts, and New Hampshire). The tools selected will enable Eversource to integrate customized usage insights and recommendations for applicable NHSaves Programs more seamlessly into the overall customer experience and marketing efforts. Once finalized, the chosen tools will replace the previous Customer Engagement Platform.

### 8.4.2 CEI Marketing Design

The CEI will drive energy efficiency awareness and customer action by meeting customers where they are with the right message at the right time. Eversource's approach involves identifying good candidates for a specific offer (such as a particular product or measure) based on what Eversource knows about them, their homes, and how they use energy, then designing a series of personalized communications and interactions over time to move customers along the desired path to energy efficiency.

The communications will include customized usage insights and recommendations delivered through traditional one-on-one outbound marketing channels (e-mail and possibly direct mail) that allow for personalization at scale. To maximize impact and reinforce the message, Eversource will integrate this information with natural touchpoints that customers have with their utility (for example, the process of viewing and paying a bill online) and trigger the presentation of information at times when its most relevant (e.g., seasonal changes in temperature or after a customer receives a high bill).

In 2021, Eversource's CEI will focus primarily on residential customers with learnings from that work applied to relevant C&I subsegments in the following years.

In the 2021-2023 term, Eversource has designed the CEI as a marketing approach to drive adoption of program measures and does not expect to generate behavioral-based energy savings. The focus of the CEI in the near term is develop customized communication journeys that utilize behavior-based principles.

To fund the marketing approach, Eversource has moved $600,000 from the former Customer Engagement Platform line of the budget into Marketing and utilized the remainder of the funds previously anticipated for the Platform in the ES Products program, anticipating that the CEI communications will drive customers to participation in that program.

**This page intentionally blank.**

# Chapter Nine: Workforce Development

**The NH Utilities recognize that increasing the adoption of energy efficiency improvements in homes, businesses, and municipal facilities across New Hampshire requires a skilled and qualified workforce. The state has a pool of dedicated trade allies who already provide quality services for the NHSaves Programs. However, as savings and participation goals increase over the 2021-2023 term, the NH Utilities must ensure this labor pool can expand to meet the demand for highly-skilled energy efficiency and demand reduction workers across the state.**

Beginning in 2020 and continuing during the implementation of the 2021-2023 Plan, the NH Utilities will focus on recruiting and retaining a demographically and geographically diverse workforce to expand the existing local energy efficiency industry with personnel who are highly-skilled and equipped to meet the NHSaves Programs' current and future needs. Energy efficiency is a growing field in New Hampshire, and many firms and organizations working within it have noted difficulties in finding new recruits to help fulfill the demand for services.

In addition to workforce needs related to increasing NHSaves Program activity and demand for services, energy efficiency contractors and vendors are significantly impacted by the recent onset of the COVID-19 pandemic. Many energy service firms had to furlough, or lay-off workers, as on-premises activities were suspended and demand for energy efficiency services slowed. Workforce recovery from this unexpected turn of events remains uncertain and may require new avenues for recruiting and replacing workforce capacity.

Potential entrants into the industry would benefit from a comprehensive source of information and resources including career paths within the energy efficiency field, what education and certifications are required to acquire a job and advance within the industry, whether tuition assistance is available, and where to find career opportunities. The NH Utilities believe that improving access to and awareness of available workforce development resources will help develop the pool of well-trained

contractors who will offer high-quality services to customers. In addition, these contractors will be trained regarding building science and emerging energy-efficient technologies, which will inform them of solutions, incentives, and services available to customers through the suite of NHSaves Programs; thus, resulting in comprehensive energy-saving projects and higher levels of participation within the programs.

The NH Utilities currently support various workforce development efforts throughout New Hampshire and will continue to do so during the 2021-2023 term. These efforts are implemented through the NHSaves Programs, with resources and training offered to contractors, distributors, builders, building owners and customers who support or are interested in energy efficiency programs or initiatives. At the same time, the NH Utilities will pursue a cohesive statewide strategy for understanding workforce development needs, and training vendors, community action agencies, building operators, distribution and contractor partners, and others to meet the goals for the 2021-2023 Plan.

## 9.1 New Hampshire Workforce Development Strategy

In 2020, the NH Utilities will issue a competitive RFP for a Workforce Development lead vendor responsible for designing and implementing a Workforce Development Strategy that supports the NH Utilities' workforce development goals:

1. **Identification of Workforce Development Needs.** The NH Utilities and lead vendor will work to develop a three-year Workforce Development Strategy, including timelines and budget allocations, to address current and future workforce development needs, as informed by existing studies and supplemented by additional benchmarking and research. The lead vendor will propose pathways and opportunities to allow contractors and trade allies to further develop their staff in three ways: technical capacity, sales acumen, and other extraneous benefits like managerial proficiency. In addition, the NH Utilities will ask the lead vendor to identify pathways for job seekers in communities with high unemployment to join the energy efficiency workforce.
2. **Coordinate Implementation of New and Existing Training and Workforce Development Activities.** The Workforce Development lead vendor will be responsible for identifying and

coordinating the implementation of new and existing training and workforce development activities needed to fulfill the Workforce Development Strategy. Trainings will focus on the skills required to sell and install high-efficiency technologies across all fuel types (i.e., electricity, natural gas, oil, and propane), as well as the building sciences and other skills identified during the development of the strategy by the NH Utilities and lead vendor.

3. **Coordinate Activities to Retain Existing Energy Efficiency Workers.** The Workforce Development lead vendor will identify and recommend strategies for retaining trained and qualified energy efficiency workers. The NH Utilities and lead vendor will coordinate with contractors, vendors, engineering firms and other businesses implementing energy efficiency projects to understand issues related to retaining trained workers and develop strategies to keep them working in New Hampshire.
4. **Coordinate Activities to Recruit Entrants to the Energy Efficiency Workforce.** The Workforce Development lead vendor will help identify, develop, and implement activities to engage potential workers who are new to the workforce, or considering career changes, to seek careers within the energy efficiency field in New Hampshire. The NH Utilities and lead vendor will collaborate with existing career and educational organizations, as well as engage with other key stakeholders to define recruitment paths for job seekers. This will also include engagement with high schools and technical schools regarding energy efficiency as a career path.

## 9.2 2021-2023 Workforce Development Efforts

During the development of the Workforce Development Strategy, the NH Utilities will continue to develop and implement trainings and workforce development activities for the current energy efficiency workforce. As the strategy is developed, the NH Utilities will introduce and/or modify contractor trainings to align with research and best practices design.

The NH Utilities will continue to monitor and support existing trainings and training pathways in order to contribute to building and maintaining a qualified workforce that will meet the demand for energy efficiency. During the 2021-2023 term, the NH Utilities will continue to train the state's current

workforce, including contractors, distributors, manufacturers, CAAs, home builders, municipal facility managers, and retailers on high-efficiency equipment and design. To support many of the 2021-2023 Plan's priorities and programs, key workforce trainings will include but are not limited to these topics: high-efficiency HVAC technologies and controls, refrigeration equipment and controls, advanced LED lighting and controls, whole-building design (C&I sector), code-plus initiatives, ADR strategies, and emerging technologies.

### Residential Programs

For the 2021-2023 term, the NH Utilities will look to expand existing trainings and include additional content on: building code compliance, emerging technologies, and energy-efficient building techniques. Residential workforce development will include in-field home builder trainings, lunch and learns, hands-on equipment training, and interactive online training videos. In order to scale up energy savings and program participation, the NH Utilities will increase workforce capacity through more contractor training, particularly regarding HVAC equipment and systems.

The NH Utilities also plan to continue to collaborate with HVAC contractors and to increase training opportunities regarding HVAC system design, operations, and performance. In addition, the NH Utilities will expand the refrigeration contractor trade ally network during the 2021-2023 term. This effort will help increase the number of refrigeration contractors who understand high-efficiency technologies and controls and the comprehensiveness of large C&I projects.

### C&I Programs

During the 2021-2023 term, the NH Utilities plan to increase the C&I contractor network statewide: enabling the program to serve more customers in remote, hard-to-reach areas where access to energy efficiency contractors and solutions is sometimes limited. The NH Utilities will continue to offer C&I trainings on advanced technologies and controls to municipal representatives, including building operators and facility managers. The NH Utilities will conduct workforce trainings regarding energy-

efficient technologies, building codes and standards, and building above code (code plus). The number of specialized contractor trainings will be increased to promote the C&I Programs' push for more comprehensive energy projects and to increase the adoption of new and emerging energy-efficient technologies. Workforce trainings will include but are not limited to: advanced lighting design and controls, HVAC systems and controls, and refrigeration tuning and controls.

**This page intentionally blank.**

# Chapter Ten: Planning Elements

## 10.1 Benefit-Cost Testing

Since the inception of energy efficiency programs in New Hampshire, and in accordance with Commission Order No. 23,850, in DE 01-057, dated November 29, 2001, the NH Utilities have used the Total Resource Cost ("TRC") test, which compares the value of the avoided cost of energy and other resources over the life of installed measures against the cost of those measures to both the NH Utilities and the participating customers. Over the years, amendments to the TRC test have been made, which include adding the costs and benefits of avoided fossil fuels as the residential weatherization programs became fully fuel-blind (saving oil, propane, and other fossil fuels), and also include a non-energy impact adder to the benefits as a proxy for the participant benefits the programs delivered beyond those deriving from reduced energy use. The NH Utilities use a common set of avoided costs to ensure that program benefits are calculated consistently across utilities, which are based on values from the periodically updated, regional AESC Study (see additional details below).

As part of the settlement to the 2018-2020 Plan, stakeholders agreed to revisit the energy efficiency program's long-standing benefit cost test and assess whether adjustments should be made based on the evolution of policy priorities in New Hampshire. To undertake this assessment, the EM&V Working Group, in conjunction with the Benefit-Cost Working Group, issued a competitive bid and selected Synapse Energy Economics to facilitate the stakeholder effort. Following the guidance of the National Standards Practice Manual, the NH Utilities and energy efficiency stakeholders over many months undertook a comprehensive review of state energy policy and Commission precedent. The resulting Cost Effectiveness Review Final Report was completed in October 2019.[67] On October 31, 2019, the

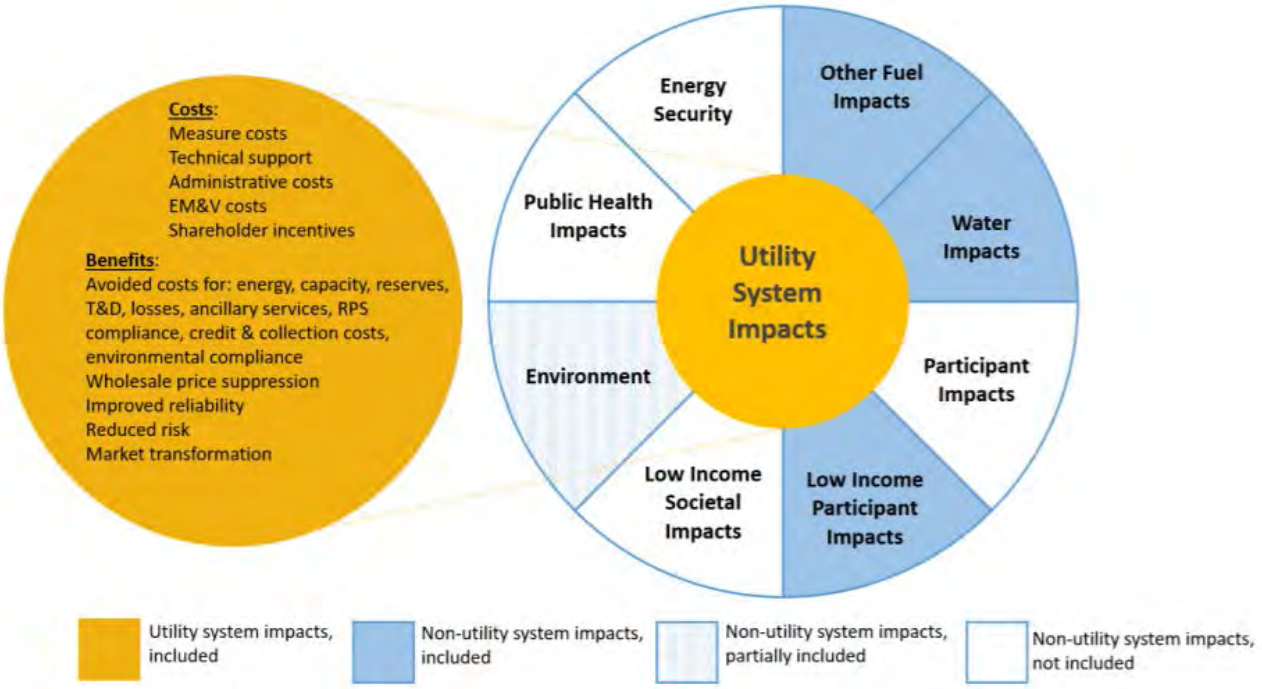
[67] Synapse Energy Economics, Inc. *New Hampshire Cost-Effectiveness Review*. Oct. 4, 2019. Available at: https://puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_NH_COST_EFFECTIVENESS_REVIEW.PDF.

Benefit-Cost Working Group filed a report and a set of recommendations to the Commission regarding the adoption of the proposed primary cost-effectiveness test (the Granite State Test), and two secondary tests to be applied to the 2021-2023 Plan.[68] On December 30, 2019, the Commission issued Order 26,322, approving the Benefit-Cost Working Group's recommendations to take effect for the 2021-2023 term.

### 10.1.1 Granite State Test

The Granite State Test, the primary cost-effectiveness test, measures the utility costs of delivering energy efficiency programs against the benefits that accrue to the utility system, as well as those benefits associated with improving outcomes for limited-income participants, reducing participants' use of unregulated fuels and water, and a RGGI/carbon emissions proxy.

**Figure 10-1: Granite State Test**



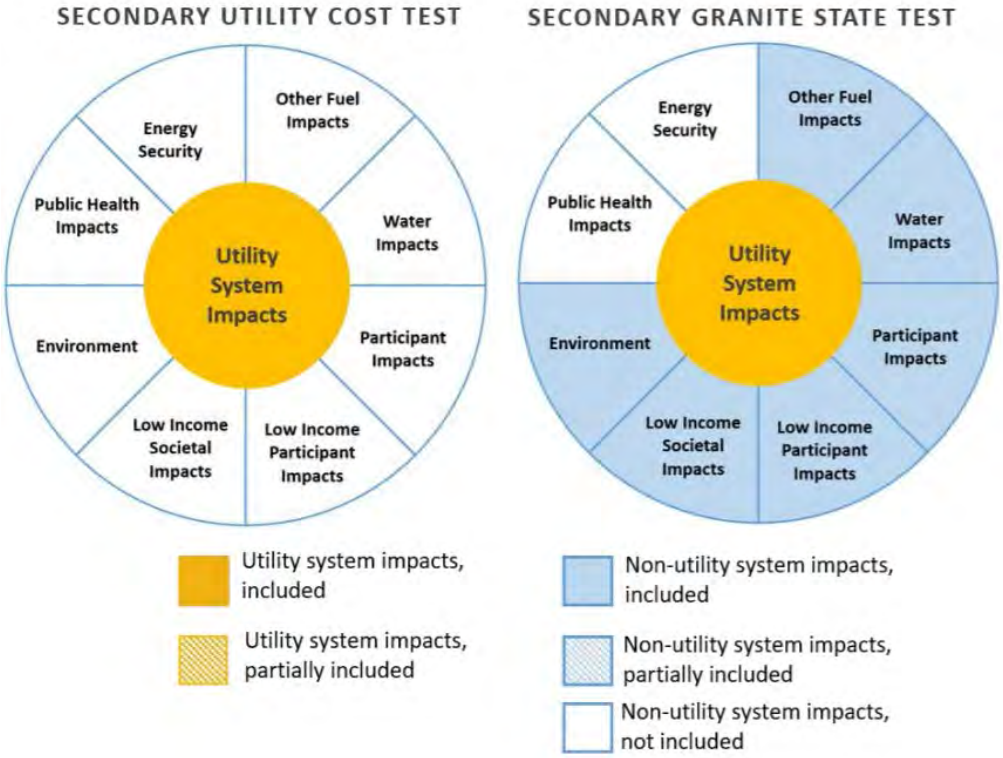

[68] DE 17-136, *Electric and Gas Utilities 2018-20 New Hampshire Statewide Energy Efficiency Plan Benefit-Cost Working Group Recommendations Regarding New Hampshire Cost-Effectiveness Review and Energy Optimization through Fuel Switching Study*. Oct. 31, 2019. Available at: https://puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_FILING_WORKING_GROUP_REC.PDF.

### 10.1.2 Secondary Tests

In addition to the Granite State Test, the Commission approved two secondary cost-effectiveness tests recommended by the Benefit-Cost Working Group: the Utility Cost Test ("UCT") and Secondary Granite State Cost Test ("GST-2"). These two tests measure the two extremes of the cost-effectiveness spectrum: one test includes impacts to the utility system only, the other test includes a much larger list of impacts that the Benefit-Cost Working Group considered relevant to New Hampshire.

- The UCT takes into account the utility's costs of delivering energy efficiency programs against the direct benefits to the utility system (i.e., ignoring the significant non-system benefits realized by participants).
- The GST-2 considers the utility and participant costs of delivering energy efficiency programs against both the direct and indirect benefits to the utility system, participants, and the environment.

**Figure 10-2: UCT and GST-2**



The Granite State Test is applied to each proposed energy-saving program in the portfolio at the time of filing. If the Net Present Value ("NPV") of benefits realized by the energy efficiency programs (benefits) is greater than the NPV of costs to deliver those programs (costs), it is assumed the investment is sound and can proceed. Certain exceptions to cost-effectiveness requirements can be made for offerings including education, approved pilots, programs in early stages, and the low-income HEA program.

The Granite State Test will also be applied by each NH Utility to each approved program at the time of annual and term reporting. If, under that test, a NH Utility's portfolio of programs delivered during the term is cost-effective (with a benefit-cost ratio greater than 1.0), the NH Utility will be eligible to earn a performance incentive.

Because the Granite State Test requires that the NH Utilities plan for each program to be cost effective, measures and projects that make up the program must also be cost effective. Not every individual measure or project has to be cost effective, but on average, they must have a benefit-cost ratio greater than 1.0 to ensure their benefits exceed the costs of both rebates and services provided to customers, as well as all program-related marketing, evaluation, administration, and other costs not invested directly in energy-saving measures. In accordance with recommendations from the benefit-cost working group, the NH Utilities will not apply values for reliability benefits as quantified in the 2018 AESC Study but will work toward developing more rigorous values under the 2021 AESC Study that will be applied during the 2022-2023 term.

The secondary tests (UCT and GST-2) will also be applied by each NH Utility to each of the NHSaves Programs at the time of filing and reporting. These tests will help inform resource allocation decisions, as well as treatment of marginally cost-effective programs, but will not be used to judge the viability of a program that has been determined cost-effective under the Granite State Test and will not have an impact on the NH Utilities' PI.

### 10.1.3 Benefits

Benefits are derived from the AESC Study undertaken every three years for the entire New England region. The AESC Study is overseen by and receives input from the AESC Study Group, comprised of regulators, utility staff, and energy efficiency consultants throughout New England, and serves as the source of most avoided costs for calculation of benefits for New England states.

The most recent study, *Avoided Energy Supply Components in New England: 2018 Report* ("2018 AESC") was completed in March 2018 and amended in June 2018. The results of the 2018 AESC Study have been used to calculate the benefits associated with programs to be delivered as a result of the 2021-2023 Plan. Updated benefits from the 2021 AESC Study will be provided to the Commission as outlined in Chapter Two.

The AESC Study generates state-specific models of the value of avoided energy and capacity (kWh in each of four seasonal periods, kW at summer and winter peak, and natural gas, oil, propane, kerosene, cord wood, and wood pellets), as well as Demand Reduction Induced Price Effect ("DRIPE") and avoided costs of certain transmission infrastructure. These avoided energy values are projected out over a 25-year time horizon. Individual state policy specifies the time period that should be used in determining the inflation and discount rates to be applied to the NH Utilities' benefit-cost model to arrive at a calculation of NPV benefits. The NPV benefits of a given project depend on various project-specific factors, including measure life, load-shape, the coincidence of its use with summer electric system peak, and the fuel(s) whose use is avoided. As a result, the value (or benefit) of an avoided annual kWh varies by measure and by project.

In accordance with the Final Energy Efficiency Group Report, dated July 6, 1999 in DR 96-150, the nominal discount rate from June of the prior year is applied to the benefit-cost analysis, while the inflation rate is based on the seasonally adjusted rate of inflation between January of the preceding year and January of the current year, as determined by the US Bureau of Economic Analysis. For the 2021-2023 Plan, the NH Utilities have applied a nominal discount rate of 3.25 percent (June 2020

value) and an inflation rate of 1.81 percent (rate of inflation between January 2019 and January 2020), resulting in a real discount rate of 1.41 percent used for NPV cost and benefit calculations.

### 10.1.4 Non-Energy Impacts

As discussed with the NH Benefit-Cost Working Group, and per Commission Order,[69] the NH Utilities are applying non-energy impacts ("NEIs") in cost-effectiveness screenings as follows:

- The **Primary Granite State Test** reflects low-income participant NEIs, based on New Hampshire-specific primary research on the HEA program. Specifically, based on the HEA evaluation, a per-project value reflecting participant NEIs—including increased comfort, decreased noise, and health-related NEIs—will be applied annually to each weatherization project over its 15-year measure life, as reflected in the TRM.[70]
- The **Secondary Granite State Test** reflects sector-level percentage adders for participant NEIs for the Residential (non-low-income) and C&I sectors, based on a comprehensive, secondary research survey and analysis of NEIs by an independent third party, adjusted for New Hampshire-specific economic and other factors and matched to New Hampshire's programs and measures.[71] Per the BC Working Group's final report, the test also reflects environmental externalities, including the $100/ton global reduction marginal abatement scenario from the AESC Study.

Both the Primary and Secondary Granite State Tests reflect other resource impacts for water and delivered fuels.

---

[69] Docket No. DE 17-136, Order Approving Benefit Cost Working Group Recommendations, No. 26,322, Dec. 30, 2019; Order Approving 2020 Update Plan, No. 26,323, Dec. 31, 2019.

[70] Opinion Dynamics. Home Energy Assistance Program Evaluation Report 2016-2017, Final, Jul. 29, 2020. https://puc.nh.gov/Electric/Monitoring%20and%20Evaluation%20Reports/20200729-NHSaves-HEA-Evaluation-Report-FINAL.pdf.

[71] DNV-GL. New Hampshire Non-Energy Impacts Database Methodology Memo, Apr. 9, 2020. https://puc.nh.gov/Electric/Monitoring%20and%20Evaluation%20Reports/Final-NH-NEI-Methodology-Memo-20200409.pdf.

## 10.2 Performance Incentive

As part of the DE 17-136 Performance Incentive Working Group, which commenced in January 2018 and concluded with a final report in July 2019, changes to the PI structure were proposed and implemented for Plan Year 2020. For the 2021-2023 Plan, the NH Utilities will continue to utilize the revised PI framework, with minor changes to the weightings proposed below. The PI framework categorizes and weights six separate performance indicators: (1) Lifetime kWh Savings, (2) Annual kWh Savings, (3) Summer Peak Demand Savings, (4) Winter Peak Demand Savings, (5) Value, and new this term, (6) Active Demand Savings (components) at the portfolio level for each NH Electric Utility, each involving minimum savings thresholds (as well as other minimum thresholds summarized below) that must be met in order for any PI to be earned for that component.

The PI Working Group report recommended changing minimum thresholds for savings and benefits components from the prior 65 percent to 75 percent. Due the significant economic and societal impacts of COVID-19, the 2021-2023 Plan moves those thresholds back to 65 percent. This shift reflects the dichotomy between the high energy savings goals in the 2021-2023 Plan and the significant uncertainty that exists in the marketplace due to current and future impacts of the global pandemic and its ripple effects.

In 2021-2023, the ADR offerings will transition from demonstration projects to full-fledged programs; those NH Utilities that offer an ADR program will include a distinct PI component for achievement of ADR goals, as was anticipated by the PI Working Group. This element will be based on the actual spending for the ADR programs, as well as actual kW reduced. The target PI for the ADR portion will match the rest of the PI at 5.5 percent of actual expenditures, with a threshold of 65 percent and a cap of 125 percent. Compared to 2020, the demand components continue to represent a combined 20 percent of the incentive weight, however the percentages for Summer Peak and Winter Peak Demand Savings components have been lowered slightly to allow for a weight of 5 percent for the Active Demand component.

Eversource, Liberty Electric, and Unitil Electric have added an Active Demand component to the PI calculations for 2021-2023, which follows the same framework as the other components, as shown in Table 10-1.

**Table 10-1: Performance Incentive Components (Electric)**

| PI No. | Component Title | Description | Incentive Weight | Minimum Threshold | Maximum PI Level | Verification |
|---|---|---|---|---|---|---|
| 1 | Lifetime kWh Savings | Actual/Planned Lifetime kWh Savings | 35% | 65% | 125% | Term PI Filing w/Commission |
| 2 | Annual kWh Savings | Actual/Planned Annual kWh Savings | 10% | 65% | 125% | Term PI Filing w/Commission |
| 3 | Summer Peak Demand Savings | Actual/Planned ISO-NE System-wide Summer Peak Passive kW Savings | 9% | 65% | 125% | Term PI Filing w/Commission |
| 4 | Winter Peak Demand Savings | Actual/Planned ISO-NE System-wide Summer Peak Passive kW Savings | 6% | 65% | 125% | Term PI Filing w/Commission |
| 5 | Active Demand Savings | Actual/Planned Active kW Savings | 5% | 65% | 125% | Term PI Filing w/Commission |
| 6 | Value | Actual/Planned Net Benefits | 35% | 65% | 125% | Term PI Filing w/Commission |
| **Total** | | | **100%** | | | |

For the NH Natural Gas Utilities, the kW components are omitted from the framework.

**Table 10-2: Performance Incentive Components (Natural Gas)**

| PI No. | Component Title | Description | Incentive Weight | Minimum Threshold | Maximum PI Level | Verification |
|---|---|---|---|---|---|---|
| 1 | Lifetime MMBtu Savings | Actual/Planned Lifetime MMBtu Savings | 45% | 65% | 125% | Term PI Filing w/Commission |
| 2 | Annual MMBtu Savings | Actual/Planned Annual MMBtu Savings | 20% | 65% | 125% | Term PI Filing w/Commission |
| 3 | Value | Actual/Planned Net Benefits[2] | 35% | 65% | 125% | Term PI Filing w/Commission |
| **Total** | | | **100%** | | | |

- **PI Calculation.** PI = [(1.925% x ACTUAL) x (kWhL-ACT/kWhL-PLN)] + [(0.55% x ACTUAL) x (kWhA-ACT/kWhA-PLN)] + [(0.495% x ACTUAL) x (kWSUM-ACT/kWSUM-PLN)] + [(0.33% x ACTUAL) x (kWWIN-ACT/kWWIN-PLN)] + [(0.275% x ACTUAL) x (kWADR-ACT/kWADR-PLN)] + [(1.925% x ACTUAL) x (NET-BENACT/NET-BENPLN)]

- Where:
    - **PI** = Performance Incentive in dollars;
    - **ACTUAL** = Total dollars spent (less PI);
    - **kWhL-ACT** = Actual lifetime kWh;
    - **kWhL-PLN** = Planned lifetime kWh;
    - **kWhA-ACT** = Actual annual kWh;
    - **kWhA-PLN** = Planned annual kWh;
    - **kWSUM-ACT** = Actual passive summer peak kW;
    - **kWSUM-PLN**= Planned passive summer peak kW;
    - **kWWIN-ACT** = Actual passive winter peak kW;
    - **kWWIN-PLN** = Planned passive winter peak kW;
    - **kWADR-ACT** = Actual active demand summer peak kW;
    - **kWADR-PLN** = Planned active demand summer peak kW;
    - **NET-BENACT** = Actual net benefits (in NPV dollars) (i.e., total benefits less utility costs and NEI's)[72]; and
    - **NET-BENPLN** = Planned net benefits (in NPV dollars).

[72] Refer to Appendix D in the Final Performance Incentive Working Group Report in Docket No. DE 17-136.

Additional requirements are as follows:

- The NH Utilities' portfolio of programs must be cost effective over the term before any PI can be earned, meaning the BCR must be at least 1.0 under the Granite State Test;
- If the Electric Program portfolio does not meet a minimum threshold of 55 percent of total energy savings from electricity, the PI coefficient will be reduced to 80 percent of the design value, that is, the total incentive level decreases to a maximum of 4.4 percent (e.g., for lifetime electric savings the PI would change from a target of 1.925 percent to a maximum of 1.54 percent, etc.);
- Lifetime savings must be at least 65 percent of planned lifetime savings in order for any PI to be earned on the Lifetime Savings kWh component;
- Annual savings must be at least 65 percent of planned annual savings in order for any PI to be earned on the Annual Savings kWh component;
- Passive summer peak kW savings must be at least 65 percent of planned passive summer peak kW in order for any PI to be earned on the Summer Peak Demand Savings component;
- Passive winter peak kW savings must be at least 65 percent of planned passive winter peak kW in order for any PI to be earned on the Winter Peak Demand Savings component;
- Active summer peak kW savings must be at least 65 percent of planned active summer peak kW in order for any PI to be earned on the Active Demand component;
- The portfolio Net Benefits must be at least 65 percent of the planned Net Benefits in order for any PI to be earned on the net benefits component;
- Earned PI on each component is capped at 125 percent of that component's coefficient, that is, the maximum total PI is 6.875 percent; and
- PI will be calculated on actual portfolio spending up to 110 percent of approved portfolio term budget, excluding PI, without prior Commission authorization. That is, the actual spending may exceed the planned term budgets, including all sources of funding and excluding the PI, by up to

10 percent. A NH Utility may request approval from the Commission to spend in excess of 110 percent of proposed budget over the term, however, the utility will be expected to demonstrate good reasons why it should be exceeded. PI would then be calculated against actual program spending at the portfolio level, up to the revised Commission-approved budget, or as otherwise ordered.

For the EO pilot, costs are included in the PI calculation but neither planned nor will savings or benefits resulting from the pilot be reported or used in PI calculations. This approach ensures that the portfolio is cost effective with all costs, including those for the pilot, while avoiding inaccurate projections of savings and benefits, which the pilot is designed to test.

As discussed in Chapter 2, each NH Utility will complete a preliminary PI calculation in annual reports, based on actual costs, savings, and benefits for the program year. At the end of the third year of the three-year term, each NH Utility will perform a final calculation of earned PI, based on actual achievement over the term compared to the three-year term goals.

## 10.3 Technical Reference Manual

In advance of every program plan or update filing, the NH Utilities work together to review savings assumptions, incorporate results from New Hampshire evaluations, identify changes in federal equipment standards, reference neighboring states' evaluations, and update relevant savings algorithms, as necessary. Historically, these changes have been made by the NH Utilities and are reflected in the benefit-cost models filed with each plan. Beginning with the 2021-2023 Plan, these savings assumptions will also be documented in the New Hampshire TRM, which will contain the set of standard methodologies and inputs for calculating the savings impacts and cost effectiveness of the NHSaves Program measures.

The revised draft of the TRM is included with this filing. Although the draft is substantially complete, some measure chapters are still under review by members of the EM&V Working Group and the independent evaluation contractor supporting this effort. This ongoing review will help ensure accuracy and allow for incorporation of the most up-to-date results from New Hampshire evaluations,

including from the nearly-finalized Energy Efficiency Baseline and Potential Study. In developing the TRM, the EM&V Working Group prioritized measures with the greatest impacts on portfolio savings, and remaining adjustments will not have a material impact on portfolio savings of any individual utility or the statewide EERS goals. The NH Utilities, in coordination with the EM&V Working Group, will work expeditiously to finalize and publish the complete TRM as soon as possible after this filing, in accordance with the 2018-2020 settlement agreement which requires the TRM to be published by the end of 2020. Once complete, the TRM will be made publicly accessible on an electronic platform to provide a user-friendly interface. Any compliance filing resulting from settlement discussions and/or a final order on the 2021-2023 Plan will incorporate in the NH Utilities' benefit-cost models all adjustments to the TRM made after the date of this filing.

The 2021-2023 Plan TRM will take effect as of January 1, 2021, and an annual update to the TRM will be submitted to the Commission by December 1 of 2021 and 2022. These updates to the TRM will reflect changes in assumptions and will take effect as of the beginning of the subsequent program year. The NH Utilities will update the TRM in coordination with the EM&V Working Group, and annual updates will incorporate all relevant evaluation results that are finalized by November 1. The EM&V Working Group will strive to include consensus-based assumptions for all measures and offerings included in the NHSaves Programs. Should consensus not be reached, members of the EM&V Working Group may petition the Commission for resolution on the matter.

The primary source of methodologies and inputs for the TRM is New Hampshire-specific evaluations, where available. New Hampshire jurisdiction-specific results will be favored over results from other jurisdictions in order to account for differences in climate, hours of use, program design and delivery, market conditions, and evaluation frameworks. When considering whether to apply results from a study originating in another jurisdiction to New Hampshire programs, the EM&V Working Group will make the determination based on (1) the similarity of evaluated program/measures to those offered in New Hampshire; (2) the similarity of relevant markets and customers base; (3) the recency of the study relative to the recency of any applicable New Hampshire results; and (4) the quality of the study's methodology and sample size. In addition to third-party evaluations, inputs may also be based on

sources including manufacturer and industry data, data from government agencies such as the US DOE or EPA, or credible and realistic factors developed using engineering judgment. Savings from energy efficiency measures and projects will be calculated using the TRM that is in effect during the program year in which the application or project savings are approved by the respective NH Utility.

## 10.4 Bill and Rate Impact Analysis

As part of the settlement agreement filed on December 13, 2018 and approved via Order No. 26,207 on December 31, 2018 in Docket No. DE 17-136, Eversource, Liberty Electric and Gas, and Unitil Electric and Gas (the "Regulated Utilities") agreed to undertake a bill impact analysis, including rate impacts, bill impacts, and participant impacts ("Rate & Bill Impact Analysis").[73] As agreed to in the settlement, the Regulated Utilities performed a Rate & Bill Impact Analysis utilizing the model developed by Synapse Energy Economics ("Synapse"), under the guidance of the EM&V Working Group.

For the 2021-2023 Plan, the Regulated Utilities utilized the modeling tool developed by Synapse, using model inputs including rates, sales, and customer data, as well as planned savings for the 2021-2023 NHSaves Programs.[74] Based on these inputs, the modeling tool estimates the annual and long-term electric and gas rate and bill impacts of the proposed energy efficiency programs, relative to a scenario with no programs. These impacts are estimated for both non-participating customers and for program participants, including an illustrative high savings participant and an illustrative low-savings participant, across each of the four customer segments: residential, low-income, small C&I, and large C&I. In addition, the modeling tool estimates bill impacts for an average customer in each segment, which represents a hypothetical blend between non-participants and participants and is calculated based on the segment's program savings divided by the segment's total customers.

The rate and bill impact analysis does not consider two key impacts to customers' energy bills. First, the analysis focuses on electric and natural gas utility rates and bills, while the NH Utilities implement

[73] 2018 Settlement Agreement, Docket No. DE 17-136, pp. 18-19, Available at: https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136.html.

[74] Draft 2021-2023 Plan, Filed Jul. 1, 2020.

the energy efficiency programs in a fuel-neutral manner, providing additional benefits to customers that consume oil, propane, or other unregulated fuels. Second, the estimates of long-term bill and rate impacts do not reflect the potential costs of compliance with any future federal or state GHG or other environmental requirements, which would increase the cost to ratepayers of energy resources other than energy efficiency.

Based on the NH Utilities' 2021-2023 Plan, the energy efficiency programs will change the Regulated Utilities' revenue requirements by -1.3 percent on average, or -$419.9 million in total, over the life of the measures installed during the term and across all programs. The Regulated Utilities' natural gas revenue requirements change by -3.2 percent on average, or -$9 million in total. These changes in revenue requirements are driven by long-term avoided costs and account for SBC and LDAC revenues. The reductions in revenue requirements are distributed across each utility and each rate class differently, depending on the rate class' structure. Additional details, including graphs showing bill and rate impacts for non-participants, high and low savings participants, and average customers for each customer segment and each Regulated Utility, is included in Attachment K.

## 10.5 Lighting Market Trends

The NH Utilities carefully considered and accounted for the significant ongoing changes in lighting markets in the development of the 2021-2023 Plan. There are two primary factors impacting the claimable lighting savings reflected in the 2021-2023 Plan:

1. The quantity of the various lighting measures that the NH Utilities anticipate being able to deliver; and
2. The net savings per lighting measure, given market changes and evaluation paradigms.

For the first factor, the NH Utilities used historical quantities as well as recent study results to determine the remaining potential from lighting. Specifically, the results from the residential baseline survey revealed that the majority (over 50 percent) of sockets in New Hampshire homes are already

filled with LEDs.[75] At the same time, retail lighting sales data evaluation results found that although there are strong signs of LED market transformation in New England, the depth of transformation has varied among states and retail channels, and that the timing of market exit strategies should account for these differences.[76] For instance, Massachusetts and Rhode Island have the highest LED market shares, while Connecticut and New Hampshire lag slightly behind these states. Given these findings, the NH Utilities planned for residential retail lighting quantities to aggressively promote continued transition to LEDs in 2021, followed by a substantial decline over the remainder of the term.

For C&I customers, based on results from surveys of NH lighting suppliers as well as survey and on-site results from Massachusetts and Rhode Island, the NH Utilities have planned for continued aggressive increased levels of C&I lighting in 2021, focusing primarily on capturing the remaining market potential for retrofit lighting. Final results from the Energy Efficiency Baseline and Potential Study show continued savings potential from lighting in both the commercial and residential sectors, though with decreasing opportunity as the 2021-2023 term progresses.

Additionally, for midstream offerings, including lighting, the NH Utilities accounted for the fact that some consumers participating in the programs would have purchased LED lighting with or without the NHSaves Program incentives. To adjust for this "free ridership," the NH Utilities have included a Net to Gross ("NTG") rate for these measures in benefit cost modeling, effectively reducing the amount of savings attributable to the NHSaves Programs. Utilizing guidance from vendors and efficiency program administrators operating similar programs in other states, and accounting for possible differences in the New Hampshire market, the NH Utilities applied declining NTG rates (i.e., greater free-ridership and less net savings attributable to the efficiency programs) over the term for both residential retail and C&I midstream lighting.

---

[75] Itron, Inc. *New Hampshire Residential Energy Efficiency Baseline Study*. Jun. 11, 2020.
[76] NMR, *2019 Regional Lighting Sales Data Analysis (MA20R22-E)*, Draft, Aug. 17, 2020.

## 10.6 2021-2023 Quarterly Meetings and Stakeholder Engagement

During the course of the 2021-2023 Plan, Quarterly Meetings will be held no more than one month after submission of each quarterly report. Program progress and updates year-to-date savings results, marketing updates, EM&V Working Group report, potential MTMs, pilot updates, financing updates, and other related information will be provided during the quarterly meeting to all parties who participate, including those from the EESE Board. The Quarterly Meeting will serve as a venue for discussion of cross-cutting topics and may lead to scheduling of topic-specific follow-up meetings on an as needed basis.

The NH Utilities will continue to engage as active members of the EESE Board during the 2021-2023 Term, participating in the energy efficiency and renewable energy discussions taken up by that Board, including topic-specific presentations or program updates as needed.

## 10.7 2024-2026 Planning Process

Establishment of appropriate EERS goals for the next triennial plan covering the 2024-2026 term will take place in a stakeholder process that will be initiated in October of 2022. The stakeholder process will be conducted through scheduled meetings of the EERS Committee of the EESE Board.

The first task of the EERS Committee will be to establish savings goals for the 2024-2026 triennium. The Committee may review energy efficiency results and lessons learned from the 2021-2023 triennium, including those contained in program evaluations or market studies projecting new trends and opportunities in the energy efficiency market place, as well as energy efficiency program activities from other states, as well as evolving state, regional and federal energy policy, and any other information related to energy efficiency goals.

The second task of the EERS Committee will be to discuss and provide input to the NH Utilities on program design, the appropriate level of funding, and other aspects of the 2024-2026 Plan that will lead to the achievement of the previously determined goals.

In 2022, the Commission will solicit and hire a technical consultant to advise Commission Staff, the OCA, and all other non-utility stakeholders. The proposed 2024-2026 Plan will be filed no later than July 1, 2023. A Draft 2024-2026 Plan will be provided to the EERS Committee during the stakeholder process at a date determined by the Committee based on its workplan.

**This page intentionally blank.**

# Chapter Eleven: Evaluation, Measurement, and Verification

**EM&V has been an integral component of the efficiency programs in New Hampshire since inception. EM&V has many objectives, including verifying portfolio energy savings, estimating future energy savings of specific measures and behaviors, and identifying ways to improve program delivery and results. The 2018-2020 Plan established a formalized NH EM&V Working Group, consisting of Commission Staff members, independent EM&V consultants hired and supervised by the Commission, representatives of the NH Utilities, and a representative of the EESE Board.**

The EM&V Working Group has successfully managed a dozen studies during the 2018-2020 term to date and will be launching several additional evaluations in the remainder of 2020. Going forward, particularly during times of quickly-evolving markets and program offerings, as well as broader economic disruptions associated with the COVID-19 pandemic, there will be many research questions to be studied, and competition for limited evaluation resources and staff time.

To date, the NH Utility members of the EM&V Working Group have facilitated meetings and served as the primary point(s) of contact with each of the third-party evaluators under contract. This follows from the necessity of the NH Utilities, rather than the Commission or other public entity, contracting directly with the third-party evaluators given constraints on state agencies. However, the NH Utilities are committed to an efficient and collaborative process within the EM&V Working Group and welcome a larger facilitation role for the Commission's EM&V consultants in the next term.

Although members of the EM&V Working Group have successfully resolved evaluation-related disagreements to date, the NH Utilities propose a process be established for resolving potential disputes going forward. Specifically, this new process would allow for questions on which the EM&V Working Group cannot reach consensus to be adjudicated by an appeal to the Commission. In a dispute that is appealed to the Commission, each party would provide a written position summary for Commission review and resolution.

For purposes of this dispute resolution process, 'parties' to the EM&V Working Group would include:

1. The NH Utilities;
2. The Commission Staff and designees; and
3. The EESE Board Representative.

The EM&V Working Group has worked diligently to build upon previous evaluation work and expand the portfolio of New Hampshire evaluation activities to a level commensurate with the size and scope of the NHSaves Programs, and it will continue doing so as the programs continue growing over the 2021-2023 triennium.

- All completed New Hampshire evaluations are posted at: https://puc.nh.gov/Electric/Monitoring_Evaluation_Report_List.htm; and
- EM&V Working Group agendas and other materials are posted at: https://www.puc.nh.gov/EESE%20Board/EERS_Working_Groups.html#em&v.

The NH Utilities, together with the EM&V Working Group, have also sought to make the most effective use of New Hampshire evaluation resources by leveraging the efforts of neighboring jurisdictions—both by collaborating with other states' program administrators to conduct joint evaluations, and by adopting results from other states' evaluations where appropriate. For example, Eversource and Unitil joined with counterparts in Massachusetts and Connecticut on a regional evaluation of C&I ADR programs and pilots, which are implemented on a similar basis across multiple states. This approach allowed for more robust results at a lower cost than would be possible through a study limited to NHSaves Program offerings. Similarly, the Energy Efficiency Baseline and Potential Study leveraged analysis of the regional residential and C&I lighting markets being led by Massachusetts program administrators, by augmenting survey and interview efforts with New Hampshire-specific research questions.

## 11.1 2020 Evaluations

The EM&V Working Group has continued progress on a number of ongoing research efforts that are concluding in 2020. Table 11-1 lists the evaluations completed or planned for completion in 2020.

**Table 11-1: 2020 Evaluations**

| Evaluation | Vendor | Completion Date | Results |
|---|---|---|---|
| Energy Efficiency Baseline and Potential Study | Dunsky Energy Consulting | Draft report, August 2020; final report, September 2020 (est.) | The study provides a key source of planning assumptions and inputs for the 2021-2023 Plan (see below). |
| NH Lighting Supplier Insights | NMR Group | June 2020 | The NH Utilities used findings from in-depth interviews with manufacturers and retailers regarding the residential lighting market in New Hampshire and the region to guide 2021-2023 planning assumptions. |
| NH Lighting Sales Data Analysis | NMR Group | Draft report, August 2019; final report, September 2020 (est.) | The analysis of retail lighting sales data trends in New Hampshire and the region have informed the NH Utilities' market exit strategy for different lighting types and channels. |
| HPwES Impact and Process Evaluation | Opinion Dynamics Corporation | June 2020 | Impact results are reflected in the TRM. Process recommendations, including incentive structure changes and software upgrades are being pursued as described in the residential section of the 2021-2023 Plan. |
| HEA Impact, Process, and Low-Income NEI Evaluation | Opinion Dynamics Corporation | June 2020 | Impact results are reflected in the TRM and NEI values are incorporated in the TRM as described in Section 10.1.4 and based on review by the NH Benefit-Cost Working Group. Process recommendations, including incentive structure changes and software upgrades are being pursued as described in the residential section of the 2021-2023 Plan. |

**Table 11-1: 2020 Evaluations (continued)**

| Evaluation | Vendor | Completion Date | Results |
|---|---|---|---|
| Crosscutting Non-Energy Impacts Study | DNV-GL | NEI database for 2021-2023 Plan, August 2020; Methodology Memo, April 2020; Sensitivity Analysis Memo, June 2020 | As described in Section 10.1.4, NEI values from this study have been used to develop sector-level percentage adders for the Secondary Granite State Test, as discussed with the NH Benefit-Cost Working Group. |
| Bill and Rate Impact Analysis | Synapse Energy Economics, Inc. | August 2020 | The analysis developed estimates of the bill and rate impacts of the 2021-2023 Plan programs based on utility-specific inputs, as described in Section 10.4 and detailed in an attachment to the 2021-2023 Plan. |
| Cross-State C&I Active Demand Reduction Evaluation *(joint with Massachusetts and Connecticut)* | Energy & Resource Solutions | April 2020 | The study evaluated load reduction values for the 2019 ADR offerings and recommended an approach to estimate planned load reductions for the 2020 program, which the NH Utilities are applying as described in the Supplemental Information filing to the Commission[77] and reflected in the TRM. |

In addition to the ongoing evaluations listed above, the NH Utilities, in coordination with the EM&V Working Group, are working with ERS, an evaluation firm, to compile New Hampshire's first comprehensive TRM, which will extensively document savings calculations and assumptions for measures offered by the NHSaves Programs. This work will result in a public-facing, electronic TRM for program year 2021, to be updated annually, as described above in the Planning Elements chapter.

## 11.2 Strategic Evaluation Plan

In early 2020, the Commission's EM&V consultants led the EM&V Working Group in updating the NH Strategic Evaluation Plan ("SEP"). The updated SEP provides a prioritized and annotated list of

[77] DE 17-136, 2020 Demand Reduction Initiatives, Supplemental Information, Feb. 28, 2020.

evaluation activities to guide the EM&V Working Group over the next several years. These activities will include impact and process evaluations—including a Large Business Solutions impact and process evaluation, as well as a Baseline Practice Study, both of which are being competitively procured as of the date of this filing. In late 2020, the NH Utilities expect to initiate another RFP for a follow-up to the initial NHSaves Market Awareness Assessment.

In addition to addressing these near-term evaluation priorities, the EM&V Working Group has identified other evaluation activities that will be needed to ensure the NHSaves Programs continue to produce verified, accurate savings, and achieve the highest levels of performance during the 2021-2023 term. In particular, a subsequent round of evaluation projects will be planned based on insights gained from the results of the Energy Efficiency Baseline and Potential study as well as gaps identified during the development of the TRM.

## 11.3 Energy Efficiency Baseline and Potential Study

One of the critical inputs informing the 2021-2023 Plan is the New Hampshire Energy Efficiency Baseline and Potential Study, conducted by Dunsky Energy Consulting and overseen by the EM&V Working Group. Dunsky has conducted similar research for Eversource in Massachusetts, as well as for other utilities throughout North America. This study provides insights into the available energy and demand reduction opportunities in New Hampshire and helped to inform the development of savings forecasts for a wide set of energy efficiency and ADR measures across all fuels and segments. The research, report, and supporting data resulting from this year-long effort will remain a valuable source of information for program evaluation and design for years to come, and serve as a starting point for additional research to be undertaken as part of the SEP framework in the coming term.

The study utilized primary and secondary research to provide detailed data and analysis on residential market baselines, and to estimate saturation and efficiency of energy-using equipment in New Hampshire homes. In addition, the study conducted primary research into high savings lighting and HVAC measure saturation and penetration in non-residential markets, and leveraged building archetypes from the US DOE as well as Dunsky's own database of building baselines, adjusted for New Hampshire's climate and economy. Dunsky also performed a sensitivity analysis based on the new

barriers posed by the COVID-19 pandemic, which has confirmed that the wide scale impacts to the economy and ways people work will be challenging and expensive to overcome. The final report, which is expected to be delivered in mid-September, will examine the impact of customer barriers on achievable energy efficiency savings and model the impact of different incentive levels. As with all evaluations, the study will be posted to the Commission's website upon completion.

The draft results of the study present three levels of potential energy savings: (1) technical potential, which includes all theoretically possible energy savings resulting from measures included in the study, regardless of cost effectiveness, market barriers, or customer economics; (2) economic potential, which is the subset of technical potential that reflects only those measures that pass cost-effectiveness screening; and and(3) achievable potential, which is a subset of economic potential that considers market barriers and customer economics.

Based on adoption curves adapted from the US DOE, the study models cost-effectiveness as well as market barriers to arrive at low, medium, and high scenarios of achievable potential. There is a direct relationship between the level of energy efficiency potential that is achievable, the barriers to adoption that must be overcome to achieve that potential, and the level of investment needed to overcome those barriers. Working closely with the EM&V Working Group, the Dunsky team focused on the low and medium achievement scenarios. The scenarios are modelled using the following assumptions:

- **Low:** modelled using incentives and enabling activities (i.e., strategies to overcome customer and market barriers) at levels from the 2018-2020 Plan, to simulate business as usual.
- **Medium:** modelled with incentives increased to a minimum of 75 percent of the incremental cost of efficient equipment and increased enabling activities.
- **Maximum:** eliminates any customer contribution, while maintaining all other assumptions from the medium scenario.

As with the development of the 2021-2023 Plan, two of the key challenges faced by the EM&V Working Group in guiding Dunsky through the development of the potential study were: a) how to treat the

rapidly evolving market for lighting, and b) how to incorporate the economic impacts and resulting barriers resulting from COVID-19 into the assumptions.

The draft report of the potential study explains that: "lighting remains an important measure class under both the low and mid scenarios in 2021. The study assumes declining NTG values for lighting in alignment with the utility benefit cost ratio models. This results in fewer savings from lighting with each subsequent study year and decreased total savings over time because of reduced lighting savings under both scenarios. Between the low and mid scenario, the HVAC, appliance, and other non-lighting measure classes show the greatest relative growth."

The NH Utilities will continue to carefully consider this and related research throughout the region related to lighting, and will adjust the market approach in order to continue to promote market transformation for measures and markets that have additional potential available, while at the same time aggressively pursuing non-lighting savings where the potential for energy efficiency has yet to achieve the same degree of market transformation.

The potential study was well underway when COVID-19 caused on-site research and activity to come to a sudden halt, negatively impacting data collection efforts among medium and large businesses. The EM&V Working Group asked Dunsky to perform a sensitivity analysis relating to the pandemic based on primary data collected by the NH Utilities from customers, as well as by the US Census. This sensitivity analysis considered the impact of the shut down and associated economic impacts on residential customers, as well as different business segments. Draft results indicate that in the low - or business-as-usual scenario, the impact to electric energy efficiency savings in 2021 could be reduced from between 25 percent to 41 percent compared to a world in which the pandemic had not occurred; this is projected to ease to between 21 percent and 30 percent in 2022 and 2023. For natural gas programs, the modeled impact of COVID-19 is even greater, showing a 30 to 48 percent reduction in 2021, which is eased to between 24 and 38 percent in the second and third year of the 2021-2023 Plan.

In the medium scenario, which reflects higher customer incentives and lower costs, the impact of the pandemic is somewhat moderated, impacting between 20 and 37 percent of electricity and natural gas

savings in 2021 and between 14 and 25 percent in 2022 and 2023. The aggressive EERS goals the NH Utilities are proposing under this 2021-2023 Plan are roughly equivalent to savings modelled under the medium scenario, after accounting for potential COVID-19 impacts.

The potential significance of these barriers to program achievement is daunting, as is the general uncertainty surrounding the impact of COVID-19 on our economy and our customers. This level of uncertainty poses substantial challenges to the NH Utilities as they propose and work to achieve significantly increased energy savings goals in 2021-2023. A true three-year plan, the ability to file mid-term modifications, and the lowering of the minimum performance threshold are collectively critical to managing these substantial challenges.

## 11.4 EM&V Budgets

The EM&V budget for the 2021-2023 Plan is proposed to be consistent with past budgeting at approximately 5 percent of the annual program budgets. This includes both internal and external costs of evaluation, measurement and verification activities including but not limited to any studies identified by the EM&V Working Group and the Strategic Evaluation Plan. The EM&V budget also includes costs for several cross-cutting activities such as, the AESC Study, ISO certification of utility demand resources, Commission Staff's third-party evaluation consultants, updating and maintaining the TRM, program research, professional associations, utility tracking system upgrades and maintenance, quarterly and annual reporting, program modeling software, and other program support needs.

Any funds budgeted in the EM&V budget activity category that an NH Utility anticipates will not be spent in a given year can be utilized for other program-related purposes. The total evaluation budget for the 2021-2023 Plan is $16.4 million. Of that figure, approximately one third will be utilized for other EM&V activities.

**STATE OF NEW HAMPSHIRE**

**PUBLIC UTILITIES COMMISSION**

**September 14, 2020** - 10:51 a.m.

*[Remote Hearing conducted via Webex]*

RE: **DE 20-092**
**ELECTRIC AND GAS UTILITIES:**
**2021-2023 Triennial Energy**
**Efficiency Plan.**
***(Prehearing conference)***

**PRESENT:** Chairwoman Dianne Martin, Presiding
Cmsr. Kathryn M. Bailey
Cmsr. Michael S. Giaimo

Jody Carmody, Clerk
Eric Wind, PUC Remote Hearing Host

**APPEARANCES:** **Reptg. Eversource Energy:**
Jessica Chiavara, Esq.

**Reptg. Liberty Utilities (Granite State Electric) Corp. and Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities:**
Michael J. Sheehan, Esq.

**Reptg. Unitil Energy Systems, Inc., and Northern Utilities, Inc.:**
Patrick H. Taylor, Esq.

**Reptg. New Hampshire Electric Cooperative:**
Mark W. Dean, Esq. *(Mark Dean Law)*

Court Reporter: Steven E. Patnaude, LCR No. 52

**APPEARANCES:** ***(C o n t i n u e d)***

**Reptg. Conservation Law Foundation:**
Nick Krakoff, Esq.

**Reptg. Clean Energy New Hampshire:**
Elijah D. Emerson, Esq. *(Primmer...)*
Madeleine Mineau, Executive Director

**Reptg. Acadia Center:**
Stefan Koester

**Reptg. The Way Home:**
Raymond Burke, Esq. *(N.H. Legal Asst.)*

**Reptg. Dept. of Environmental Services:**
Rebecca Ohler
Christopher Skoglund

**Reptg. Residential Ratepayers:**
D. Maurice Kreis, Esq., Consumer Adv.
Christa Shute, Esq.
Phil Mosenthal, Optimal Energy
Cliff McDonald, Optimal Energy
Office of Consumer Advocate

**Reptg. PUC Staff:**
Paul B. Dexter, Esq.
Brian D. Buckley, Esq.

# I N D E X

**P R O C E E D I N G**

CHAIRWOMAN MARTIN: Okay. We're here this morning in Docket DE 20-092 for a prehearing conference regarding the electric and gas utilities' 2021 through 2023 Triennial Energy Efficiency Plan.

I still need to make the findings required for remote hearings, because we are still doing these due to the pandemic.

As Chairwoman of the Public Utilities Commission, I find that due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic and in accordance with the Governor's Emergency Order Number 12, pursuant to Executive Order 2020-04, this public body is authorized to meet electronically. Please note that there is no physical location to observe and listen contemporaneously to this hearing, which was authorized pursuant to the Governor's Emergency Order.

However, in accordance with the Emergency Order, I am confirming that we are utilizing Webex for this electronic hearing. All members of the Commission have the ability to

communicate contemporaneously during this hearing through this platform, and the public has access to contemporaneously listen and, if necessary, participate.

We previously gave notice to the public of the necessary information for accessing the hearing in the Order of Notice. If anybody has a problem during the hearing, please call (603) 271-2431. In the event the public is unable to access the hearing, the hearing will be adjourned and rescheduled.

Okay. Let's start with roll call attendance of the Commission. When each Commissioner identifies himself, if anyone is with you, please identify that person as well.

My name is Dianne Martin. I am the Chairwoman of the Public Utilities Commission. And I am alone.

Commissioner Bailey.

CMSR. BAILEY: Kathryn Bailey, Commissioner at the Public Utilities Commission. And I am alone.

CHAIRWOMAN MARTIN: Commissioner Giaimo.

CMSR. GIAIMO: Good morning. Good morning. Michael Giaimo, PUC Commissioner. I, too, am alone.

CHAIRWOMAN MARTIN: Okay. And we'll take appearances next. But I do want to say, I have a lot of people on my screen. So, if you're raising your hand to get recognized and I don't see you, please do kind of shake it at me or shout out if you are not getting recognized. I don't want to move forward without recognizing you.

Okay. Let's take appearances, starting with Ms. Chiavara.

MS. CHIAVARA: Good morning. Jessica Chiavara, counsel for Eversource. And *[inaudible]*.

CHAIRWOMAN MARTIN: Ms. Chiavara? You're on mute. And I lost you a little bit for a moment there. Mr. Patnaude, did you?

MR. PATNAUDE: Yes, I did. I missed something.

CHAIRWOMAN MARTIN: Can you start over for us please?

MS. CHIAVARA: Me?

CHAIRWOMAN MARTIN: Yes.

MS. CHIAVARA: Restart? Okay. Sorry about that.

Good morning. Jessica Chiavara, counsel, Eversource Energy. And I am alone.

CHAIRWOMAN MARTIN: Okay. Thank you. Yes. We got that one.

Mr. Sheehan, why don't we go to you next.

MR. SHEEHAN: Good morning. Mike Sheehan, for two companies: Liberty Utilities (EnergyNorth Natural Gas) Corp. and Liberty Utilities (Granite State Electric) Corp. On video, the Company, and you don't need to speak to them, is Heather Tebbetts and Eric Stanley.

CHAIRWOMAN MARTIN: Okay. Great. Mr. Taylor.

MR. TAYLOR: Good morning, Commissioners. Patrick Taylor, on behalf of Northern Utilities, Inc., and Unitil Energy Systems, Inc.

CHAIRWOMAN MARTIN: Thank you. And, Mr. Dean, are you on somewhere? Yes.

MR. DEAN: Yes. Good morning. Mark

Dean, representing New Hampshire Electric Cooperative.

CHAIRWOMAN MARTIN: All right. Thank you. Mr. Kreis.

MR. KREIS: Good morning, everybody. Good morning, Chairwoman Martin, Commissioners. Speaking to you from the World Headquarters of the OCA, I am the Consumer Advocate, Don Kreis. Of course, the job of our office is to represent the interests of residential utility customers.

And with me today is our Staff Attorney, Christa Shute, and our two consultants from Optimal Energy Services, Phil Mosenthal and Cliff McDonald.

CHAIRWOMAN MARTIN: Okay. Thank you. And Mr. Dexter.

MR. DEXTER: Good morning. Thank you, Chairwoman Martin. Appearing on behalf of the Commission Staff, Paul Dexter and Brian Buckley.

CHAIRWOMAN MARTIN: Okay. And I will try to go through the list of who I have for intervenors. And, if you can just let me know that you're here.

I have CLF?

MR. KRAKOFF: Yes. Good morning. My name is Nick Krakoff, for Conservation Law Foundation. I'm here alone.

CHAIRWOMAN MARTIN: Okay. Thank you. Clean Energy New Hampshire? Ms. Mineau.

MR. EMERSON: Good morning, Chairwoman. This is Eli Emerson, from Primmer, Piper, Eggleston & Kramer, on behalf of Clean Energy New Hampshire. Virtually today is Madeleine Mineau and Kelly Buchanan from Clean Energy, and also David Hill from Energy Futures Group.

Thank you.

CHAIRWOMAN MARTIN: Okay. Thank you. Acadia Center?

MR. KOESTER: Stefan Koester, with Acadia Center, here today. And I am alone.

CHAIRWOMAN MARTIN: Okay. Thank you. The Way Home?

MR. BURKE: Good morning, Commissioners. Raymond Burke, from New Hampshire Legal Assistance, on behalf of The Way Home. I am alone at the moment. But, given the realities of my home office, my wife may be present at some point in the future. Her name is Linda Haller.

CHAIRWOMAN MARTIN: No worries. The requirement really applies to the Commission more than anything else.

Okay. New Hampshire DES?

MS. OHLER: Yes. Hi. This is Becky Ohler, with the Department of Environmental Services. And also with DES is Christopher Skoglund.

CHAIRWOMAN MARTIN: Excellent. And Southern New Hampshire Services was the last I had, and appears they have not joined yet?

*[No indication given.]*

CHAIRWOMAN MARTIN: Okay. Otherwise, we'll proceed. And, if they do join, just let me know.

Is there anyone else who needs to make an appearance?

*[No indication given.]*

CHAIRWOMAN MARTIN: All right. Great. Seeing none. Let's get on with preliminary issues.

We have a number of pending interventions. I have an intervention motion from CLF, Clean Energy New Hampshire, DES, The

Way Home, Acadia Center, and this morning Southern New Hampshire Services also filed a Petition to Intervene.

Are there any objections to any of those petitions?

MR. DEXTER: No. Staff has no objection.

CHAIRWOMAN MARTIN: Okay. And from the utilities?

MR. SHEEHAN: None from Liberty.

CHAIRWOMAN MARTIN: Okay. Seeing none. Any other parties objecting or potential parties?

*[No verbal response.]*

CHAIRWOMAN MARTIN: All right. I see no objections. So, we will grant the Motions to Intervene, and proceed -- so that all of those intervenors can proceed as full parties today in the hearing and in the technical session.

All right. We have a Joint Motion for Designation of Staff. Why don't we start with that. And we'll take arguments on the Motion first, and then we will go to the initial positions of the parties.

Why don't we start with you, Mr.

Kreis.

MR. KREIS: Good morning, everybody, again. I'm just going to leap right in.

The PUC's job, by statute, is to serve as the arbiter between utility shareholders and utility customers. For the reasons that we explained in our written Motion, this particular proceeding is really an exercise of the Commission's statutory authority to determine just and reasonable utility rates. And because, when the PUC does that, there's a statutory hearing requirement, that means recourse to the Administrative Procedure Act and the PUC 200 rules regarding adjudication.

PUC Commissioners are appointed for their insight and expertise, but they can't do that work alone. So, of course, they have a staff. And the rules say that, for purposes of adjudication, the Commission will treat its Staff as if it were a party. Note: The Staff is not a party, but it must act like one and be treated like one by both the Commission and the other parties. That's a key reality. And I two things to say about it in the present context.

One, this paradigm is a good thing. It's about transparency. If the Staff didn't participate in adjudication as if it were a party, then Staff's advice would simply be tendered behind closed doors, around the conference table in the Chairwoman's office, or maybe the conference room next to the General Counsel's office. Instead, Staff's advice is grounded in evidence, subject to formal scrutiny by other parties, as if Staff were a party.

The other thing I have to say about this "Staff as a pseudoparty" paradigm, is that it's weird. To get personal for a second, when I joined the Commission as a Staff attorney in 1999, after five years working as a judicial law clerk in two state courts and one federal court, I was incredulous. Incredulous, in light of habits developed in a judicial setting, that I'd be sitting at counsel table in the hearing room, arguing, cross-examining, litigating, and then, often later the very same day, I'd be sitting with the commissioners as they deliberated.

RSA 363:32 is all we have when it comes to squaring that process with due process and

notions of basic fairness. The Motion says there are three. But, in fact, if you drill down, you'll see there are really six distinct circumstances when that paradigm doesn't work without an extra added bit of protection, and that protection is that there needs to be an *ex parte* wall between the Commissioners and certain of the Commission's employees.

One is the situation in which Staff members "may not be able to fairly and neutrally advise the Commission on all positions advanced in the proceeding." Building the *ex parte* wall is mandatory in that situation.

The other five circumstances are left to the Commission's discretion. They are when "the proceeding is particularly controversial and significant in consequence"; (2) when "the proceeding is so contentious as to create a reasonable concern about the staff's role"; (3) when "it appears reasonable that such designations may increase the likelihood of a stipulated agreement by the parties"; (4) when "such designations will contribute to the prompt and orderly conduct of the proceeding"; and

finally, (5) when it "is otherwise in the public interest." Every single one of those statutory grounds for designation are present here with respect to Mr. Dexter and Ms. Nixon.

Now, this is a challenging statute for the Commission to apply. There is no guidance, no binding precedent from the New Hampshire Supreme Court. There is, of course, Commission precedent. But the Commission should not consider itself, an indeed, as far as I know, does not consider itself bound by its own precedent, for the simple reason that being a commissioner requires policy judgment, and the policy views of the Commission does change over time, as it should.

Ground one does not require the Commission to determine that Mr. Dexter and Ms. Nixon will not be able to fairly and neutrally advise the Commission, only that they "may not be able to". That standard is easily satisfied here, for the reasons stated in the OCA/Acadia/CLF Motion.

A committee of the EESE Board, that's the Energy Efficiency & Sustainable Energy Board,

worked under a Commission-approved plan for almost eight months to achieve stakeholder consensus on a new Triennial Energy Efficiency Plan. In the end, after a sometimes difficult process, mission accomplished: Stakeholder consensus. The key agreement being how much savings from energy efficiency we are willing to pay for in the three years beginning on January 1.

The sole dissenting voices, offered repeatedly and emphatically on this crucial issue, were not those of any stakeholders, but rather of Mr. Dexter and Ms. Nixon.

Now, I do not want to overplay my hand here. These two Staff members were not rude, they were not obnoxious, and they weren't making frivolous arguments or *ad hominem* arguments. But, rather, they were repeatedly asserting that the near-term pain, higher SBC and LDAC rates, are not worth the long-term gain of megawatts, reduced energy costs, and a more sustainable New Hampshire. You may or may not, Commissioners, end up agreeing with that perspective. But they have advanced it so forcefully in public, on

numerous occasions, that it should not enjoy special treatment during your deliberations.

Back in 2014, when the issue was the ultra controversial mercury scrubber at Merrimack Station, the Commission, in Order Number 25,630, rejected a designation motion and made this observation: "To avoid designation in every case in which it takes a position, Staff is entitled to the presumption that they are of conscience and capable of reaching a just and fair result. The presumption of fairness", said the Commission, "should not be lightly overcome."

I respectfully disagree with what the Commission said in 2014, ironically, on Valentine's Day of that year. If I had evidence that a Commission employee, particularly a fellow member of the New Hampshire Bar, were not "of conscience", I would, in fact, report the facts to various authorities. And I would expect disciplinary action, not RSA 363:32 designation. Imposing a "bad faith" standard reduces the mandatory ground in RSA 363:32 to a nullity.

Moreover, and this is both something I would say with great hesitation, and something,

in fact, I would not have said before last Friday. If there really is such a presumption, it is, in fact, overcome here. I say that in light of the email I received from Mr. Dexter last Friday afternoon, in which he complained about how much Staff time this Motion has taken up, and, more importantly, he circulated a proposed procedural schedule for this docket, but said that Staff would not support that schedule --

*(Audio feed dropped off.)*

CHAIRWOMAN MARTIN: Going to go off the record for a minute, Mr. Patnaude.

*(Off the record and a brief off-the-record discussion ensued.)*

CHAIRWOMAN MARTIN: Okay. Back on the record. Go ahead.

MR. KREIS: Okay. So, I was talking about the existence of a "good faith" presumption. And I said, that if there really is such a presumption, it is, in fact, overcome here. And I said that, and I say it again, in light of the email I received from Mr. Dexter last Friday afternoon, in which he complained

about how much Staff time this Motion has taken up, and, more importantly, he circulated a proposed procedural schedule for the docket, but he said that Staff would not support that schedule if the Commission grants the OCA/Acadia/CLF Designation Motion.

Conditioning Staff's willingness to collaborate with parties on procedural matters, on Commission employees not being designated Staff advocates, is not what one would expect from Staff members who are capable of fairly and neutrally advising the Commission on matters related to this docket. In these circumstances, you must grant the requested designations under the first ground in Section 32.

Now, a few words about the discretionary grounds, which the Commission generally prefers to invoke when designations are appropriate. You can and do -- and should do that here.

This is a case -- this case, that is, is the functional definition of a case that is "particularly controversial and significant in consequence". This great state lags behind all

of its neighbors when it comes to energy efficiency. And this Triennial Plan, if approved, will give us a good shot at catching up. But it will increase rates in the near term, hopefully just as the pandemic is easing. It will put people back to work just as the pandemic is easing.

But ambitious savings targets have, let's be honest here, partisan political opponents. That has become obvious -- or, that became obvious when the proposed Triennial Plan came before the full EESE Board for a vote a few weeks ago. Whatever you decide on the merits, no decision you make between now and the end of the year will be more controversial. I guarantee it.

For the exact same reasons, this is a contentious case. And, yes, there are reasonable concerns about the Staff's role.

Would it be reasonable to conclude that such designations may increase the likelihood of a stipulated agreement by the parties? Well, let me put it this way. I respect Mr. Dexter and Ms. Nixon, and readily proclaim that they know a lot about our ratepayer-funded energy efficiency

programs. But I have little interest in negotiating with them if they will be participating in your deliberations.

Conversely, their designation -- excuse me.

CHAIRWOMAN MARTIN: I'm sorry to interrupt. I was making sure we still had Ms. Chiavara, but I see her now.

Go ahead.

MR. KREIS: Okay. Thank you.

Conversely, their designation would contribute to the prompt and orderly resolution of the case. They'd be free to articulate their perspective as forcefully as they would like. And, generally, such a step would be in the public interest for whatever other more inchoate reason the Commission would care to apply under the catch-all public interest standard.

One final point. As noted in the Motion, how much ratepayer money to spend during the triennium on energy efficiency is a policy call, given that the money must be spent cost-effectively under a test that you have already approved. There's the big policy call

about how willing we really are as a state to bring our progress in line with that of the rest of the region. But there's a smaller one, about how aggressively and quickly to pursue savings related to lighting, now that LEDs are blossoming in more and more places.

You do not need the expert advice of Mr. Dexter or Ms. Nixon to address these policy questions. You are capable of making those important policy decisions yourselves. And, unlike your employees, each of you, as a Commission, bear the signature of the Governor who appointed you.

Thank you for hearing my oral argument. I'd be happy to answer any questions and listen to the argument of my colleagues.

CHAIRWOMAN MARTIN: Ms. Bailey, do you have any questions for --

*(Cmsr. Bailey indicating in the negative.)*

CHAIRWOMAN MARTIN: You're all set. Commissioner Giaimo?

*(Cmsr. Giaimo indicating in the negative.)*

CHAIRWOMAN MARTIN: So, why don't we move on to Mr. Krakoff.

MR. KRAKOFF: Chairwoman, I have *[inaudible]* to Mr. Kreis's testimony.

*[Court reporter interruption due to inaudible audio.]*

CHAIRWOMAN MARTIN: You can say it again, Mr. Krakoff.

MR. KRAKOFF: Yes. I just said "I have nothing to add to Mr. Kreis's argument."

CHAIRWOMAN MARTIN: Do any of the other parties who joined in the Motion wish to be heard?

*[No indication given.]*

CHAIRWOMAN MARTIN: Okay. I don't see anyone's hand up.

Clean Energy submitted a letter of support. Do you wish to be heard?

MR. EMERSON: Yes. This is Eli Emerson. We don't have anything to add to the letter of support we filed.

CHAIRWOMAN MARTIN: Okay. Then, why don't we hear from Staff at this point.

MR. DEXTER: Thank you, Chairwoman

Martin. Attorney Buckley will be delivering Staff's objection to the Motion.

Although, if we were in the hearing room, I would lean over to Mr. Buckley and whisper if he would like me to address the email aspect that Attorney Kreis brought up. I'd be happy to do that at the end of his comments. So, I'm making that suggestion in front of everyone, since I don't have the ability to whisper.

But I will turn the Staff's comments over to Attorney Buckley. And, if you'd like to supplement at the end, he will let me know.

CHAIRWOMAN MARTIN: Okay. Mr. Buckley.

MR. BUCKLEY: Thank you, Madam Chair and Attorney Dexter. Can everybody hear me all right? Okay.

So, at the outset, I'll mention that the Staff objects to this Motion, and intends to file a written objection later today, as allowed for under the Commission's rules which prescribe a ten-day period during which parties may file an objection to a motion. The Movants filed their Motion on September 2nd, and that ten-day period tolled on Saturday, which means any objections

must be filed by close of business today.

Moving to the substance of the Motion, I'll start by addressing the Motion at issue proceeds from a fundamentally flawed premise by failing to recognize a substantial body of case law describing Staff's dual role at the Commission. Yes, the Staff during adjudications, and, in this case, during the lead up to an adjudication, develops and promotes proposals for the resolution of issues, often via testimony, as if it were a party to the proceeding.

But, in addition to this role, Staff also has a duty to fairly and neutrally advise the Commissioners as to the positions of the parties, policy considerations that should be taken into account, and other aspects of the case during deliberations. Staff is afforded a presumption that they're able to remain fair and neutral, a presumption that the Commission has repeatedly stated "should not be lightly overcome", and further instructed that "a lack of impartiality is not sufficient to rebut this presumption."

Now, I'll turn to RSA 363:32, I, which

requires designation in cases where certain Staff members "may not be able to fairly and neutrally advise the Commission on all positions advanced in the proceeding." In this case, the Movants claim that statements by Ms. Nixon and Mr. Dexter can no longer satisfy their duty to fairly and neutrally advise the Commissioners based on statements of concern relating to the savings goals and associated rate impacts resulting from the energy efficiency plan we will consider in this docket.

It is a longstanding precedent at the Commission that mere statements of Staff which may be adverse or contrary to other parties does not justify mandatory designation. Recognizing this precedent, the Movants argue that Ms. Nixon and Mr. Dexter's statements go beyond mere contrary statements, in that they are seeking to influence or were seeking to influence the EERS Committee discussions.

Without conceding that there should be any distinction between Staff statements made during EERS Committee discussions and statements made in testimony, technical sessions or

settlement discussions, the Staff notes the following: The comments of Ms. Nixon and Mr. Dexter were offered within a stakeholder process agreed to via settlement, a settlement in which the settling parties included Staff and each of the Movants. That Settlement was approved by the Commission in Order Number 26,207, and describes Staff as one of the stakeholder to whom a technical consultant, a consultant hired to facilitate and advise the EERS Committee process, would consult as the EERS Committee and other relevant stakeholders attempted to inform the appropriate level of funding and goals related to the 2021 through 2023 Plan. That same settlement then commits the Settling Parties, which includes Staff, to work in good faith through these discussions to reach consensus on the design of the plan.

The intent of Ms. Nixon and Mr. Dexter, during the collaborative process that led to today's 2021 through 2023 Plan, was not, as the Movants suggest, to influence EERS Committee discussions, but rather instead were efforts to work in good faith to reach consensus on the

design of the plan. If Staff were to withhold its opinion on aspects of the plan until the litigated process, it would have been a violation of that settlement commitment.

Now, I'll turn to RSA 363:32, II, which permits the Commission to use its discretion to designate Staff, if good reason can be found, specifying three factors that would be considered, including the significance of the case; the contentiousness of the case; and whether doing so would aid in reaching settlement.

With respect to these factors, the Commission has long held that merely stating that a case is significant or contentious is not enough, but rather the Movants must show that how the nature of the case is likely to impact Staff's ability to provide the Commission with fair and neutral advice, remembering that Staff enjoys the presumption of fairness.

Staff submits that this -- Staff submits that its discussion of all three factors, the Movants have failed to demonstrate how the significant or contentious nature of this case

would likely impact Staff's ability to provide fair and neutral advice.

With respect to the first factor, the Movants argue that this case is of particular significance because of the significance of raising the System Benefits Charge, a target of persistent scrutiny at the Legislature. The Movants make no attempt to describe how this significance might impact Staff's ability to provide fair and neutral advice during Commission deliberations. Furthermore, the Commission has in cases with even more political significance and even greater bill impact than the instant petition declined to designate Staff advocates.

One example of such an instance was the docket considering the prudence of PSNH's investment in the $420 million scrubber for Merrimack Station, an investment decision which was directly intermingled with directives from the Legislature.

With respect to the second factor, the Movants argue that this case is abnormally contentious because the eight months of pre-adjudication process at the EERS Committee

were contentious, and because the treatment of the SBC is a target of legislative attention. The Movants make no attempt to describe how their perceived contentiousness of this subject might impact the Staff's ability to provide fair and neutral advice during the Commission deliberations.

Furthermore, this case is no more contentious than the docket where the Commission considered development of a new net metering tariff for customer generators. That case had approximately 17 parties, many of whom are national organizations, and more than 15 individual non-consensus issues existed for the Commission to rule on even after two separate settlements were filed. In that docket, the Commission declined the Office of the Consumer Advocate's motion to designate a Staff advocate. Staff also notes that in the instant petition, like the net metering case, many of the parties have not joined in this Motion. And no single utility, the parties that have filed the Plan we consider in this docket, has taken any position in support of the Motion.

With respect to the third factor, the Movants argue that designation is more likely to increase the likelihood of a stipulated agreement by the parties, describing the expertise of Ms. Nixon and Mr. Dexter as valuable for facilitating settlement negotiations, but expressing "little interest in negotiating with Commission employees who will be at liberty to participate thereafter in the Commission's internal deliberations." The Commission should not consider this expression of unwillingness to negotiate with employees who can participate with deliberations, because it would validate the false premise upon which the unwillingness is impliedly based; that the Commission Staff is incapable of fulfilling its duty to fairly and neutrally advise the Commission simply because they have participated in settlement negotiations or previously expressed a position contrary to the Movants.

Furthermore, Movants have -- the Movants have consistently participated in significant and contentious dockets where they have willingly negotiated with Staff who they knew later would advise the Commissioners during

deliberations.

Finally, the Commission should consider the likelihood that as a consequence of a decision on the Motion, it might designate certain employees as decisional, thereby removing them from the opportunity to help facilitate settlement discussions, and instead embracing them solely to provide advice to the Commissioners.

While it's unclear exactly which members of Staff might be considered for a designation as decisional, it is clear that those employees would no longer be able to contribute their subject-matter expertise or conflict resolution skills to any settlement process. It is likely that such a designation, which might be a direct result of any decision to designate a Staff advocate, may make settlement less likely, in direct contravention to the assertions of the movements -- of the Movants relating to their willingness to negotiate with certain Staff members who might deliberate with Commissioners.

Finally, Staff observes that the Movants assert that "the determination of what

savings targets are appropriate is really a matter of figuring out how to balance the near-term SBC and LDAC increases against long-term bill savings," and that "it is not a matter of objective analysis, expert opinion, or even legal reasoning of the sort typically contributed to Staff" -- "by Staff to assist the Commissioners with the policy calls they must make."

Staff agrees that the question of how to balance near-term SBC and LDAC increases against long-term bill savings is one of the many questions at issue in this proceeding, and among the most important. Yet, Staff takes issue with the Movants' inference that the Staff cannot fulfill its duty of fairness and neutrality when responding to the Commissioners' questions about the case during deliberations as they consider this policy decision. This inference is particularly worrisome when those Staff experts can offer the Commissioners advice on the many likely issues in this case, inclusive of, but in addition to, the single issue the Movants describe as a policy question the Commissioners

must decide.

For the aforementioned reasons, Staff objects to the Motion to Designate Staff Advocates in the instant petition.

And I will just follow up with one of the items that has been asserted by the Consumer Advocate. And that's that the Consumer Advocate suggests that, even though there is a presumption of fairness here, that it has been overcome, and cites Staff's proposals relating to the procedural schedule. The proposals related to the procedural schedule, these suggestions were not offered in bad faith or out of some bias against the parties' positions. But rather were offered based on practicality related to the docket timeline, which, by order, was supposed to be considered over a period of several more months that are now available as a result of delays, which in some parts are unavoidable and related to the pandemic. It is entirely possible that, as a result of this --

CHAIRWOMAN MARTIN: Mr. Buckley, I apologize for interjecting. Mr. Emerson just went off my screen. I want to make sure that he

is still available.

Mr. Emerson, can you hear me? Can you still hear us? You went off the screen for a minute there.

MR. EMERSON: Yes. I can hear you.

CHAIRWOMAN MARTIN: Okay. I just wanted to make sure you could participate.

Okay. Go ahead, Mr. Buckley.

MR. BUCKLEY: And, so, I'll just -- thank you.

I'll finish up by just noting that it is possible that, as a result of this Motion, the Staff will need to solicit outside counsel or expert witnesses for this docket. That was the motivating factor in qualifying our circulation of the previously developed procedural schedule, not any sort of bias on the behalf of Staff.

And with that, I will turn it over to Attorney Dexter, if he has anything else to add.

MR. DEXTER: Thank you, Attorney Buckley.

I just wanted to note that about a month ago, as indicated in the stakeholder process, the Staff circulated a procedural

schedule, a four-month procedural schedule. And we were going to discuss that at the tech session today, which is typical, and then present it to the Commission for approval.

And, as a result of the Motion that was filed, Staff tweaked the schedule a little bit to allow for some extra discovery time at the front end of the schedule.

And, secondly, noted that its support of that schedule would be conditioned upon denial of the Motion. The simple reason for that is because, if the Motion is granted, and then Staff submits a proposed revision to the procedural schedule, which is likely, depending on the implications of what comes out of a Commission decision in terms of granting the Motion, it is likely that Staff would seek to alter the schedule, and Staff did not want to have thrown back at it a statement like "Well, you proposed the procedural schedule on September 14th."

It almost goes without saying that our support of the schedule presumes that the case will go forward in the manner that it was going to go forward when the schedule was produced.

That was the only reason for that condition. It has nothing to do with litigation strategy or bad faith. Simply stating the obvious.

Thank you.

CHAIRWOMAN MARTIN: Okay. Any questions -- just a moment, Mr. Kreis -- from the other Commissioners for Staff on that?

(Commissioner Bailey indicating in the negative.)

CHAIRWOMAN MARTIN: Okay. Seeing none. Mr. Kreis, you had your hand up?

MR. KREIS: I guess I would like leave to be heard in reply to the argument that I just listened to.

CHAIRWOMAN MARTIN: Well, I'd like to just see if anyone else wants to be heard first, and then I'll circle back to you, since it was your motion, then I have a question for you myself.

Do any of the utilities want to be heard on this Motion? If you do, you can just put your hand up.

Ms. Chiavara.

MS. CHIAVARA: Yes. The Joint

Utilities don't have any comment on or a position on this matter at this time.

CHAIRWOMAN MARTIN: Okay. Thank you for that. How about any of the intervenors? If you want to be heard on this and haven't been, can you put your hand up please? Okay.

MR. BURKE: Chairwoman Martin, I can just say that The Way Home takes no position on the Motion at this time.

CHAIRWOMAN MARTIN: Okay. Thank you, Mr. Burke. And I don't see anybody else.

And, so, I will circle back to you, Mr. Kreis. Why don't I ask my question first.

I guess the main question that I have for you is how is this different than all of the other cases that I've seen in my brief time here, where Staff comes into the hearing room or the virtual hearing room and shares their position? Why is this fundamentally different from that?

MR. KREIS: First of all, let me reemphasize what I said earlier, which is I don't think those previous Commission precedents, including the one that both I and Mr. Buckley referred to, actually are precedents that you

should necessarily follow. You're not obliged to, and I disagreed with some of the legal analysis in that prior Commission decision.

But, assuming that that is the correct framework, this scenario is very different than those scenarios, because of this very elaborate stakeholder engagement process that took place prior to the commencement of the proceedings. That process was intended to drive the stakeholders to consensus, and it, in fact, did that. But it did that in spite of what Staff did, which is repeatedly interject a particularly contentious and I would argue divisive perspective into those deliberations. And I know that influenced the way that we got to the consensus.

You basically are looking at a scenario here where you will have a room full of parties saying "Commission, approve these savings goals", and the only people telling you to do anything other than that will be your own employees. That is very troublesome.

I don't object to the fact that the Commission Staff raised their hands during the

stakeholder engagement or deliberation process and articulated some concerns. That was actually helpful. In fact, it didn't happen three years ago, and that created its own set of difficulties, because it's useful to actually know what Staff's perspective is on things that we're talking about.

But this went beyond that, into a repeated, emphatic, and I would say ongoing effort to influence a collaborative stakeholder process, that was simply not helpful, and raises issues under RSA 363:32.

So, let me just stop and ask if that was an adequate answer to your question?

CHAIRWOMAN MARTIN: Yes.

MR. KREIS: Okay. So, --

CHAIRWOMAN MARTIN: Before you go on, I think Commissioner Giaimo has a follow-on to that.

CMSR. GIAIMO: Yes. I guess I actually had the same exact question.

What makes this so unique? What makes it more contentious and more contested than some prior situation?

But, I guess, Mr. Kreis, as you continue on, I'm hoping you might talk about, if we entertained your Motion, how it would delay and potentially cost more to the consumer because of the delay? I'd like to hear a little more about that.

MR. KREIS: Sure.

CMSR. GIAIMO: Thank you.

MR. KREIS: Let me just go through a few issues, and one of them is the one that Commissioner Giaimo just addressed.

First of all, I think the Commission should ask its Staff not to file a written objection to the Motion. (a) It has already been heard an objection. (b) Staff is not a party. And it would be more seemly for the employees of the Commission simply to await what the Commission decides about this Motion. And you're capable of doing that.

(3) If you await the Staff filing a written objection to the Motion, then, obviously, you can't rule from the Bench on the Motion. And, if you can't rule from the Bench on the Motion, then there isn't going to be any

agreement on a procedural schedule. And, in that scenario, my request will be that we need to address the procedural schedule on the record at this prehearing conference, as opposed to the usual Commission practice of having the parties address it informally during the tech session. That custom is premised on the notion that there will be an agreement about the procedural schedule, and you already know that there will not be an agreement. That is a problem.

Beyond that, I want to say that, you know, I address this idea that I'm proceeding from a fundamentally flawed premise, in light of the existence of a substantial body of case law. None of that case law was written by the New Hampshire Supreme Court. All of that case law comes from prior Commissioners, who clearly don't like granting these designation motions, for reasons that I fully understand, because I used to work at the Commission.

I would also like to respectfully suggest to the Commission that the Staff's oral argument misconstrued the statutory standards. The standard that relates to the significance or

contentiousness of the proceeding is a stand-alone basis for designation. It doesn't matter whether I or anybody else can demonstrate a smoking gun that says that, because this is a significant and contentious docket, the Staff is somehow biased or its objectivity could be questioned; the statute doesn't say that. It says merely that, because of the significance and contentiousness of this docket, you can and should designate.

And, you know, it's clear why that requirement or why that standard exists. It is a way of raising issues that could become extremely difficult to confront and very disruptive, if they have to be raised on appeal later. And, believe me, depending on how this turns out, I will seriously consider doing that. That could really hold up the state's energy efficiency programs.

You know, the net metering docket, and the precedent that set about a previous designation motion that I previously tendered and had denied, is completely inappropriate. Because, if you look at that decision of the

Commission, the Commission stressed that, in fact, that case was not an adjudicative proceeding. I remember that vividly, because it made that ruling over my intense objection. I still think that was incorrect. But that's why the Commission rejected my designation motion. It said "Oops. Not an adjudicative proceeding. RSA 363:32 only applies to adjudicative proceedings."

Mr. Buckley raised the concern about what would happen if you made any designations of decisional employees. That's a red herring, obviously, because the Motion doesn't ask you to do that. And I do not think you need to do that. Unless there are facts and circumstances internal to the Commission that I have no knowledge of, I do not ask and do not think you need to designate any decisional employees.

And, with respect to Commissioner Giaimo's question, about how this might or might not add to the ultimate cost of this proceeding to consumers, I want to avoid having to appeal this case to the New Hampshire Supreme Court. I am not asking you to tell any Commission employee

that its role in this case is limited to being a decisional adviser to you, the Commissioners. And I'm not even seeking to limit the role of Mr. Dexter or Ms. Nixon in everything but your deliberations. So, they are free to come to the tech session, to do everything they would have done at the tech session, to do everything they would have done around developing testimony and conducting discovery, and doing everything that a party would also be able to do.

The only thing I don't want them to do is to advise you, Chairwoman Martin, in your conference room, even if it's a virtual conference room, because that would be fundamentally unfair in these circumstances. And one reason it would be fundamentally unfair -- well, Staff is not a party. I guess that's the final point I would leave you with.

That, I think, is all I have to say.

CHAIRWOMAN MARTIN: Mr. Kreis, I hear the reference to "decisional employee", and that designation would effect that. But I'm looking at the definition of "decisional employee" in the statute, which includes those who are to "assist

or advise the commission...with respect to issues of law, fact or procedure".

So, I think that the two employees you reference would otherwise be "decisional employees". Is that your understanding?

MR. KREIS: No. When there is no designation, Commission Staff is free to straddle the two universes.

I'm sorry, I'm getting some feedback. But I don't think it's my fault.

In other words, you know, this is very -- this is a very difficult, and I think, to some degree, unsettled area of the law, because the precedent is the *Atlantic Connections* case. And, you know, a party sought to challenge this sort of Heisenberg uncertainty principle, where Staff people are sometimes particles and sometimes waves. Sometimes they're litigants and sometimes they're advisers, and those are usually the same people. That, as I said, that's weird, but it is permissible under your statute. And the designation statute exists when there are reasons why that kind of freedom should be restricted.

So, to answer your question, Chairwoman Martin, when there is no designation, if you deny my Motion, then everybody on the Commission Staff, including Mr. Dexter and Ms. Nixon, are free to both participate as if they were a party in all of the adjudicative things that parties do here, and then advise you in your conference room as you figure out how you want to decide the case, either before, during, or after the hearings.

I mean, could that raise due process issues? Yessiree. Are we there yet? No.

CHAIRWOMAN MARTIN: Okay. Thank you for that. I think my point was just the use of the term "decisional employee". If you look at the statute, it may be slightly different. I understand the process that you would be describing.

Do either of the other Commissioners have any follow-up questions?

*(Commissioner Giaimo and Commissioner Bailey indicating in the negative.)*

CHAIRWOMAN MARTIN: Nothing, Commissioner Bailey? Okay. Commissioner Giaimo,

I saw you shake your head? Okay.

And any follow-up from Staff in response to that? Mr. Buckley.

MR. BUCKLEY: I think the Staff's follow-up to the Consumer Advocate would be to suggest that the Commission not direct Staff not to file a written objection.

And we would also just note that the contentiousness and significance of the case, and how it would allow for designation, although it's not in statute that that has to directly relate to how that influences an employee's ability to fairly advise the Commissioners, it is extensively discussed in prior Commission precedents.

And, while the Consumer Advocate is correct, that the Commission is free to disregard its own precedents, there is reasoning underlying those decisions, which the Commission should carefully weigh as it considers this request for designation.

And I think that's all I'll add, unless Attorney Dexter has something else to add.

MR. DEXTER: I have nothing further.

Thank you.

CHAIRWOMAN MARTIN: Okay. I think what we'll do is take a brief break, so that I can consult with the other Commissioners before we move forward.

I would ask one question. Mr. Kreis, I heard you suggest that an order needed to issue from the Bench today on procedural schedule, because, in the normal course, the recommendation coming out would be the result of an agreement in a tech session.

I would say that the presumption is that might happen. But, in any case, there could be a procedural schedule discussed that wasn't agreed to and a filing made thereafter, and you would have the ability to either object or recommend your own procedural schedule. Is that not doable here for some reason?

MR. KREIS: I would say the only reason it -- it's doable, as a matter of law, and you are not obliged to rule from the Bench on the Motion by any means. You know, it's certainly within your right to say that you want to hear from your Staff in writing and then make a

written ruling on whatever timeframe you deem appropriate.

It's just that, as I think Mr. Dexter explained to you, or maybe it was Mr. Buckley or maybe it was both of them, you know, time is really of the essence in this proceeding, because the new triennium begins on January 1st.

You know, I did my best to try to get some of the procedural stuff in this docket out of the way, even before the Triennial Plan was filed, and my suggestions to that end were mostly rebuffed. So, you know, it is what it is. And I'm sorry everybody is rushed.

And the only downside to the Commission taking the Motion under advisement, having the parties talk about a procedural schedule, and then have a letter filed with the Commission saying "Well, there really isn't a unanimous agreement on the procedural schedule, so you'll have to decide." That will just slow things down, I would say, more than they otherwise would be and more than they otherwise would need to be.

But, yes. You can do that, if that's the way you believe it has to be done or should

be done.

CHAIRWOMAN MARTIN: Okay. Thank you. Mr. Wind, at this point, if the Commissioners want to step off, do you need to demote us or can we just shut off our video and sound.

MR. WIND: You can just shut off your video and sound, and go to a private session.

CHAIRWOMAN MARTIN: Mr. Patnaude, we'll go off the record. Thank you.

*(Recess taken at 11:46 a.m. and the prehearing conference resumed at 11:54 a.m.)*

CHAIRWOMAN MARTIN: Okay. Thank you. Let's go back on the record, Mr. Patnaude.

All right. The Commission has discussed the Motion, and has decided that it will take it under advisement and not issue a ruling from the Bench today on the Motion to Designate. But we will take the timing concerns that you raised in the consideration in reaching our decision and getting that order issued.

Okay. And, so, I think, at this point, we can move on to initial positions, well, unless there are any other preliminary items that I am

not aware of?

*[No indication given.]*

CHAIRWOMAN MARTIN: Okay. Seeing none. Why don't we start with Ms. Chiavara.

MS. CHIAVARA: All right. Thank you. Good afternoon, Chair Martin and the Commissioners, and all of the stakeholders here today.

*[Court reporter interruption due to indecipherable audio.]*

CHAIRWOMAN MARTIN: Let's go off the record.

*(Off the record.)*

CHAIRWOMAN MARTIN: Let's go back on the record and see if it works.

MS. CHIAVARA: Thank you. All right. Go again.

Chair Martin and Commissioners, the New Hampshire utilities are surpassingly proud to submit the second Triennial Statewide Energy Efficiency Plan that provides the roadmap for energy savings and environmental benefits that can be achieved through New Hampshire's Energy Efficiency Programs for the next three-year

period.

The Plan submitted on September 1st represents the next phase of New Hampshire's energy efficiency goals envisioned and embodied by the Energy Efficiency Resource Standards. This second Statewide Triennial Plan has the potential to serve as a catalyst for staunch advancement of statewide energy policy, while providing tangible economic and environmental benefits for all residents through local business growth and community economic development.

The 2021 to 2023 Plan presents cost-effective, energy-maximizing program pathways that allow all New Hampshire customers to receive definitive benefits, while reinvesting in our local workforce and economy. This Plan's design takes into account the most financially sensitive residents in the state, and focuses on maximizing the benefits of programs, whether generally offered or for those specifically targeted to those facing economic hardships and challenges.

This Plan was developed through a robust stakeholder process spanning ten months,

beginning at the end of 2019 and continuing uninterrupted through September of this year. Working through difficult topics, all while during the radical shift in logistics of the planning process itself. Both the EERS Committee and the EESE Board members provided thoughtful insight and engagement that ultimately led to a more comprehensive and inclusive Plan. The program administrators are grateful for all input and participation that led to this final result.

The 2021-2023 Plan sets energy savings targets at 5 percent of 2019 electric sales and 3 percent of 2019 natural gas sales to be achieved over the Plan term. With additional Plan savings from other fossil fuels and active electric demand reduction.

This plan budgets $350 million for the electric programs and more than $42 million for the natural gas programs. These figures represent a competent commitment to New Hampshire's investment in energy efficiency. Worthy of note is the 20 percent of the electric budget and 17 percent of the natural gas budget that are targeted to income-eligible energy

efficiency projects, reflecting the policy objectives of the EERS to deliver tangible, relevant benefits to all New Hampshire residents.

New elements to this Plan include an adjusted planning framework to provide stability in the marketplace and support achievement of ambitious goals in the face of a significantly changed economy.

The New Hampshire utilities, in their capacity as program administrators of the New Hampshire Energy Efficiency Programs, thank the stakeholders, Commission Staff, and Commissioners for their earnest dedication of this program plan, and welcome the upcoming discussions in order to see this Plan realized.

Thank you.

CHAIRWOMAN MARTIN: Okay. And, Ms. Chiavara, were you speaking for all the utilities here?

MS. CHIAVARA: Yes. That's on behalf of all utilities, including the New Hampshire Electric Cooperative.

CHAIRWOMAN MARTIN: Okay. Great. Then, we can go to Mr. Kreis next.

MR. KREIS: Thank you, Chairwoman Martin.

The Office of the Consumer Advocate intends to ask the Commission to approve the Triennial Plan that has been filed by the program administrators. We believe that the savings goals proposed by the utilities are achievably aggressive, calculated to bring New Hampshire into the New England mainstream when it comes to ratepayer-funded energy efficiency.

There is lots of good news here. The new Granite State Test assures that, as we reach for new heights of energy efficiency, we will do so in a manner that is cost-effective from the perspective of all ratepayers. And we've shown that the stakeholder collaboration process, I heard Ms. Chiavara say "ten months", I tend to think of it as "eight months", so, let's split the difference and say "nine months", nine months of really hard work leading up to this day. That was effective in forging consensus. The process, by the way, is something for the Commission to consider, as it ponders stakeholder engagement processes in several other pending dockets.

That is not to say that we're ready to sign on the dotted line and go directly to hearing. There are questions to be asked, insights to be shared, refinements to be implemented. Our most significant questions, I think, concern the midterm modification process in the Plan, and that the relationship of that process to the stakeholder collaboration model.

Our hypothesis is that, because stakeholder collaboration works so well, it should not be limited to the fifteen months prior to the implementation of the next Triennial Plan, and the one after the one before you now. That process should, however, be an ongoing phenomenon, with available consulting help throughout, so that, as potential midterm modifications arise, the community of stakeholders is actively involved.

We expect that during this proceeding the Commission will hear concerns that the budgets are too high and thus the savings goals are too ambitious. But the latter does not necessarily flow from the former. And it may be that, over the course of the next few months, we

can work together to make the programs less expensive, without sacrificing our lofty savings goals.

We look forward to working with the parties to find out, and to make the Triennial Plan as good as it can possibly be.

CHAIRWOMAN MARTIN: Okay. Thank you. Mr. Krakoff, are you still able to see the proceeding?

MR. KRAKOFF: Yes, I can. I'm *[indecipherable audio]* --

CHAIRWOMAN MARTIN: I can't hear you very well. Can you say that again?

MR. KRAKOFF: Yes. *[indecipherable audio]* all day. Hold on.

CHAIRWOMAN MARTIN: Okay.

*[Court reporter interruption due to indecipherable audio.]*

CHAIRWOMAN MARTIN: Okay. Mr. Patnaude can't hear you. Seems like you're having a connection problem. Let's go off the record for a minute.

*[Brief off-the-record discussion ensued.]*

CHAIRWOMAN MARTIN: We'll hear Clean Energy New Hampshire next.

MR. EMERSON: Thank you. Madeleine Mineau is *[indecipherable audio]*.

MS. MINEAU: Thank you, Attorney Emerson.

CHAIRWOMAN MARTIN: Just a moment. I'm sorry, Ms. Mineau. Just a moment. Mr. Patnaude needs to catch up. Did you hear any of that?

MR. PATNAUDE: I heard Mr. Emerson initially, and then I didn't hear anything. It just broke off.

CHAIRWOMAN MARTIN: Okay. So, Mr. Emerson, can you repeat what you said?

MR. EMERSON: So, Madeleine Mineau is going to deliver the initial position of Clean Energy New Hampshire. Thank you.

CHAIRWOMAN MARTIN: Okay. All right. Ms. Mineau.

MS. MINEAU: Thank you. Thank you, Commissioners, for the opportunity to make opening remarks before you today.

Clean Energy New Hampshire broadly supports the Energy Efficiency Resource Standard

Plan for 2021 to 2023 submitted by the New Hampshire utilities on September 1st. As members of the EERS Committee of the EESE Board, we actively participated in the collaborative planning process, submitted multiple rounds of comments, and provided input, both ourselves, as well as directly from our members and partner organizations, to inform the Plan that was submitted by the program administrators.

The program administrators were responsive to input from the EERS Committee. And we find that the Plan submitted by the New Hampshire utilities reflect many months of productive collaboration among stakeholders.

Specifically, Clean Energy New Hampshire supports the ambitious energy savings goals proposed in the Plan. This will represent significant progress for energy efficiency in New Hampshire. As energy efficiency is the least-cost energy resource, all measures and programs are cost-effective, and the state's efficiency programs provide benefits for all ratepayers, we feel it is in the state's best interest to set ambitious, achievable savings

targets for the 2021-2023 Plan.

Clean Energy New Hampshire is also supportive of the new three-year integrated implementation period. This will provide contractors with more flexibility in long-term projects, longer term planning periods, budget flexibility, and the ability to avoid disruptions and wait lists in rebate programs.

We think it is important to move beyond traditional passive energy efficiency, and so we support the inclusion of active demand response programs, as well as the creation of the Energy Optimization Pilot, which we hope will be integrated as a full program, if the pilots prove successful.

We also appreciate and support the implementation of robust workforce development programs during these trying economic times due to the COVID-19 pandemic.

In conclusion, Clean Energy New Hampshire is generally supportive of the EERS Plan submitted. But we are still working with our team to evaluate some details and opportunities for further improvements.

We look forward to participating in this docket. And thank the EERS Committee and the New Hampshire utilities for their work on the Plan to date.

CHAIRWOMAN MARTIN: Thank you. Mr. Kreis, can you hear me?

*[No verbal response.]*

CHAIRWOMAN MARTIN: Okay. Go off the record for a moment.

*[Off the record.]*

CHAIRWOMAN MARTIN: We'll go back on the record.

And I have Acadia Center next. Mr. Koester, do you want to be heard?

MR. KOESTER: Can you hear me?

CHAIRWOMAN MARTIN: Yes.

MR. KOESTER: I'm just here to say, on behalf of Acadia Center, that we support the stakeholder process that led to the proposal for the Energy Efficiency Plan. And we look forward to working with others in this process.

That's all for now.

CHAIRWOMAN MARTIN: Okay. Thank you.

MR. KOESTER: Thank you.

CHAIRWOMAN MARTIN: Next is The Way Home. Mr. Burke.

MR. BURKE: Thank you, Chairwoman Martin, and good morning, again, to the Commissioners.

As others have said, The Way Home would initially just like to echo a word of thanks to the utilities, the other parties, and the stakeholders for all of the time and effort that went into the planning process that led to the filing of this Plan. The Way Home believes that that process did allow for meaningful and valuable stakeholder input, as has been described to you this morning. And also very much appreciates the work of the facilitators from VEIC who helped make that process possible.

As always, The Way Home is primarily interested in the budget, design, and implementation of the low income electric and natural gas energy efficiency programs, known as the "Home Energy Assistance Program", and continues to believe that the HEA Program is crucial to reducing the energy burden of low-income families and individuals, who often

spend a larger percentage of their household income on energy costs.

Importantly, the benefits of the HEA Program, as we've noted in prior dockets, go beyond the resulting reduction in energy usage. And The Way Home appreciates the work that has been done over the past couple of years to further study this issue in New Hampshire.

There are several elements of the Plan that The Way Home supports, including the proposals around workforce development and training. And The Way Home believes that there are advantages to the proposal to move to a more "true" three-year plan, which could benefit the low income program.

So, broadly speaking, The Way Home does support the Plan with respect to the HEA Program. And looks forward to working with the parties in this docket to resolve any remaining issues that we didn't have time to resolve during the planning process.

Thank you.

CHAIRWOMAN MARTIN: Okay. Thank you, Mr. Burke. DES. Ms. Ohler.

MS. OHLER: Yes. Thank you very much.

On behalf of the Department of Environmental Services, DES really appreciates all of the efforts by all of the parties to come up with this Plan. We support the Plan. As noted by others, there's going to be some finer details that we'll be working out over the next coming months.

But, overall, we appreciate the fact that it's going to a true three-year plan for the first time. We think that that's going to allow for a smoother implementation and hopefully get rid of some of the start-and-stop issues. And we also appreciate the utilities' ability to go back and find some additional savings, so that we could get the whole three-year plan up to 3 and 5 percent, which is substantially above what was in the first draft. So, we look forward to working with all parties to implement this Plan.

Thank you.

CHAIRWOMAN MARTIN: Okay. Mr. Krakoff, I see that you're back on. Would you like to give your position now?

MR. KRAKOFF: Yes. Thank you,

Chairwoman Martin.

Yes. I'd like to note that the 2021-2023 Statewide Energy Efficiency Plan is a big step in the right direction to increase New Hampshire's energy efficiency savings in the next triennium.

For too long, New Hampshire has been a laggard in New England with respect to energy efficiency. Due to the energy efficiency savings achieved in the Plan, when compared to other New England states, New Hampshire actually has the potential to be a leader in the realm of energy efficiency for the next three years.

The Plan has very ambitious energy efficiency savings of 5 percent for electric and 3 percent for natural gas, and will also substantially increase the funding to the low income program in the Plan.

Although we anticipate opposition from Staff to the SBC rate increases, we know that the testimony of the utilities filed with their plan establishes that, for many ratepayers, overall bills will actually decrease due to the energy efficiency savings.

The Plan is the product of a meaningful stakeholder process over the last several months. While the Plan may still be subject to improvement and further refinement in this docket, and CLF will continue to evaluate it as additional details emerge. In general, CLF intends to seek approval of the Plan as submitted by the utilities, but may recommend improvements in certain areas of the Plan as necessary.

Thank you.

CHAIRWOMAN MARTIN: Okay. Thank you. Did someone from Southern New Hampshire Services ever join us, Mr. Wind, do you know?

MR. WIND: No. I have not seen them join.

CHAIRWOMAN MARTIN: Okay. Thanks.

Then, we need to hear from Staff. Mr. Buckley, I guess, or --

MR. DEXTER: This is Attorney Dexter. I will be providing the Staff's preliminary position this morning. And thank you for the opportunity, Chairwoman Martin and Commissioners.

Staff has taken a preliminary look at the filing. And, as mentioned, participated in

all of the pre-filing stakeholder processes. And we've identified several issues that we want to highlight today that we will be investigating during the course of the proceeding.

First, we are concerned that the savings targets that have been mentioned, 5 percent of 2019 electric sales and 3 percent of 2019 gas sales, have the potential to result in rate impacts that are high, to the extent that they violate the Commission's longstanding principles and rate design goals of gradualism, as expressed in many rate cases over the years.

We direct the Commission's attention to Bates Pages 931 and 940 of the filing to look at those SBC rates. Page 931 is just the energy efficiency portion. Page 940 is the total SBC rates.

And, related to the overall issue of rate impacts, there are some questions that we intend to explore during the course of the proceeding, because we find that the proposed rates on those pages are puzzling in certain aspects.

For example, by 2023, the SBC rate for

Eversource's C&I customers will be almost double that of the other electric companies, and yet their residential rate will be lower than the other two companies. And this is the first instance where the utilities have proposed any other than a uniform SBC rate. Up until now, the SBC rate has been uniform across all companies and all classes. And, while Staff is generally supportive of a disaggregated SBC rate, because we believe it will more correctly reflect underlying costs, we want to investigate these seeming disparities between the companies.

Secondly, Staff is concerned that the plan places a higher reliance on lighting as a percentage of the overall budget. And lighting, particularly commercial lighting, is a market that has largely been transformed over the years. And Staff wants to investigate to be sure that the money put towards C&I lighting rebates is necessary. In other words, to be sure that this isn't the situation where these companies would have gone ahead and performed these energy saving measures on their own without funding from the utilities and the SBC.

Similar to that, we want to look at the realization rates that are proposed in the plan, from commercial and industrial custom measures that are non-lighting, to be sure that they are consistent with evidence of results based on other states. This is an issue that Staff will continue to explore through the evaluation, monitoring, and evaluation -- the EM&V working group, and which is continuing to work on its Technical Resource Manual even as this docket unfolds. And, so, as those values and inputs with the TRM are built into the Plan, Staff wants to be sure that those realization rates are consistent with other states.

Similarly, Staff wants to investigate the cost to achieve the targets, and make sure they are reasonable, in light of information learned from other states. And then, particularly, in light of the ongoing pandemic, we want to be sure that those targets are achievable.

Staff will take a look at the demand reduction programs in the energy optimization pilot that's been proposed. We are generally in

favor of those programs, but we'll take the opportunity to do a further review.

Two other rate issues: Lost Base Revenues. Lost Base Revenues are presented by some of the companies. And there is an intricate interplay between the timing of distribution rate cases for the utilities and also the implementation of decoupling. And, given that, I believe that puts all three -- all five of the utilities, the three electric and two gas utilities, in unique situations, given the rate cases that have been filed and given the decoupling measures that have been implemented. So, Staff intends to investigate to make sure that that interplay is appropriately reflected in the proposed Lost Base Revenues.

With respect to performance incentives, we believe -- we understand that the Plan has a proposal to lower the minimum threshold for the utilities to achieve a performance incentive, and we believe it's tied to the new targets -- the higher targets, I should say. Our preliminary position is that it is not in favor of a reduced threshold. As we understand the performance

incentive calculation, higher budgets -- higher targets will lead to higher spending, higher spending leads to increased performance incentives. So, we don't see any reason to couple that -- the opportunity for increased performance incentive, we don't see the opportunity to couple that with a lowering of the threshold. That's something that we're going to look at.

Concerning the planning structure, we're generally supportive of the three-year planning period. And that was something that was discussed extensively in the collaborative process that preceded the filing.

Like the Consumer Advocate, we are interested in a midcourse modification, in terms of who ultimately gets to request one and what will be the thresholds for that.

Those are the issues that we've identified at this point. We expect there will be others as the case unfolds. And we will perform that investigation. And we will achieve a settlement, where possible, as we have done in the last -- for each of the last updates in the

last three-year plan, and I believe in the CORE programs before that. To the extent we don't reach settlement, we will bring those issues before the Commission for resolution.

And that concludes Staff's comments. Thank you.

CHAIRWOMAN MARTIN: Okay. Thank you. Is there anything else we need to do before you go to your technical session?

*[No verbal response.]*

CHAIRWOMAN MARTIN: All right. As I said earlier, we'll take the Motion for Designation under advisement, and leave you to your technical session. And this hearing is adjourned. Thank you. Have a good day, everyone.

***(Whereupon the prehearing conference was adjourned at 12:20 p.m., and a technical session has held thereafter.)***

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

2021-2023 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN

Docket No. DE 20-092

# SETTLEMENT AGREEMENT

This Settlement Agreement ("Agreement") for the 2021-2023 New Hampshire Statewide Energy Efficiency Plan (the "2021-2023 Plan") is entered into by and among Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities; New Hampshire Electric Cooperative, Inc.; Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"); Unitil Energy Systems, Inc. ; Liberty Utilities (EnergyNorth Natural Gas) Corp d/b/a Liberty Utilities; and Northern Utilities, Inc. (collectively, "the NH Utilities")[1]; the Office of the Consumer Advocate ("OCA"); Clean Energy New Hampshire; Conservation Law Foundation; Southern New Hampshire Services, and The Way Home; (all collectively referred to as the "Settling Parties") to resolve all issues related to this matter. This Agreement constitutes the recommendation of the Settling Parties for the New Hampshire Public Utilities Commission ("Commission") to approve the 2021-2023 Plan.

## I. INTRODUCTION AND PROCEDURAL HISTORY

The Commission established an inclusive process for implementing New Hampshire's Energy Efficiency Resource Standard ("EERS") in Order No. 25,932 (August 2, 2016) (the "Planning Order"), requiring the state's electric and natural gas utilities, as administrators of the programs offered to the public to meet the EERS, to "prepare the triennial EERS plans in

[1] All references to the NH Utilities for purposes of the Plan and this Agreement shall include NHEC unless explicitly stated otherwise.

collaboration with stakeholders and the EESE Board as Advisory Council." Planning Order at 10-11. In Docket No. DE 17-136, the Commission approved the first triennial plan with an implementation period of the EERS for years 2018-2020. *See* Order No. 26,095 (January 2, 2018). The 2018-2020 Plan was updated for each of the years 2019 and 2020.

On December 31, 2018, the Commission adopted the 2019 update plan with Order No. 26,207, which included a number of recommendations for the 2021-2023 Plan including a planning process with robust stakeholder input and a filing deadline for a proposed plan of July 1, 2020. On June 5, 2020 the NH Utilities and the OCA filed an uncontested motion, supported by Commission Staff ("Staff"), to amend Order 26,207 and extend the filing deadline so that the NH Utilities, OCA and stakeholders participating in the planning process could account for the rapidly developing and widespread effects of the coronavirus pandemic, as well as incorporate the findings of the energy efficiency studies that was still ongoing, into the draft of the 2021-2023 Plan. The Commission granted the extension, issued an Order *nisi* opening the instant docket for consideration of the 2021-2023 Plan, and extended the filing deadline to September 1, 2020. Order No. 26,375 (June 30, 2020).

After ten months and considerable efforts made by numerous stakeholders including the Settling Parties and Staff, the NH Utilities filed the 2021-2023 Plan on September 1, 2020 with a unanimous vote of support from the EERS Committee and a strong majority vote of support from the EESE Board. Discovery took place from September 8 to October 6. Staff, OCA, and several intervenors filed testimony on October 29. Further discovery was conducted in response to that testimony, and the Settling Parties met with Staff to discuss possible settlement on November 19 and 20. This extended and robust stakeholder planning process and subsequent adjudicative process have produced this Agreement among the Settling Parties.

## II. SETTLEMENT TERMS

The Settling Parties agree that the 2021-2023 Plan filed on September 1, 2020 ("September 1 Plan"), as modified and conditioned herein, should be approved by the Commission. The terms set forth in this Agreement constitute a comprehensive settlement and, as such, all terms are interdependent: each Settling Party's agreement to each individual term is dependent upon agreement with and Commission approval of all terms.

Appended to this Agreement, and incorporated herein by reference, are Attachments A through E, setting forth the annual energy savings goals, program budgets, and resulting rates to which the Settling Parties have agreed. These Attachments are an integral part of this Agreement and, as appropriate, are explained below.

### A. Plan

The September 1 Plan is a comprehensive three-year framework that sets forth energy savings targets, budgets, rate impacts of program implementation, program design (including new innovative elements related to energy codes and standards), new elements (i.e., energy optimization, behavioral approaches and active demand management), administrative provisions, descriptions of benefit-cost testing, a marketing plan, a workforce development initiative, a blueprint for Evaluation, Measurement & Verification ("EM&V") activities, and a framework for stakeholder engagement and collaboration.

### B. Energy Savings Targets

To be responsive to concerns voiced by Staff and representatives of the Commercial and Industrial ("C&I") sector regarding rate impacts given current statewide economic conditions, the Settling Parties stipulate and agree that the budgets and rates should be adjusted from those proposed in the September 1 Plan. The Settling Parties stipulate and agree that these revised budgets are in the public interest, and the revised rates are just and reasonable, because they

address these concerns while still advancing the EERS objective of pursuing all cost-effective energy efficiency to deliver long-term benefits to customers with sensitivity to short-term customer impacts. In addition, the Settling Parties have adjusted the savings targets filed on September 1 to account for changes described in Section D of this Agreement, to correct for minor inconsistencies among the utilities, and to bring the targets into conformity with an updated version of the Technical Reference Manual for Estimating Savings for Energy Efficiency Measures ("TRM") for the 2021 program year.

Cumulative annual incremental savings achieved by the electric programs shall be adjusted to 4.5 percent of 2019 electric sales, or 474,616 annual kWh, achieved over the 2021-2023 implementation period. Savings targets for each electric utility are set forth in Attachment A. Cumulative annual incremental savings achieved by the natural gas programs shall be adjusted from the September 1 Plan to 2.8 percent of 2019 natural gas sales, or 706,065 annual MMBtus, achieved over the 2021-2023 implementation period. Savings targets for each gas utility are set forth as Attachment A.

**C. Budgets and Rates**

As proposed in the September 1 Plan, the Settling Parties stipulate and agree that beginning on January 1, 2021 that the energy efficiency portion of the System Benefits Charge ("SBC") applicable to electric customers shall no longer be uniform but, instead, there shall be two separate SBC rates, applicable to each customer sector (i.e., residential, commercial and industrial) for each electric utility. Further, in order to balance the desire to mitigate short-term rate impacts with the opportunity for achieving additional cost-effective energy efficiency that reduces costs to ratepayers, the Settling Parties stipulate and agree to the following modifications to the budgets, rates and bill impacts set forth in the September 1 Plan.

**1. Eversource Budget**

The Eversource budget shall be reduced from $272.5 million to $258.2 million. The C&I sector budget shall be reduced by $17.6 million, the residential sector budget shall increase by $7.4 million, and the budget for the income-eligible program shall be reduced by $4.1 million, as detailed in Attachment B.

**2. Other Budgets**

Budgets for the other electric and natural gas utilities shall remain as depicted in the September 1 Plan.

**3. SBC Rates**

The Settling Parties stipulate and agree the Eversource C&I SBC should be reduced by 4.3 percent in 2021, 12.2 percent in 2022 and 18 percent in 2022 as compared with the respective September 1 Plan rates. Attachment C provides the energy efficiency portion of the proposed Eversource C&I SBC rate. Attachment C also details the total Eversource C&I SBC rate including Lost Base Revenue ("LBR") and the Energy Assistance Program ("EAP").

The Settling Parties stipulate and agree that to better balance responsibility among the rate classes for the costs of the 2021-2023 Plan and achieve the recommended savings targets, the Eversource residential SBC rate should increase by 13.9 percent in 2021, 19.1 percent in 2022 and 26 percent in 2023 compared to the September 1 Plan. This increase reflects budget adjustments intended to achieve additional kWh savings in the residential sector over the term of the plan, as well as adjustments to reflect the collection of SBC charges for the income-eligible program based on the kWh sales for each sector. Attachment C represents the energy efficiency portion of the proposed Eversource residential SBC rate as well as the total Eversource residential SBC rate including LBR and EAP.

Sector budgets for Liberty, NHEC and Unitil shall not change as a result of this Agreement, however the level of kWh savings does change as a result of applying evaluation factors described in Section D.

For Unitil this also leads to re-calculation of the LBR portion, resulting in very minor changes to the C&I SBC rate. Attachment D represents the total Unitil Residential and C&I SBC rates including LBR and EAP.

NHEC has updated the sales forecast used for 2021-2023 and incorporated projected carryover funds of $200,000 residential (excluding income eligible) and $400,000 commercial from 2020. The resulting change in the SBC from the September 1 filing is reflected in Attachment E.

**D. Savings Assumptions**

The Settling Parties stipulate and agree that the following changes shall be made for the purposes of claiming and reporting savings, and that the NH Utilities shall modify their benefit cost models accordingly. The NH Utilities shall file revised benefit-cost models that correspond with the changes in this Agreement.

**1. Non-Energy Impacts**

For purposes of the secondary cost-effectiveness test approved by the Commission and adopted in the September 1 Plan, the NH Utilities shall apply a consistent percentage adder by sector based on research into Non-Energy Impacts ("NEI") factors undertaken over the past two years. For the 2021-2023 term the natural gas utilities shall use a 15 percent adder for both residential (excluding the income-eligible program) and C&I sectors. The electric utilities, for the 2021-2023 term, shall use a 25 percent adder for the residential sector (excluding the income-eligible program) and a 10 percent adder for the C&I sector. The Settling Parties acknowledge

that these adders are not applicable to the Commission-approved primary cost test (i.e., the "Granite State Test") adopted for the 2021-2023 Plan. The adder for the income-eligible programs, which is included in the Granite State Test, shall remain as filed in the September 1 Plan. If new information related to NEI's and benefits for the secondary test arises, the NH Utilities shall discuss any potential changes with the EM&V working group.

**2. Net-to-Gross Figures**

The Settling Parties stipulate and agree that certain changes are necessary to the net-to-gross adjustments that are used in the September 1 Plan to account for "free ridership" (i.e., the fact that some consumers participating in the programs would have acquired the applicable measures with or without EERS-funded incentives) and "spillover" (i.e., the fact that some consumers make more efficient choices due to influence from the programs, but do not directly participate in the programs). Specifically, given the significant market changes taking place in the C&I lighting market, the NH Utilities shall apply a net-to-gross factor to lighting delivered through downstream delivery mechanisms to C&I customers of 94 percent in 2021, 89 percent in 2022, and 84 percent in 2023.

The EM&V working group shall identify any additional measures to which net to gross factors should be applied. For this plan, the incorporation of additional net to gross factors will be accompanied by a corresponding change in the term goals, with updated BC models reflecting the changes to be shared with the Stakeholder Advisory Council described in Section I below and provided to the Commission in an informational filing.

**3. Realization Rates**

To account for the difference between predicted and actual energy savings, during the 2021-2023 triennium the NH Utilities shall apply a realization rate of 90 percent for C&I, custom large business, small business and municipal program electric non-lighting measures and 87 percent for C&I custom large business and small business program gas measures. A New Hampshire-specific impact evaluation of the Large Business Energy Solutions program shall be completed by the end of the first quarter of 2022. Realization rates for custom measures resulting from that study shall be applied to all custom measure savings results for all three years of the term, as recommended by the evaluation contractor and agreed to by the EM&V working group consistent with Paragraph 6 below.

In addition, the NH Utilities shall conduct at least one C&I custom impact evaluation during each triennium beginning in the 2021-2023 period, adopting any adjustments to gross savings identified in the evaluations, including new realization rates, retroactively for the entire period of the applicable plan, however no evaluation changes will be made to claimed savings after the term report has been duly filed with the Commission..

If data quality checks identify typographical or mathematical errors or misapplication of a TRM value in reported savings, the NH Utilities shall correct the errors as soon as they are identified, including after a program year is complete, and the NH Utilities shall seek to ensure that any similar errors are corrected everywhere they are relevant. If errors are discovered as part of an evaluation based on a sample of projects, they shall be accounted for in realization rates that shall be applied prospectively.

**4. Industry Standard Practice Baselines**

The Settling Parties acknowledge that the EM&V working group is in the process of contracting for a comprehensive study of New Hampshire baselines, including an investigation of Industry Standard Practice ("ISP") baselines. The NH Utilities shall follow the normal practice of implementing recommendations resulting from the study once it has been reviewed by the EM&V working group and is complete.

**5. Evaluations of Behavioral Programs**

The Settling Parties acknowledge that the EM&V working group is in the process of updating the strategic evaluation plan, which prioritizes evaluations of EERS programs. The Settling Parties stipulate and agree that the Strategic Evaluation Plan shall include impact evaluations for the Home Energy Report programs offered by Unitil and Liberty to natural gas and electric customers as well as Liberty's proposed Aerial Infrared Mapping program.

**6. EM&V Working group**

The Settling Parties stipulate and agree that the EM&V working group that was authorized in connection with the 2018-2021 triennium shall continue during the 2021-2023 triennium, subject to certain modifications. The EM&V working group shall continue to consist of representatives of the NH Utilities, Staff representatives, a consultant chosen by Staff (paid for out of EERS funds), and a representative of other stakeholders. It shall be the responsibility of the Stakeholder Advisory Council ("Council"), described in Section I below, to choose the stakeholder representative. The consultant shall be independent and assist the entire working group and shall be available to all members for consultation. It shall be the responsibility of the consultant to seek consensus among members of the EM&V working group. In the event consensus is not reached after reasonable efforts, any member of the working group may seek a

Commission determination on the issue. In such a circumstance, the status quo shall continue to apply until the Commission makes a decision. Should no request for a Commission determination be filed within ten calendar days of notification by the working group member who raised the concern, the recommendation of the consultant shall be adopted. Regarding any disagreement on matters of policy (as distinct from technical disagreements) any member of the working group may notify the Council to give the Council the opportunity to address the issue as appropriate.

**F. Lost Base Revenue**

Eversource and Unitil, as the only NH Utilities collecting Lost Base Revenue ("LBR") in 2021-2023 to account for the revenue impacts of the EERS, shall apply a consistent method for calculating planned and actual LBR. Further, Eversource and Unitil shall (1) employ the terminology set forth in the LBR working group report of August 29, 2018 to ensure that the methods used for actual LBR collections are consistent, (2) continue to file quarterly reports with the Commission, using a consistent format, (3) apply 100 percent of the calculated monthly savings using the paid date, which is on average two months after the install date, , to account for the fact that not all installations are made on the first day of each month; (4) cease accruing lost base revenues in the first month following effective date of any decoupling mechanism approved by the commission, , (5) use the average distribution rate in effect at the time of the triennial plan filing, or as updated by Commission order during the term, for planning purposes, while using the actual rate in effect at the time of the reconciliation filing for reconciliation purposes, and (6) determine carrying costs on LBR over and under recoveries using the prime rate, compounded monthly.

## G. Plan Updates, Reporting and Mid-Term Modifications

To foster increased clarity and transparency, the Settling Parties stipulate and agree that certain adjustments shall be made to the three-year planning structure as it is outlined in the September 1 Plan. The Settling Parties likewise agree that Commission approval of the 2021-2023 Plan shall constitute the adoption of a true three-year plan as opposed to a framework for the consideration and approval of three individual one-year plans. As outlined in the September 1 Plan, the Settling Parties agree that such use of a true three-year planning period allows for streamlined program implementation with greater efficacy and adoption of energy efficiency measures by energy customers.

### 1. Mid-Term Modification Triggers

The Settling Parties stipulate and agree that the process for notification of changes to the 2021-2023 Plan as well as that for implementing such changes set forth in section 2.1.6 of the September 1 Plan shall be approved, subject to certain modifications and clarifications. Specifically, the Settling Parties stipulate and agree that the triggers for "midterm modifications" requiring Commission approval shall be removed to the extent they concern projected changes in planned benefits or primary energy savings. The Settling Parties stipulate and agree that the NH Utilities shall notify the Council described in Section I of material program changes such as new programs, suspension or closure of an approved program or increase of a sector's approved term budget exceeding 110 percent, which the Council may discuss prior to a filing with the Commission by one or more of the NH Utilities requesting such changes.

### 2. Avoided Energy Supply Components Study Update

The Settling Parties acknowledge that the New England states expect completion of a new Avoided Energy Supply Components ("AESC") study during the first half of 2021, which

will provide updated values for the marginal avoided costs of electricity, natural gas, and other resources to be applied to the NH Utilities' benefit cost models for the energy efficiency and active demand reduction programs. When the updated values for marginal avoided costs become available, the NH Utilities will update the AESC 2018 values currently used in their benefit cost models, apply the values from AESC 2021 to program years 2022 and 2023, and seek Commission approval for such revisions. The NH Utilities agree that these new calculations shall be used to report actual results in 2022 and 2023. However, the 2021 benefits calculations, based on AESC 2018, shall not be changed for either updating planned benefits goals or for reporting 2021 actual results.

The NH Utilities shall submit amended attachments and benefit cost models to account for the AESC 2021 updates to the Commission by September 1, 2021. Amendments shall be limited to the avoided cost updates resulting from the AESC 2021 study and reflection of this change in the calculation of the component of the performance incentive. Amended attachments to the 2021-2023 Plan shall serve as a notification and automatic update of the 2021-2023 Plan but shall not require the Commission to commence a proceeding.

**3. Technical Reference Manual Updates**

The savings calculation methods documented in the TRM appended to the September 1 plan, as revised by this Agreement, and reflected in the NH Utilities' benefit cost models once the TRM and the models are fully updated later this month and shall take effect January 1, 2021. The NH Utilities shall submit an update to the TRM to the Commission on or before December 1, 2021 and again on or before December 1, 2022 reflecting all changes in savings assumptions agreed to by the EM&V working group since the filing of the previous year's TRM. The changes reflected in the annual update to the TRM must be finalized and agreed to by November

1 of each year in order to be included and shall take effect with the commencement of the subsequent program year. The TRM in effect for a given year shall provide the basis for calculating the savings achieved by the programs for that year. Realization rates in the TRM for custom programs will be updated according to the provisions in section D paragraph 3.

**4. Interim Changes in Program Budgets**

Notwithstanding the provisions of section 2.1.6 of the September 1 Plan, the Settling Parties stipulate and agree to certain adjustments with respect to the obligation of the NH Utilities to notify the Commission of changes to program budgets. Specifically, once budgets are approved by the Commission, there shall be no movement of funds between the residential and C&I customer sectors unless specifically approved by the Commission. In addition, no funds shall be transferred from the Home Energy Assistance ("HEA") program without prior approval by the Commission. The NH Utilities shall notify the Commission if an individual program's actual expenditures are forecast to exceed 120 percent of the program's 36-month budget.

**5. Changes in SBC and LDAC Rates**

The true three-year plan structure includes SBC and Local Delivery Adjustment Clause ("LDAC") rates as proposed for each year of the term. If a change is needed to account for collection adjustments or true-ups, any such change to the SBC or LDAC rates approved for the 2021-2023 Plan shall be filed for review and approval by the Commission.

**6. Reporting and Communications**

The Settling Parties stipulate and agree that the NH Utilities will work with stakeholders, via the Council described in section I, to determine the appropriate content for annual and quarterly reports to the Commission. Annual reports shall include but not be limited to updates

on all initiatives identified for exploration or investigation during the 2021-2023 Plan implementation period.

## H. Adjustments to Plan Programs

### 1. Increase in Electric Heat to Heat Pump Conversions

In recognition of additional opportunities for energy savings, the NH Utilities shall increase by 1,200 the planned number of electric baseboard heat to heat pump conversions as described in the September 1 Plan.

### 2. Energy Optimization Pilot

Prior to implementation of the energy optimization pilot as described in the September 1 Plan, the NH Utilities shall solicit feedback from relevant stakeholders through the Council, and shall make an informational filing with the Commission describing the pilot in greater detail. The evaluation of the pilot shall be developed collaboratively, with oversight from the EM&V working group.

### 3. Active Demand Management

Prior to offering an electric vehicle managed charging measure for the active demand program, the regulated members of the NH Utilities shall solicit feedback from relevant stakeholders through the Council, and shall make an informational filing with the Commission describing the measure in greater detail. The filing shall also review any interplay between electric vehicle measures within the active demand program and other electric vehicle related docket matters underway at the Commission.

The regulated members of the NH Utilities shall work with the Council beginning in the summer of 2021to explore the potential savings and benefits related to monthly peak reduction

activity throughout the calendar year. If consensus is reached, the regulated members of the NH Utilities shall file a proposal for review and approval by the Commission. If consensus is not reached, the NH Utilities shall file a report with the Commission describing the opposing views and seeking a Commission decision resolving the disagreements.

**4. Eversource RFP program**

As part of the budget adjustments described in Section C, Eversource shall remove funding from the RFP program in favor of focusing efforts for large customers through the Large Business Energy Solutions program, which also allows for collaboration on large multi-measure projects.

**I. Stakeholder Advisory Council**

The Settling Parties stipulate and agree that there shall be an ongoing stakeholder advisory process during the 2021-2023 triennium, consisting of a Stakeholder Advisory Council ("Council") that shall convene as specified below in January of 2021 and which shall hold regular meetings thereafter. The purpose of the Council shall be to serve as the stakeholder forum in connection with the planning process for the 2024-2026 Plan and as a forum for providing feedback opportunities with respect to material changes related to implementation of the 2021-2023 Plan.

The initial members of the Council shall consist of a representative of each of the NH Utilities, Commission Staff, the Office of the Consumer Advocate, and each intervenor in Docket No. DE 20-092, unless any party waives its opportunity to participate. The representative of the OCA shall convene the initial meeting at which, the Council shall determine its leadership and operating rules, including what Plan changes are sufficiently "material" within the meaning of the preceding paragraph so as to warrant Council review, provided that the

Council shall make its decisions on leadership and operation by consensus rather than by voting. The Council shall admit additional members upon request, taking into account, particularly, whether the new member represents the interests of one or more stakeholder groups that do not already have existing or significant representation on the Council. Members of the public shall be permitted to attend and provide comments if they are not Council members. At its initial meeting, the Council shall discuss how to coordinate its activities with those of the EM&V Working group so as to allow and encourage the EM&V Working group to bring policy issues to the Council for its consideration as necessary.

The Council shall rely on an outside facilitator, which it shall choose as expeditiously as practicable and supervise. The outside facilitator shall plan and preside at meetings of the Council and shall provide technical assistance to the Council. One or more of the NH Utilities shall contract with the facilitator, but the contract shall provide that the facilitator reports exclusively to the Council so long as the Council, in turn, abides by the terms of the contract. Expenses of the Council, not to exceed $150,000 per year, including the cost of the contract with the facilitator, shall be recoverable as an administrative expense of the EERS programs.

Another key responsibility of the Council shall be to maximize consensus among participating stakeholders on the 2024-2026 triennial plan prior to its submission to the Commission. The objective shall be the presentation to the Commission in 2023 of a triennial plan supported by all stakeholders. To the extent that RSA 374-F:3, IV requires SBC increases to be approved in the first instance by the Commission and then by the General Court, beginning in January of 2022 the Council shall seek consensus on any SBC increases so that they may be presented to the Commission for approval during the second half of 2022 for introduction in the General Court during its 2023 session.

The Council shall be the forum for discussion and consensus-seeking with respect to material changes to the 2021-2023 Plan, discussed in both the September 1 Plan and/or Section G of this Agreement requiring Commission approval. The Council shall also provide a forum for discussion of policy issues that arise in connection with Plan implementation, significant changes to program designs, marketing and implementation strategies, and policy items that are referred by the EM&V working group, as discussed in Section D, paragraph 5 of this Agreement, and any other issues germane to the EERS that the Council agrees by consensus to take up. Meetings of the Council shall replace the current quarterly meeting process although the NH Utilities shall continue to file quarterly reports with the Commission.

Nothing in this section shall preclude any party from seeking a Commission decision at any time on any issue within the Commission's jurisdiction, to the extent that such actions are consistent with the general provisions of this Agreement, discussed in the following section.

**J. Pending Procedural Matters**

The OCA agrees that upon the Commission's approval of this Agreement the OCA's motion of October 16, 2020, seeking rehearing of Order No. 26,415, and the OCA's letter of October 22, 2020 requesting public deliberations in this docket, shall be deemed to have been withdrawn.

## III. GENERAL PROVISIONS

The Settling Parties agree that all testimony and supporting documentation may be admitted as full exhibits for purposes of consideration of this Agreement. Assent to admit all direct testimony without challenge does not constitute agreement by the Settling Parties that the content of the written testimony is accurate nor is it indicative of what weight, if any, should be given to the views of any witness. Reflecting the intent of this Agreement, the Settling Parties agree to forego cross-examining witnesses of the Settling Parties regarding their pre-filed

testimony and, therefore, the admission into evidence of any witness's testimony or supporting documentation shall not be deemed in any respect to constitute an admission by any party to this Agreement that any allegation or contention in this proceeding is true or false, except that the sworn testimony of any witness shall constitute an admission by such witness.

This Agreement is expressly conditioned upon the Commission's acceptance of all of its provisions without change or condition. All terms are interdependent, and each Settling Party's agreement to each individual term is dependent upon all Settling Parties' agreement with all terms. If such complete acceptance is not granted by the Commission, or if acceptance is conditioned in any way, each of the Settling Parties shall have the opportunity to amend or terminate this Agreement or to seek reconsideration of the Commission's decision or condition. If this Agreement is terminated, it shall be deemed to be withdrawn and shall be null and void and without effect and shall not constitute any part of the record in this proceeding nor be used for any other purpose. The Settling Parties recommend approval of this Agreement before the Commission. The Settling Parties also agree that they shall not oppose this Agreement before any regulatory agencies or courts before which this matter is brought but shall take all such action as is necessary to secure approval and implementation of the provisions consistent with Agreement.

The Commission's acceptance of this Agreement does not constitute continuing approval of or precedent regarding any particular issue under this docket, but such acceptance does constitute a determination that this Agreement and all provisions are just and reasonable. All discussions leading to and resulting in this Agreement have been conducted with the understanding that all offers of settlement and discussion relating to these terms are and shall be protected and treated as privileged, and shall be so without prejudice to the position of any party

or participant representing any such offer or participating in any such discussion, and are not to be used in any manner in connection with this proceeding, any further proceeding or otherwise.

This Agreement may be executed by facsimile or electronically and in multiple counterparts, each of which shall be deemed to be an original, and all of which, taken together, shall constitute one agreement binding on all Settling Parties.

## IV. CONCLUSION

The Settling Parties affirm that the proposed Agreement is reasonable, and consistent with the public interest and the requirements of Commission Order No. 25,932.

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

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP. D/B/A LIBERTY UTILITIES

By:_ _____ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

NEW HAMPSHIRE ELECTRIC COOPERATIVE

By:_____ December 3, 2020
Mark Dean, Esq.

PUBLIC SERVICE COMP ANY OF NEW HAMPSHIRE D/B/ A EVERSOURCE ENERGY

By:_____ December 3, 2020
Jessica Chiavara, Esq.
Counsel

UNITIL ENERGY SYSTEMS, INC.

By:_____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY UTILITIES

By:_ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

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

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP. D/B/A LIBERTY UTILITIES

By:_____ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

NEW HAMPSHIRE ELECTRIC COOPERATIVE

By:_____ December 3, 2020
Mark Dean, Esq.

PUBLIC SERVICE COMP ANY OF NEW HAMPSHIRE D/B/ A EVERSOURCE ENERGY

By:_____ December 3, 2020
Jessica Chiavara, Esq.
Counsel

UNITIL ENERGY SYSTEMS, INC.

By:_____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY UTILITIES

By:_ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

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

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP. D/B/A LIBERTY UTILITIES

By:_ _____ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

NEW HAMPSHIRE ELECTRIC COOPERATIVE

By:_____ December 3, 2020
Mark Dean, Esq.

PUBLIC SERVICE COMP ANY OF NEW HAMPSHIRE D/B/ A EVERSOURCE ENERGY

By:_____ December 3, 2020
Jessica Chiavara, Esq.
Counsel

UNITIL ENERGY SYSTEMS, INC.

By:_____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY UTILITIES

By:_ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

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

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP. D/B/A LIBERTY UTILITIES

By:_____ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

NEW HAMPSHIRE ELECTRIC COOPERATIVE

By:_____ December 3, 2020
Mark Dean, Esq.

PUBLIC SERVICE COMP ANY OF NEW HAMPSHIRE D/B/ A EVERSOURCE ENERGY

By:_____ December 3, 2020
Jessica Chiavara, Esq.
Counsel

UNITIL ENERGY SYSTEMS, INC.

By: _____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY UTILITIES

By:_ December 3, 2020
Michael Sheehan, Esq.
Senior Counsel

NORTHERN UTILITIES, INC.

By:_____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

OFFICE OF THE CONSUMER ADVOCATE

By:_____ December 3, 2020
D. Maurice Kreis, Esq.
Consumer Advocate

THE WAY HOME

By:___/s/ Raymond Burke, Esq._____ December 3, 2020
Raymond Burke, Esq.
New Hampshire Legal Services

CONSERVATION LAW FOUNDATION

By:_____ December 3, 2020
Nicholas Krakoff, Esq.
Staff Attorney

CLEAN ENERGY NEW HAMPSHIRE

By:_____ December 3, 2020
Madeleine Mineau
Executive Director

SOUTHERN NEW HAMPSHIRE SERVICES, INC.

By:_____ December 3, 2020
Ryan Clouthier
Deputy Director

NORTHERN UTILITIES, INC.

By:_____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

OFFICE OF THE CONSUMER ADVOCATE

By:_____ December 3, 2020
D. Maurice Kreis, Esq.
Consumer Advocate

THE WAY HOME

By:___/s/ Raymond Burke, Esq._____ December 3, 2020
Raymond Burke, Esq.
New Hampshire Legal Services

CONSERVATION LAW FOUNDATION

By:_____ December 3, 2020
Nicholas Krakoff, Esq.
Staff Attorney

CLEAN ENERGY NEW HAMPSHIRE

By:_____ December 3, 2020
Madeleine Mineau
Executive Director

SOUTHERN NEW HAMPSHIRE SERVICES, INC.

By:_____ December 3, 2020
Ryan Clouthier

NORTHERN UTILITIES, INC.

By:_____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

OFFICE OF THE CONSUMER ADVOCATE

By:_____ December 3, 2020
D. Maurice Kreis, Esq.
Consumer Advocate

THE WAY HOME

By:___/s/ Raymond Burke, Esq._____ December 3, 2020
Raymond Burke, Esq.
New Hampshire Legal Services

CONSERVATION LAW FOUNDATION

By:__ _____ December 3, 2020
Nicholas Krakoff, Esq.
Staff Attorney

CLEAN ENERGY NEW HAMPSHIRE

By:_____ December 3, 2020
Madeleine Mineau
Executive Director

SOUTHERN NEW HAMPSHIRE SERVICES, INC.

By:_____ December 3, 2020
Ryan Clouthier
Deputy Director

NORTHERN UTILITIES, INC.

By:_____ December 3, 2020
Patrick H. Taylor, Esq.
Senior Counsel

OFFICE OF THE CONSUMER ADVOCATE

By:_____ December 3, 2020
D. Maurice Kreis, Esq.
Consumer Advocate

THE WAY HOME

By:___/s/ Raymond Burke, Esq._____ December 3, 2020
Raymond Burke, Esq.
New Hampshire Legal Services

CONSERVATION LAW FOUNDATION

By:_____ December 3, 2020
Nicholas Krakoff, Esq.
Staff Attorney

CLEAN ENERGY NEW HAMPSHIRE

By:_____ December 3, 2020
Madeleine Mineau
Executive Director

SOUTHERN NEW HAMPSHIRE SERVICES, INC.

By:_____ December 3, 2020
Ryan Clouthier

By:_____ December 3, 2020
Nicholas Krakoff, Esq.
Staff Attorney

CLEAN ENERGY NEW HAMPSHIRE

By:_____ December 3, 2020
Elijah Emerson
Attorney

SOUTHERN NEW HAMPSHIRE SERVICES, INC.

By:_____ December 3, 2020
Ryan Clouthier
Deputy Director

**TABLE OF ATTACHMENTS**

ATTACHMENT A: Electric and Natural Gas Program Annual Savings by Utility

ATTACHMENT B: Eversource Budget Adjustments

ATTACHMENT C: Eversource SBC Rates

ATTACHMENT D: Unitil SBC Rates

ATTACHMENT E: NHEC Energy Efficiency SBC Rates and Sales Forecast

**TABLE OF ATTACHMENTS**

ATTACHMENT A: Electric and Natural Gas Program Annual Savings by Utility

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Savings |
|---|---|---|---|---|---|
| **Electric Annual Savings (MWh)** | | | | | |
| Eversource | 106,869 | 118,024 | 135,058 | **359,951** | 76% |
| Liberty Electric | 12,627 | 13,520 | 15,025 | **41,172** | 9% |
| NHEC | 8,805 | 7,825 | 7,157 | **23,788** | 5% |
| Unitil Electric | 14,785 | 16,035 | 18,887 | **49,706** | 10% |
| **Total** | **143,085** | **155,404** | **176,127** | **474,616** | **100%** |

| | 2021 | 2022 | 2023 | 2021-2023 | Percentage of 3-year Savings |
|---|---|---|---|---|---|
| **Natural Annual Savings (MMBtu)** | | | | | |
| Liberty Gas | 141,953 | 178,869 | 205,385 | **526,206** | 75% |
| Unitil Gas | 42,299 | 58,706 | 78,854 | **179,859** | 25% |
| **Total** | **184,252** | **237,575** | **284,239** | **706,065** | **100%** |

ATTACHMENT B: Eversource Budget Adjustments

| | | 2021 | 2022 | 2023 | 2021-2023 |
|---|---|---|---|---|---|
| **Eversource Budget ($000)** | | | | | |
| C&I and Municipal | Sept. 1 Filing | $39,239 | $54,573 | $72,401 | **$166,213** |
| | Settlement | $38,008 | $49,356 | $61,221 | **$148,585** |
| | % Change | -3.1% | -9.6% | -15.4% | **-10.6%** |
| Residential | Sept. 1 Filing | $17,144 | $16,998 | $17,655 | **$51,796** |
| | Settlement | $18,904 | $19,428 | $20,918 | **$59,250** |
| | % Change | 10.3% | 14.3% | 18.5% | **14.4%** |
| Income-Eligible | Sept. 1 Filing | $14,096 | $17,893 | $22,514 | **$54,502** |
| | Settlement | $13,786 | $16,662 | $19,897 | **$50,345** |
| | % Change | -2.2% | -6.9% | -11.6% | **-7.6%** |
| **Total** | Sept. 1 Filing | **$70,478** | **$89,464** | **$112,569** | **$272,511** |
| | Settlement | **$70,699** | **$85,446** | **$102,035** | **$258,181** |
| | % Change | **0.3%** | **-4.5%** | **-9.4%** | **-5.3%** |

ATTACHMENT C: Eversource SBC Rates

| | | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| **Eversource Energy Efficiency Portion of SBC Rate** | | | | |
| Commercial | Sept. 1 Filing | $0.01029 | $0.01498 | $0.02062 |
| | Settlement | $0.00960 | $0.01283 | $0.01637 |
| | % Change | -6.7% | -14.4% | -20.6% |
| Residential | Sept. 1 Filing | $0.00651 | $0.00646 | $0.00673 |
| | Settlement | $0.00756 | $0.00815 | $0.00910 |
| | % Change | 16.1% | 26.2% | 35.2% |

| **Eversource Total SBC Rate - 2021** | | | | | |
|---|---|---|---|---|---|
| | | EE Portion | EAP Portion | LBR Portion | Total SBC Rate |
| Commercial | Sept. 1 Filing | $0.01029 | $0.00150 | $0.00091 | **$0.01270** |
| | Settlement | $0.00960 | $0.00150 | $0.00105 | **$0.01215** |
| | % Change | -6.7% | 0.0% | 15.2% | **-4.3%** |
| Residential | Sept. 1 Filing | $0.00651 | $0.00150 | $0.00065 | **$0.00866** |
| | Settlement | $0.00756 | $0.00150 | $0.00080 | **$0.00986** |
| | % Change | 16.1% | 0.0% | 24.0% | **13.9%** |

| **Eversource Total SBC Rate - 2022** | | | | | |
|---|---|---|---|---|---|
| | | EE Portion | EAP Portion | LBR Portion | Total SBC Rate |
| Commercial | Sept. 1 Filing | $0.01498 | $0.00150 | $0.00159 | **$0.01807** |
| | Settlement | $0.01283 | $0.00150 | $0.00154 | **$0.01587** |
| | % Change | -14.4% | 0.0% | -3.2% | **-12.2%** |
| Residential | Sept. 1 Filing | $0.00646 | $0.00150 | $0.00102 | **$0.00898** |
| | Settlement | $0.00815 | $0.00150 | $0.00105 | **$0.01070** |
| | % Change | 26.2% | 0.0% | 2.8% | **19.1%** |

| **Eversource Total SBC Rate - 2023** | | | | | |
|---|---|---|---|---|---|
| | | EE Portion | EAP Portion | LBR Portion | Total SBC Rate |
| Commercial | Sept. 1 Filing | $0.02062 | $0.00150 | $0.00220 | **$0.02432** |
| | Settlement | $0.01637 | $0.00150 | $0.00207 | **$0.01994** |
| | % Change | -20.6% | 0.0% | -5.9% | **-18.0%** |
| Residential | Sept. 1 Filing | $0.00673 | $0.00150 | $0.00118 | **$0.00941** |
| | Settlement | $0.00910 | $0.00150 | $0.00125 | **$0.01185** |
| | % Change | 35.2% | 0.0% | 6.1% | **26.0%** |

ATTACHMENT D: Unitil SBC Rates

| | | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| **Unitil Energy Efficiency Portion of SBC Rate** | | | | |
| Commercial | Sept. 1 Filing | $0.00867 | $0.01070 | $0.01333 |
| | Settlement | $0.00867 | $0.01070 | $0.01333 |
| | % Change | 0.0% | 0.0% | 0.0% |
| Residential | Sept. 1 Filing* | $0.00615 | $0.00773 | $0.00829 |
| | Settlement | $0.00615 | $0.00773 | $0.00829 |
| | % Change | 0.0% | 0.0% | 0.0% |

*Reflects corrected Sept 1 filing submitted on December 1, 2020

| **Unitil Total SBC Rate - 2021** | | | | | |
|---|---|---|---|---|---|
| | | **EE Portion** | **EAP Portion** | **LBR Portion** | **Total SBC Rate** |
| Commercial | Sept. 1 Filing | $0.00867 | $0.00150 | $0.00129 | **$0.01146** |
| | Settlement | $0.00867 | $0.00150 | $0.00128 | **$0.01145** |
| | % Change | 0.0% | 0.0% | -0.8% | **-0.8%** |
| Residential | Sept. 1 Filing | $0.00615 | $0.00150 | $0.00120 | **$0.00885** |
| | Settlement | $0.00615 | $0.00150 | $0.00120 | **$0.00885** |
| | % Change | 0.0% | 0.0% | 0.0% | **0.0%** |

| **Unitil Total SBC Rate - 2022** | | | | | |
|---|---|---|---|---|---|
| | | **EE Portion** | **EAP Portion** | **LBR Portion** | **Total SBC Rate** |
| Commercial | Sept. 1 Filing | $0.01070 | $0.00150 | $0.00121 | **$0.01341** |
| | Settlement | $0.01070 | $0.00150 | $0.00120 | **$0.01340** |
| | % Change | 0.0% | 0.0% | -0.8% | **-0.8%** |
| Residential | Sept. 1 Filing | $0.00773 | $0.00150 | $0.00145 | **$0.01068** |
| | Settlement | $0.00773 | $0.00150 | $0.00145 | **$0.01068** |
| | % Change | 0.0% | 0.0% | 0.0% | **0.0%** |

| **Unitil Total SBC Rate - 2023** | | | | | |
|---|---|---|---|---|---|
| | | **EE Portion*** | **EAP Portion** | **LBR Portion** | **Total SBC Rate** |
| Commercial | Sept. 1 Filing | $0.01333 | $0.00150 | $0.00130 | **$0.01613** |
| | Settlement | $0.01333 | $0.00150 | $0.00129 | **$0.01612** |
| | % Change | 0.0% | 0.0% | -0.8% | **-0.8%** |
| Residential | Sept. 1 Filing* | $0.00829 | $0.00150 | $0.00186 | **$0.01165** |
| | Settlement | $0.00829 | $0.00150 | $0.00186 | **$0.01165** |
| | % Change | 0.0% | 0.0% | 0.0% | **0.0%** |

*Reflects corrected Sept 1 filing submitted on December 1, 2020

ATTACHMENT E: NHEC Energy Efficiency SBC Rates and Sales Forecast

| | | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| NHEC Energy Efficiency Portion of SBC Rate | | | | |
| Commercial | Sept. 1 Filing | 0.00906 | 0.01036 | 0.01004 |
| | Settlement | 0.00818 | 0.01050 | 0.01000 |
| | % change | -10% | 1% | -0.4% |
| Residential | Sept. 1 Filing | 0.00838 | 0.00873 | 0.00853 |
| | Settlement | 0.00761 | 0.00848 | 0.00825 |
| | % change | -9% | -3% | -3% |

| | | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| NHEC Sales Forecast (MWH) | | | | |
| Commercial | Sept. 1 Filing | 299,137 | 299,137 | 299,137 |
| | Settlement | 282,441 | 295,141 | 300,544 |
| | % change | -6% | -1% | 0.5% |
| Residential | Sept. 1 Filing | 469,460 | 469,460 | 469,460 |
| | Settlement | 490,242 | 483,522 | 485,967 |
| | % change | 4% | 3% | 4% |

**SSTATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 20-092**

**GAS AND ELECTRIC UTILITIES**

**2021-2023 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN**

**Order Approving Short-Term Extension of 2020 Energy Efficiency Programs and System Benefits Charge Rate**

**O R D E R N O. 26,440**

**December 29, 2020**

**APPEARANCES:** Jessica Chiavara, Esq., for Public Service Company of New Hampshire d/b/a Eversource Energy; Patrick Taylor, Esq., for Northern Utilities, Inc., and Unitil Energy Systems; Michael J. Sheehan, Esq., for Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities, Inc., and for Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities; Mark W. Dean, Esq., for New Hampshire Electric Cooperative; New Hampshire Legal Assistance, by Raymond Burke, Esq., for The Way Home; Ryan Clouthier, for Southern New Hampshire Services; Craig A. Wright for the New Hampshire Department of Environmental Services; Nicholas A. Krakoff, Esq., for Conservation Law Foundation; Primmer, Piper, Eggleston & Cramer PC, by Elijah D. Emerson, Esq,, for Clean Energy New Hampshire; Stefan Koester, for Acadia Center; Office of the Consumer Advocate, by D. Maurice Kreis, Esq., and Christa Shute, Esq., for residential ratepayers; and Paul B. Dexter, Esq., and Brian D. Buckley, Esq., for the Staff of the Public Utilities Commission.

In this Order, the Commission approves a continuation of the current System Benefits Charge rate and structure of the existing energy efficiency programs until a final order regarding the proposed 2021-2023 Statewide Energy Efficiency Plan is issued. We expect that final order will be issued within eight weeks.

## I. PROCEDURAL HISTORY

In 2016, the Commission approved an Energy Efficiency Resource Standard (EERS), which established a comprehensive framework for New Hampshire's ratepayer-funded energy efficiency programs. *Energy Efficiency Resource Standard*, Order No. 25,938 (August 2, 2016). The Commission approved the first statewide three year energy efficiency plan under the EERS

framework, covering the years 2018-2020, in early 2018. *Public Service Company of New Hampshire*, Order No. 26,095 (January 2, 2018).

On September 1, 2020, the Joint Utilities[1] filed a statewide energy efficiency plan proposing programs and funding levels for 2021-2023 (2021-23 Plan). On October 29, the Commission Staff (Staff), the Office of the Consumer Advocate (OCA), the Department of Environmental Services (DES), and Clean Energy New Hampshire (CENH) pre-filed direct testimony. On December 3, 2020, the Joint Utilities, OCA, and CENH pre-filed rebuttal testimony. That same day, the Joint Utilities, OCA, DES, Conservation Law Foundation (CLF), The Way Home (TWH), Southern New Hampshire Services (SNHS), and CENH (collectively, the Settling Parties), filed a settlement agreement which called for approval of the 2021-23 Plan with some modifications (Settlement Agreement). Acadia Center and DES both filed letters supporting the Settlement Agreement. Hearings were held to consider the proposed 2021-23 Plan, as amended by the Settlement Agreement, on December 10, 14, 16, 21, and ending on December 22.

The 2021-23 Plan, Settlement Agreement, testimony, exhibits, and other docket filings except any information for which confidential treatment is requested of or granted by the Commission, are posted at: https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-092.html.

## II. SETTLEMENT AGREEMENT AND EXTENSION REQUEST

The Settlement Agreement purports to resolve all issues relating to the 2021-23 Plan which were raised in this proceeding. Through the Settlement Agreement, the Settling Parties agreed to modify various components of the 2021-23 Plan, including the energy savings targets,

[1] The Joint Utilities are Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities; New Hampshire Electric Cooperative, Inc.; Public Service Company of New Hampshire d/b/a Eversource Energy; Unitil Energy Systems, Inc.; Liberty Utilities (EnergyNorth Natural Gas) Corp d/b/a Liberty Utilities; and Northern Utilities, Inc.

the System Benefits Charge (SBC) rates and budgets, the lost base revenue calculation methodology, plan modification and reporting procedures, budget and SBC rate modification procedures, creation of a stakeholder advisory council, and treatment of certain savings assumptions such as non-energy impacts, net-to-gross figures, and realization rates. The 2021-23 Plan, as modified by the Settlement Agreement, requested rates effective as of January 1, 2021. Settlement Agreement at 4.

The cover letter accompanying the Settlement Agreement requested that, if the Commission is unable to approve the Settlement Agreement prior to the end of the 2020 calendar year, the Commission "extend the current funding and structure of the current EERS plan (as modified and updated by the latest technical reference manual), until the Commission is able to issue a comprehensive Order in this docket in 2021." The cover letter cited prevention of any disruptions to ongoing energy efficiency program work currently underway or already scheduled as the basis for that extension request.

## III. COMMISSION ANALYSIS

The Commission encourages parties to attempt to reach a settlement of issues through negotiation and compromise, as it is an opportunity for creative problem solving, allows the parties to reach a result more in line with their expectations, and is often a more expedient alternative to litigation. *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH*, Order No. 25,202 at 18 (March 10, 2011); *see* RSA 541-A:31, V(a), :38. Even where all parties join a settlement agreement, however, the Commission cannot approve it without independently determining that the result comports with applicable standards. *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH*, Order No. 24,972 at 48 (May 29, 2009). We must analyze settlements to ensure that a just and reasonable result has been reached. *Id*.

The 2021-23 Plan, as modified by the Settlement Agreement, requests significant programmatic and rate changes as compared to the prior triennial plan. 2021-23 Plan at 17; Settlement Agreement, Attachment B. The final day of hearings in this matter was not held until December 22, 2020, and the record yet remains open to receive additional evidence. Given the complexity, importance, and inter-related nature of the many issues presented by the 2021-23 Plan and the Settlement Agreement, we do not believe sufficient time remains available to fully consider and resolve this matter prior to the requested rates effective date of January 1, 2021.

The current energy efficiency programs, electric energy efficiency budgets, and SBC rates were approved until December 31, 2020.[2] Order No. 26,323 at 6 (December 31, 2019). Citing the need to prevent disruption to ongoing energy efficiency program work currently underway or already scheduled, the Settling Parties requested an extension of program funding and the current EERS plan structure until the Commission is able to issue a comprehensive order on the 2021-23 Plan, if that order cannot be issued by December 31. We agree that such disruption would be detrimental to the energy efficiency contractor network and ratepayers who have already invested resources in planned program participation. To avoid such adverse impacts, and to ensure that the Joint Utilities are authorized to continue their support for the statewide energy efficiency programs after December 31, 2020, and until new programs and rates are approved, we grant the requested extension of the current program funding levels and EERS plan structure into 2021 and until a final order is issued in this proceeding. We currently expect that final order will be issued within eight weeks from the date of this order.

[2] Budgets and funding associated with the proposed gas programs were approved in Order No. 26,419 (October 30, 2020) and Order No. 26,420 (October 30, 2020).

**Based upon the foregoing, it is hereby**

**ORDERED**, that the request for extension of the 2020 energy efficiency program structure and System Benefit Charge rate beyond December 31, 2020, and until the Commission is able to issue a comprehensive order in this proceeding is APPROVED.

By order of the Public Utilities Commission of New Hampshire this twenty-ninth day of December, 2020

Dianne Martin
Chairwoman

Kathryn M. Bailey
Commissioner

Attested by:

Debra A. Howland
Executive Director

# Service List - Docket Related

Docket#: 20-092

Printed: 12/29/2020

Email Addresses

---

ExecutiveDirector@puc.nh.gov
asbury@unitil.com
roshan.bhakta@eversource.com
kelly@cleanenergynh.org
brian.buckley@puc.nh.gov
bill.bullock@eversource.com
rburke@nhla.org
john.butler@eversource.com
carroll@unitil.com
richard.chagnon@puc.nh.gov
brandy.chambers@eversource.com
jessica.chiavara@eversource.com
rclouthier@snhs.org
gary.cronin@puc.nh.gov
kristi.davie@eversource.com
mdean@mdeanlaw.net
paul.dexter@puc.nh.gov
downesm@unitil.com
kimberly.dragoo@libertyutilities.com
jay.dudley@puc.nh.gov
tracy.dyke-redmond@eversource.com
Stephen.Eckberg@puc.nh.gov
steven.elliott@eversource.com
eemerson@primmer.com
tom.frantz@puc.nh.gov
tomas.fuller@eversource.com
genestj@unitil.com
michael.goldman@eversource.com
gouldingc@unitil.com
dhill@energyfuturesgroup.com
miles.ingram@eversource.com
jarvis@unitil.com
maureen.karpf@libertyutilities.com
nkrakoff@clf.org
donald.kreis@oca.nh.gov
marc.lemenager@eversource.com
elevin@veic.org

jmarks@acadiacenter.org
mcdonald@optenergy.com
nelson.medeiros@eversource.com
frank.melanson@eversource.com
erica.menard@eversource.com
madeleine@cleanenergynh.org
Mosenthal@OptEnergy.com
elizabeth.nixon@puc.nh.gov
amanda.noonan@puc.nh.gov
ocalitigation@oca.nh.gov
rebecca.ohler@des.nh.gov
palma@unitil.com
katherine.peters@eversource.com
tina.poirier@libertyutilities.com
ralph.prahl@gmail.com
bryant.robinson@eversource.com
Melissa.Samenfeld@libertyutilities.com
michael.sheehan@libertyutilities.com
Christa.Shute@oca.nh.gov
david.simek@libertyutilities.com
karen.sinville@libertyutilities.com
christopher.skoglund@des.nh.gov
skumatz@serainc.com
eric.stanley@libertyutilities.com
taylorp@unitil.com
heather.tebbetts@libertyutilities.com
stower@nhla.org
Jacqueline.Trottier@puc.nh.gov
jvanrossum@clf.org
david.wiesner@puc.nh.gov
kiersten.williams@eversource.com
wirtino@comcast.net
woodsca@nhec.com

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 20-092**

**ELECTRIC AND GAS UTILITIES**

**2021-2023 Triennial Energy Efficiency Plan**

**Order Reopening Record**

**O R D E R N O. 26,513**

**September 1, 2021**

A hearing in the above captioned matter was held over the course of five-days between December 10, 2020, and December 22, 2020, wherein the Commission heard testimony relating to the merits of the Joint Utilities' 2021-23 Triennial Plan filing and a settlement agreement reached between the parties. In addition to testimony, the Commission received 46 exhibits, including three responses to record requests made by Commissioners. Upon the conclusion of the hearing, the record in this matter was closed and the Commission took the matter under advisement. Subsequent to the closing of the record, one commissioner departed and a new commissioner was appointed.

New commissioners must review the record before participating in the decision on a pending matter. The new Commissioner has now completed his review of the record. The new Commissioner did not sit during the hearings and did not have the opportunity to ask questions. Therefore, the Commission will issue a series of record requests in the next two weeks. The Commissioners act on their own motion to reopen the record and find reopening the record and

taking additional evidence will enhance their ability to resolve matters in this proceeding.

Pursuant to Puc 203.30(a), "The commission shall, on its own motion or at the request of a party, authorize filing of exhibits after the close of a hearing if the commission finds that late submission of additional evidence will enhance its ability to resolve the matter in dispute." Puc 203.30(c) further requires the Commission to consider the probative value of any new exhibit against the parties' right of cross examination.

To the extent the text of procedural rule Puc 203.30 constrains the Commission's ability to re-open the record and schedule additional hearings, we waive the provisions of Puc 203.30 as authorized by Puc 201.05. The Commissioners find that such a waiver serves the public interest and will not disrupt the orderly and efficient resolution of matters before the Commission. Our finding that waiver is in the public interest is based on the purpose of Puc 203.30, which is to allow for the re-opening of a record prior to the issuance of a decision on the merits to receive relevant, material, and non-duplicative evidence necessary for a full and fair consideration of the issues. This will still be satisfied if an additional hearing is scheduled. And, by scheduling an additional hearing, the Commission ensures the parties' right of cross examination pursuant to RSA 541-A:33, IV is protected.

With regard to the Office of the Consumer Advocate's letter dated July 26, 2021, requesting that a status conference be held in this matter, we construe the letter as a motion to schedule a status conference. In light of the procedure and further hearing set forth herein, we deny the Office of the Consumer Advocate's request at this time.

The Commission does not intend to re-litigate this matter for itself and this Commission action is not an invitation for the parties to propound additional exhibits beyond the scope of the Commissioner's post-hearing record requests, or to seek to re-litigate this matter. The Commission further determines that a full and fair proceeding demands a supplemental hearing to examine this additional evidence; therefore, the Commission will schedule another hearing date to occur approximately two weeks after the receipt of complete responses to the record requests.

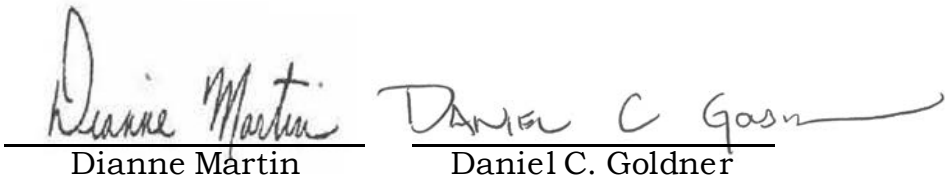
**Based upon the foregoing, it is hereby**

**ORDERED**, that the record in this matter is reopened to receive responses to record requests as discussed in the body of this order; and it is

**FURTHER ORDERED**, that a hearing to examine this additional evidence will be scheduled to occur approximately two weeks after complete responses to the record requests have been filed, as discussed in the body of this order; and it is

**FURTHER ORDERED**, that the Office of the Consumer Advocate's request for a status conference is DENIED.

By order of the Public Utilities Commission of New Hampshire this first day of September, 2021.



| Dianne Martin | Daniel C. Goldner |
| --- | --- |
| Chairwoman | Commissioner |

# Service List - Docket Related

Docket# : 20-092

Printed: 9/1/2021

Email Addresses

---

ClerksOffice@puc.nh.gov
asbury@unitil.com
roshan.bhakta@eversource.com
kelly@cleanenergynh.org
brian.d.buckley@energy.nh.gov
bill.bullock@eversource.com
rburke@nhla.org
john.butler@eversource.com
carroll@unitil.com
richard.t.chagnon@energy.nh.gov
brandy.chambers@eversource.com
jessica.chiavara@eversource.com
rclouthier@snhs.org
gary.m.cronin@energy.nh.gov
kristi.davie@eversource.com
mdean@mdeanlaw.net
paul.b.dexter@energy.nh.gov
downesm@unitil.com
kimberly.dragoo@libertyutilities.com
jay.e.dudley@energy.nh.gov
tracy.dyke-redmond@eversource.com
stephen.r.eckberg@energy.nh.gov
steven.elliott@eversource.com
eemerson@primmer.com
sam@cleanenergynh.org
thomas.c.frantz@energy.nh.gov
tomas.fuller@eversource.com
genestj@unitil.com
michael.goldman@eversource.com
gouldingc@unitil.com
dhill@energyfuturesgroup.com
miles.ingram@eversource.com
jarvis@unitil.com
maureen.karpf@libertyutilities.com
nkrakoff@clf.org
donald.kreis@oca.nh.gov
marc.lemenager@eversource.com
elevin@veic.org
jmarks@acadiacenter.org
mcdonald@optenergy.com
nelson.medeiros@eversource.com
frank.melanson@eversource.com

erica.menard@eversource.com
Mosenthal@OptEnergy.com
elizabeth.r.nixon@energy.nh.gov
amanda.o.noonan@energy.nh.gov
ocalitigation@oca.nh.gov
rebecca.ohler@des.nh.gov
palma@unitil.com
katherine.peters@eversource.com
tina.poirier@libertyutilities.com
ralph.prahl@gmail.com
bryant.robinson@eversource.com
Melissa.Samenfeld@libertyutilities.com
michael.sheehan@libertyutilities.com
david.simek@libertyutilities.com
karen.sinville@libertyutilities.com
christopher.skoglund@des.nh.gov
skumatz@serainc.com
eric.stanley@libertyutilities.com
taylorp@unitil.com
heather.tebbetts@libertyutilities.com
stower@nhla.org
jacqueline.m.trottier@energy.nh.gov
jvanrossum@clf.org
david.k.wiesner@energy.nh.gov
kiersten.williams@eversource.com
wirtino@comcast.net
woodsca@nhec.com

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

ELECTRIC AND GAS UTILITIES

2021-2023 Triennial Energy Efficiency Plan

Docket No. DE 20-092

**MOTION FOR RECONSIDERATION AND CLARIFICATION OF ORDER NO. 26,513**

Pursuant to New Hampshire Code of Administrative Rules Puc 203.07 and RSA 541:3, 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; Unitil Energy Systems, Inc. (UES); Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty; and Northern Utilities, Inc. (Northern) (collectively, the "NH Utilities") hereby move for clarification and/or reconsideration of Order No. 26,513 (September 1, 2021) (the "Order") issued by the New Hampshire Public Utilities Commission (the "Commission") in the instant docket. Collectively, the NH Utilities have certain concerns about the procedural steps delineated in the Order and respectfully request further guidance and/or consideration of the due process concerns. If not clarified or reconsidered, the Order creates a level of uncertainty that needs to be addressed for the NH Utilities to comply with its terms in a meaningful and timely manner. In support of this motion, the NH Utilities state as follows:

## I. BACKGROUND AND PROCEDURAL HISTORY

The Commission established the process for implementing New Hampshire's Energy Efficiency Resource Standard ("EERS") in Order No. 25,932 (August 2, 2016) (the "Planning Order"), requiring the state's electric and natural gas utilities, as administrators of the programs offered to the public to meet the EERS, to "prepare the triennial EERS plans in collaboration

with stakeholders and the EESE Board as Advisory Council." Planning Order at 10-11. In Docket No. DE 17-136, the Commission approved the first triennial plan with an implementation period of the EERS for years 2018-2020. (Order No. 26,095 (January 2, 2018)). The 2018-2020 Plan was updated for each of the years 2019 and 2020.

Subsequently, the Commission issued an Order *nisi* opening the instant docket for consideration of the 2021-2023 New Hampshire Statewide Energy Efficiency Plan (the "Proposed Plan"). Order No. 26,375 (June 30, 2020). The Proposed Plan was filed on September 1, 2020, after a nearly year-long stakeholder process and discovery took place in September and October 2020. Commission staff (now staff of the New Hampshire Department of Energy, or "DOE"), the Office of the Consumer Advocate ("OCA"), and several intervenors filed testimony on October 29, 2020. Further discovery was conducted on the content of the testimony; settlement discussions were held on November 19 and 20; and a settlement agreement signed or supported by all parties except Commission staff was submitted on December 3, 2020, along with rebuttal testimony by the OCA and by the NH Utilities. A hearing was held on the settlement agreement on December 10, 2020, which was extended to December 14, 16, 21, and 22, 2020. Three record requests were made of the NH Utilities during the course of those hearings to accompany the 46 other exhibits provided as part of the record supporting the settlement agreement's approval. Thus, the record in this proceeding is fulsome.

On December 29, 2020, in lieu of a final order in this docket, the Commission issued Order No. 26,440 granting a temporary "extension of the 2020 energy efficiency program structure and System Benefit Charge rate beyond December 31, 2020" until a final order could be issued, which at that time was estimated by the Commission to occur within eight weeks. (Order No. 26,440, at 5). Since the conclusion of the hearings and issuance of Order No. 26,440,

the composition of the Commission has changed, with one Commissioner retiring and a new Commissioner appointed. Also, the vast majority of Commission staff was reassigned to the newly formed DOE, which transition took effect on July 1, 2021. The NH Utilities recognize that this unique confluence of circumstances has created an unusual situation for all parties involved as well as the Commission.

On September 1, 2021, the Commission issued the Order reopening the record to allow for a "series of record requests [to be issued] in the next two weeks." Although a deviation from past practice, the NH Utilities recognize that the issuance of additional record requests may reasonably arise from the fact that the new Commissioner did not sit during the hearings and is seeking an opportunity to ask questions to help inform his decision. (Order 26,513 at 1).

The Order also stated that an additional hearing would be scheduled to occur "approximately two weeks after the receipt of complete responses to the record requests," which is a necessary prerequisite for the incorporation of new evidence into the record for the proceeding. (Order at 3). However, the Order further stated that the additional hearing is not "an invitation for the parties to propound additional exhibits beyond the scope of the Commissioner's post-hearing record requests, or to seek to re-litigate this matter." *Id*. For the reasons stated below, this severe limitation on the scope of the hearing following the submission of the responses to record requests creates some concern for the NH Utilities regarding the application of N.H. Code Admin Rules Puc 203.30 and 201.05, in combination with RSA 541-A:31, and due process principles. Therefore, the NH Utilities respectfully request clarification and/or reconsideration of certain, limited procedural issues.

## II. LEGAL STANDARD

Pursuant to RSA 541:3, the Commission may grant rehearing or reconsideration where a party states good reason for such relief. *Public Service Company of New Hampshire*, Order No. 25,361 (May 11, 2012) at 4. Good reason may be shown by identifying specific matters that were overlooked or mistakenly conceived by the deciding tribunal. (*Id*. at 4-5). In the unusual circumstances that exist with a foundational transformation of the Commission's organization; the creation of DOE; the appointment of a new commissioner; and a deviation from past practice involving the reopening of the record, good cause exists to assure that due process concerns are fully addressed to protect the due process rights of all parties participating in matters before the Commission.

## III. LEGAL CONSIDERATIONS

The Order states that, because newly appointed Commissioner Goldner did not sit for the hearings in this docket, reopening the record pursuant to Puc 203.30(a) for a series of record requests from that Commissioner is appropriate. (Order at 1-2). The NH Utilities agree that unusual circumstances exist and that it is imperative that Commissioner Goldner have the information necessary to make an informed decision. At the same time, the NH Utilities are concerned that, typically, reopening the record for limited purposes after a robust adjudicatory process has occurred can have the potential to create due process concerns for the final deliberation of issues. These concerns are outlined as follows:

First, Puc 203.30(a) allows the Commission to reopen the record to "*authorize filing of exhibits* after the close of a hearing." (emphasis added). Pursuant to Puc 203.22, *parties* are to present evidence by filing exhibits. Thus, typically, it is the parties that bear the obligation for creating and providing evidence that will be included as exhibits for the record, upon which the

Commission will base its decisions. A concern here is that the Commission, with the obligation to render an impartial decision on the merits, may request the production of information that may be unduly narrow and therefore not provide the opportunity to present – at this late date – a full picture of the merits of an issue raised. Conversely, potentially broader implications not previously raised in the proceeding may be invoked, which would not get the full benefit of an adjudicatory process given the narrowly framed scope of the hearing that will be afforded to that information according to the Order.

Second, reopening the record pursuant to Puc 203.30(a) typically does not apply to responses to record requests like those contemplated in the Order. Record requests are not typically created or submitted as late-filed exhibits of new information to the docket, but rather arise for the purpose of supplementing witness testimony at hearing. During the hearing, the record request is specified; parties have an opportunity to object to it or clarify what information is sought and for what purpose; and, the parties then determine what information will be provided in response prior to such response being admitted as an exhibit to the record. Here, the Order does not indicate whether the record requests will be tethered to any part of the existing record, including testimony and responses to record requests, nor does it limit those requests to the existing issues or scope of the docket. Instead, the Order indicates that questions will be forthcoming without specifying if some, all, or perhaps none of the answers will be treated as exhibits and, if only some will be entered, how to determine which to admit. This again raises the concern that a narrowly framed hearing on the responses to the record requests may not provide adequate due process to the NH Utilities or the other parties in the context of the overall proceeding.

Third, the Order asserts that "by scheduling an additional hearing, the Commission ensures the parties' right of cross examination pursuant to RSA 541-A:33, IV is protected" (Order at 2). The NH Utilities appreciate the provision for an additional hearing on the record request responses, as a critical component of this procedural path. However, the rights of the parties to the docket may not be fully protected given that the Order restricts the parties from "propound[ing] additional exhibits beyond the scope of the Commissioner's post-hearing record requests, or seek[ing] to relitigate this matter." (Order at 3). The hearing is, therefore, potentially limited first by the way that record requests are stated, and then second by what the Commission determines is or is not within the scope of those record requests, after the requests are submitted. Thus, although parties could submit exhibits they feel germane or necessary in response to the record requests, those exhibits apparently could be excluded at the Commission's discretion for being outside the scope of the post-hearing record requests, thereby restricting the parties' "[o]pportunity . . . to respond and present evidence and argument on all issues involved" as required by RSA 541-A:31 IV.

An additional concern relates to the right to cross examination. In this regard, the Order states that Puc 203.30(c) "requires the Commission to consider probative value of any new exhibit against the parties' right of cross examination." (Order at 2). But this excerpt from Puc 203.30(c) omits the majority of the language stated in 203.30(c). Puc 203.30(c) states in full:

> In determining whether to admit the late filed exhibit into the record, the commission shall consider:
>
> (1) The probative value of the exhibit; and
>
> (2) Whether the opportunity to submit a document impeaching or rebutting the late filed exhibit without further hearing shall adequately protect the parties' right of cross examination pursuant to RSA 541-A:33, IV.

This rule is intended to protect the right of cross-examination possibly at the expense of admitting a late exhibit. Subpart (1) of this rule addresses whether, in the case of an exhibit with sufficient probative value, a document impeaching such an exhibit is sufficient for cross-examination purposes without having an additional hearing. This cannot be interpreted to mean that an exhibit's probative value should be weighed *against* a party's right to cross examine, as to do so would inherently create the possibility for a violation of due process and is contrary to the notice requirement of RSA 541-A:30, IV, that "opportunity shall be afforded all parties to respond and present evidence and argument on all issues involved." With the Order's restrictive interpretation of Puc 203.30(c), it is not clear that the rights of the NH Utilities in having the opportunity to rebut the new evidence is protected.

## IV. REQUEST FOR CLARIFICATION AND/OR RECONSIDERATION

The NH Utilities welcome the opportunity to provide additional information to assist in informing a decision by the Commission on the merits of this proceeding and certainly recognize that the unusual circumstances that have occurred warrant the submission of information to answer any questions the Commission may have. However, the NH Utilities have the following specific concerns and requests:

(1) Time is of the essence. The NH Utilities have been operating the NHSaves programs under the temporary order with a lower funding amount than proposed by the settlement agreement pending before the Commission, which has resulted in adjusted program implementation and correspondingly lower energy savings achievements. Planned program ramp-up has not taken place in 2021, and some planned offerings have been paused or were not initiated. The NH Utilities are concerned that, whatever happens next, it is exceedingly important that a final

decision on the merits of the settlement agreement be issued as soon as possible and that any additional process afforded in this docket be conducted with consideration of the unfortunate delay that has already occurred and the associated ramifications for the implementation of the settlement agreement.

(2) Adequate Scope for Additional Hearing. The scope of the post-response hearing on the record requests should provide a reasonable and adequate opportunity for the NH Utilities to present information deemed by the NH Utilities as necessary to support, rebut or otherwise address any new issues, requirements or implications raised by the record requests. Therefore, the Commission should define the scope of the subsequent hearing after accepting comment from the NH Utilities and other parties as to the appropriate scope and process for the subsequent hearing to assure that all issues germane to the final decision are afforded due process of law in the proceeding.

WHEREFORE, the NH Utilities respectfully request that the Commission:

A. Grant reconsideration and/or clarification as provided above; and

B. Grant such further relief as is just and equitable.

Respectfully submitted,

The NH Utilities: 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; Unitil Energy Systems, Inc.; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty; and Northern Utilities, Inc.

Date: September 16, 2021 By: _____ o/b/o the NH Utilities

Jessica A. Chiavara
Counsel
Public Service Company of New Hampshire d/b/a Eversource Energy
780 N. Commercial Street, P.O. Box 330
Manchester, NH 03101
603-634-2972
Jessica.chiavara@eversource.com

**STATE OF NEW HAMPSHIRE**
**PUBLIC UTILITIES COMMISSION**

**DE 20-092**

**ELECTRIC AND GAS UTILITIES**

**2021-2023 Triennial Energy Efficiency Plan**

**Order of Suspension**

**O R D E R N O. 26,520**

**September 21, 2021**

In this order the Commission suspends Commission Order No. 26,513 pending further consideration of the recent motions for rehearing. Accordingly, the record in this proceeding will remain closed and the Commission will not issue written record requests as it further considers the motions for rehearing.

## I. BACKGROUND

On September 1, 2020, the Joint Utilities[1] filed the Second Triennial Statewide Energy Efficiency Plan (Plan) for review and approval by the Commission. The Commission subsequently opened this docket to consider the matter under its rules governing contested administrative proceedings. *See* Order of Notice (September 8, 2020). On December 3, 2020, multiple parties to the proceeding filed a proposed Settlement Agreement. Over the course of five days in December 2020, the Commission conducted a hearing to consider the issues noticed, including the proposed Settlement Agreement. In addition to testimony, the Commission received 46 exhibits, including three responses to record requests made by Commissioners. Upon the conclusion of the hearing, the Commission closed the record in this matter and

[1] The "Joint Utilities" are 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; Unitil Energy Systems, Inc. (UES); Liberty Utilities (EnergyNorth Natural Gas) Corp d/b/a Liberty; and Northern Utilities, Inc.

took the matter under advisement. Subsequent to the closing of the record, one commissioner departed the Commission and another commissioner was appointed. The new commissioner conducted a review of the record in order to participate in this docket. The new Commissioner did not sit during the hearings and did not have the opportunity to ask questions. Therefore, on September 1, 2021, the Commission issued Order No. 26,513 reopening the record in this proceeding in order to allow for the filing of responses to record requests issued by the Commission. The Order also stated that an additional hearing would be scheduled after the receipt of supplemental evidence responsive to those requests in order for all parties to respond to the supplemental evidence and present argument.

## II. MOTIONS FOR REHEARING

### A. The Joint Utilities

On September 16, 2021, the Joint Utilities filed a "Motion for Reconsideration and Clarification of Order No. 26,513" pursuant to N.H. of Admin. R. Puc 203.07 and RSA 541:3. The Joint Utilities state that Order No. 26,513 creates a level of uncertainty that needs to be reconsidered or clarified by the Commission.

### B. The Office of the Consumer Advocate & Conservation Law Foundation

On the same day as the Joint Utilities, the Office of the Consumer Advocate ("OCA") and the Conservation Law Foundation ("CLF") filed a Joint Motion for Rehearing of Order No. 26,513. The OCA and CLF take the position that the Commission cannot reopen the record in this proceeding to receive supplemental evidence responsive to Commission-generated record requests.

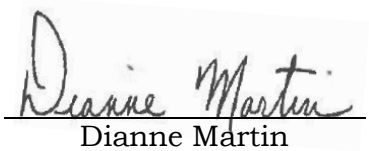
## III. COMMISSION ACTION

Under RSA Chapter 541 and RSA 365:21, within 30 days of a filing of a motion for rehearing, the Commission must either grant or deny the motion, or suspend the order or decision complained of pending further consideration. As described above, Commission Order No. 26,513 ordered the reopening of the record for the purpose of receiving supplemental evidence responsive to written record requests issued by the Commission. While the Commission considers the motions for rehearing, the Commission suspends Order No. 26,513. Accordingly, no record requests will be issued at this time and the record in this docket will remain closed.

**Based upon the foregoing, it is hereby**

**ORDERED**, that Commission Order No 26,513 is **SUSPENDED** pending further consideration of the motions for rehearing.

By order of the Public Utilities Commission of New Hampshire this twenty-first day of September, 2021.



Dianne Martin
Chairwoman

Daniel C. Goldner
Commissioner

# Service List - Docket Related

Docket# : 20-092

Printed: 9/21/2021

Email Addresses

---

ClerksOffice@puc.nh.gov
asbury@unitil.com
roshan.bhakta@eversource.com
kelly@cleanenergynh.org
brian.d.buckley@energy.nh.gov
bill.bullock@eversource.com
rburke@nhla.org
john.butler@eversource.com
carroll@unitil.com
richard.t.chagnon@energy.nh.gov
brandy.chambers@eversource.com
jessica.chiavara@eversource.com
rclouthier@snhs.org
gary.m.cronin@energy.nh.gov
kristi.davie@eversource.com
mdean@mdeanlaw.net
paul.b.dexter@energy.nh.gov
downesm@unitil.com
kimberly.dragoo@libertyutilities.com
jay.e.dudley@energy.nh.gov
tracy.dyke-redmond@eversource.com
stephen.r.eckberg@energy.nh.gov
steven.elliott@eversource.com
eemerson@primmer.com
sam@cleanenergynh.org
thomas.c.frantz@energy.nh.gov
tomas.fuller@eversource.com
genestj@unitil.com
michael.goldman@eversource.com
gouldingc@unitil.com
dhill@energyfuturesgroup.com
miles.ingram@eversource.com
jarvis@unitil.com
maureen.karpf@libertyutilities.com
nkrakoff@clf.org
donald.kreis@oca.nh.gov
clane@synapse-energy.com

marc.lemenager@eversource.com
elevin@veic.org
jmarks@acadiacenter.org
mcdonald@optenergy.com
nelson.medeiros@eversource.com
frank.melanson@eversource.com
erica.menard@eversource.com
Mosenthal@OptEnergy.com
elizabeth.r.nixon@energy.nh.gov
amanda.o.noonan@energy.nh.gov
ocalitigation@oca.nh.gov
rebecca.ohler@des.nh.gov
palma@unitil.com
katherine.peters@eversource.com
tina.poirier@libertyutilities.com
ralph.prahl@gmail.com
Maureen.l.reno@oca.nh.gov
bryant.robinson@eversource.com
Melissa.Samenfeld@libertyutilities.com
michael.sheehan@libertyutilities.com
david.simek@libertyutilities.com
karen.sinville@libertyutilities.com
christopher.skoglund@des.nh.gov
skumatz@serainc.com
eric.stanley@libertyutilities.com
atakasugi@synapse-energy.com
taylorp@unitil.com
heather.tebbetts@libertyutilities.com
stower@nhla.org
jacqueline.m.trottier@energy.nh.gov
jvanrossum@clf.org
david.k.wiesner@energy.nh.gov
kiersten.williams@eversource.com
wirtino@comcast.net
woodsca@nhec.com
twoolf@synapse-energy.com

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

ELECTRIC AND GAS UTILITIES

2021-2023 Triennial Energy Efficiency Plan

Docket No. DE 20-092

**MOTION FOR REHEARING, CLARIFICATION AND STAY**

**OF ORDER NO. 26,553**

Pursuant to New Hampshire Code of Administrative Rules Puc 203.07, RSA 541:3, and RSA 541:5, New Hampshire Electric Cooperative, Inc.; Public Service Company of New Hampshire d/b/a Eversource Energy; Unitil Energy Systems, Inc.; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty; Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty; and Northern Utilities, Inc. (collectively, the "NH Utilities"); the Office of the Consumer Advocate ("OCA"); Clean Energy New Hampshire; Conservation Law Foundation; and Southern New Hampshire Services (altogether, the "Moving Parties") respectfully request rehearing and clarification of Order No. 26,553 (November 12, 2021) (the "Order") issued by the New Hampshire Public Utilities Commission (the "Commission") in the instant docket.

The Order changed the previously-approved framework for energy efficiency plans without notice, without giving the Moving Parties the opportunity to demonstrate the merits of that framework, without being anchored to evidence in the record, and without regard to the impact such dramatic and sudden changes will have on the the NH Utilities, utility customers, energy efficiency contractors and vendors, and other stakeholders. To allow time for the Commission's consideration of the Moving Parties' request for rehearing and clarification, the Moving Parties

also request that the Commission: temporarily stay the Order[1]; suspend or extend the December 15, 2021 compliance filing requirements; and temporarily reinstate the terms of Order No. 26,440, pending resolution of this matter. A temporary stay is warranted and appropriate because the Order institutes a drastic, disruptive effect on the NH Utilities' 2021 energy efficiency projects without notice or sufficient due process. The Moving Parties respect the authority of the Commission. However, the Moving Parties also share a fundamental concern that there are several elements of the Order that are not based on sound legal processes and principles, and implementation of many of the directed changes are immediately and significantly harmful to the businesses that offer energy efficiency services in New Hampshire, and the customers that benefit from those programs. Over 10,000 New Hampshire residents work in the energy efficiency sector, and some of the businesses where they are employed have already announced they will have to lay workers off in response to the Order. Some of these businesses are facing permanent closure given the Order's terms. These are real, significant and immediate harms that will occur due to the terms of the Order. For these reasons, the Moving Parties respectfully request that the Commission stay the Order pending resolution of the issues in this Motion.

In addition to the many foundational changes to New Hampshire's Energy Efficiency Resource Standard ("EERS") program, there is lack of clarity regarding implementation of the Commission's directives for the 2022 and 2023 EERS program plans due to numerous ambiguities contained in the Order. Also, there are issues raised within the Order that will require other, further action by the Commission as part of its rehearing and clarification. Therefore, in light of the notice and due process deficiencies and the drastic changes that have been ordered, the Moving Parties

[1] In light of the December 6, 2021, order in this docket denying Liberty's motion to stay, Liberty does not participate in the request for a stay articulated here, although Liberty continues to believe a stay is appropriate.

request that the Commission grant a temporary stay pending resolution of the issues raised herein. In support of this Motion, the Moving Parties state as follows:

## I. BACKGROUND AND PROCEDURAL HISTORY

The Commission established New Hampshire's EERS and the process for implementing it in Order No. 25,932 (August 2, 2016) (the "Initial EERS Order"). The implementation process requires the state's electric and natural gas utilities, as administrators of the programs offered to the public to meet the EERS, to "prepare the triennial EERS plans in collaboration with stakeholders and the EESE Board as Advisory Council." Initial EERS Order at 39-40. In Docket No. DE 17-136, the Commission approved the first EERS triennial plan with an implementation period of calendar years 2018-2020. *See* Order No. 26,095 (January 2, 2018). The 2018-2020 Plan was updated for each of the years 2019 and 2020 and approved by the Commission in Order Nos. 26,207 (December 31, 2018) and 26,323 (December 31, 2019), respectively.

On June 5, 2020, the NH Utilities that have jointly administered New Hampshire's energy efficiency programs since 2001 filed a letter requesting the Commission open a docket for consideration of the second Energy Efficiency Triennial Plan covering calendar years 2021-2023 (the "Proposed Plan"). In that letter, the NH Utilities and the OCA requested that a prehearing conference be scheduled before September 1, 2020 "so that the docket will be ready to proceed without delay once the final draft triennial plan for 2021-2023 is submitted to the Commission." Letter of Jessica A. Chiavara, Esq. to Executive Director Howland, (June 5, 2020). The widely held expectation was that the Commission would conduct an adjudicative proceeding in accordance with RSA 541-A:31, as the Commission had done in prior energy efficiency dockets. In addition, the expectation was that the Commission would complete the process by December

31, 2020 to allow for timely implementation of the second EERS triennial plan, as had occurred in connection with the first triennial plan in Docket No. DE 17-136.

On June 5, 2020, the NH Utilities also submitted a motion to amend Order 26,207 to extend the submission date for the second triennial plan (DE 17-136, Motion to Amend Order 26,207 (June 5, 2021)). By Order No. 26,375 (June 30, 2020), the Commission granted the motion and extended the deadline for filing the second triennial plan to September 1, 2020.[2] The Commission relied on RSA 365:28 for authority to extend the deadline previously adopted in Order No. 26,207 (December 31, 2018). RSA 365:28 provides that the Commission may, after notice and hearing, "alter, amend, suspend, annul, set aside, or otherwise modify any order made by it."[3] In its order extending the July 1, 2020 deadline, the Commission noted that the agency's authority to change earlier determinations is "limited only in that the modification must satisfy the requirements of due process and be legally correct." Order No. 26,375 at 3, citing *Appeal of Office of Consumer Advocate*, 134 N.H. 651, 658 (1991).

The NH Utilities filed the Proposed Plan on September 1, 2020, after a nearly year-long stakeholder collaboration process that entailed over 20 meetings with diverse interests represented. The Commission issued an Order of Notice on September 8, 2020, which, after briefly summarizing how triennial plans are funded under the EERS, stated:

> The filing raises, *inter alia*, issues related to whether the proposed Plan programs offer benefits consistent with RSA 374-F:3, VI; whether the proposed Plan programs are reasonable, cost-effective, and in the public interest consistent with RSA 374-F:3, X; whether the proposed programs will properly utilize funds from the Energy Efficiency Fund as required by RSA 125-O:23; and whether, pursuant

---

[2] According to the Commission, the reason for an additional two months to submit the second triennial plan as compared to the initial triennial plan was that "under the circumstances created by the COVID-19 pandemic, [the NH Utilities] and other stakeholders required additional time to understand market impacts, develop goals and tailor a program and plan structure to account for the pandemic." Order No. 26,375 (internal quotation marks omitted).

[3] RSA 365:28 exempts from this requirement any prior Commission order that was "made under a provision of law that did not require a hearing and a hearing was, in fact, not held."

> to RSA 374:2, the Electric Utilities and Gas Utilities' proposed rates are just and reasonable ***and comply with Commission orders***.

Order of Notice at 2 (emphasis added).

The Order of Notice expressly recognized that unspent funds from prior years' energy efficiency programs, including interest, "are carried forward to the following year's budget." *Id.* The Order of Notice did not state that the Commission was considering abandoning that long-standing practice or that the Commission planned to use the instant proceeding to reevaluate or modify the existing EERS paradigm. Nor did the Order of Notice invoke RSA 365:28, or otherwise indicate that the Commission was considering the possibility of altering, amending, suspending, annulling, setting aside, or otherwise modifying any of its prior orders relative to the establishment or funding of the EERS. Consequently, no change to the established framework or funding of the EERS was noticed as part of this docket.

The docket proceeded through the steps outlined in RSA 541-A:31 applicable to contested administrative proceedings conducted by the Commission.[4] A prehearing conference took place as scheduled on September 14, 2020, at which the Commission granted the intervention requests of Conservation Law Foundation, Clean Energy New Hampshire, the Department of Environmental Services, The Way Home, Acadia Center, and Southern New Hampshire Services. The parties convened for a technical session immediately after the prehearing conference and agreed upon a procedural schedule to govern the remainder of the docket, which the Commission approved by secretarial letter on September 17, 2020. Discovery ensued, and Commission staff (now staff of the New Hampshire Department of Energy, or "DOE"), OCA, and several intervenors

[4] In its order denying a motion by the OCA and other parties to designate staff advocates, the Commission ruled that it was performing quasi-legislative or legislative functions in this docket, rather than adjudicative functions. DE 20-092, Order No. 26,415, at 7 (October 8, 2020). The Commission later reconsidered this determination and decided to treat the entire proceeding as adjudicative. DE 20-092, Order No. 26,458, at 4 (February 19, 2021).

filed testimony on October 29, 2020. Further discovery was conducted on this testimony, and rebuttal testimony was filed by the NH Utilities, OCA, Clean Energy New Hampshire, and the then-staff of the Commission on December 3, 2020. Settlement discussions were held on November 19 and 20, and a settlement agreement (the "Settlement Agreement") signed or supported by all parties (except Commission staff) was submitted to the Commission on December 3, 2020. The Department of Environmental Services submitted a letter indicating support for "the efficiency targets and programs proposed in the Settlement Agreement." Letter from Craig A. Wright, Director of the Air Resources Division of the Department of Environmental Services to Debra A. Howland (December 4, 2020). Acadia Center filed a letter in support of the Settlement Agreement on December 10, 2020.

The Commission conducted evidentiary hearings on December 10, 14, 15, 16, 21, and 22, 2020. The hearing took place before the two commissioners then in office – Chairwoman Dianne Martin and Commissioner Kathryn Bailey – and, without objection, exclusively addressed the Proposed Plan as modified by the Settlement Agreement submitted on December 3, 2020.

Although the parties requested a final decision prior to the January 1, 2021 effective date of the Proposed Plan, this did not occur. On December 29, 2020, in lieu of a final order in this docket, the Commission issued Order No. 26,440 granting an "extension of the 2020 energy efficiency program structure and System Benefit Charge rate beyond December 31, 2020," until a final order could be issued. At that time, the Commission estimated issuance would follow within eight weeks. Order No. 26,440 at 4-5. However, the Order took considerably longer than eight weeks and was issued nearly eleven months later on November 12, 2021. The Order denied the NH Utilities' request for approval of the proposed 2021-2023 New Hampshire Statewide Energy Efficiency Plan; denied the Settlement Agreement that modified the Plan; and ordered significant

changes to the funding and administration of energy efficiency programs in New Hampshire, including, but not limited to:

- Progressively reducing the energy efficiency portion of the system benefits charge ("SBC") and local delivery adjustment charge ("LDAC");
- Rejecting the Granite State Test that had been recently adopted by the Commission for purposes of cost-benefit analysis of energy efficiency programs;
- Revising the calculation of lost base revenue;
- Eliminating performance incentives for the utilities administering energy efficiency programs;
- Eliminating the ability to carry forward an over-collection and requiring utility shareholders to bear the cost of an under-collection;
- Reducing evaluation, monitoring, and verification (EM&V) costs in 2022 and terminating EM&V effective December 31, 2022; and
- Altering the criteria upon which programs are screened and selected for implementation.

For the reasons set forth herein, the Order is inconsistent with New Hampshire law, including but not limited to contravening rights secured to parties by virtue of the New Hampshire Constitution. In particular, the Order is arbitrary and unreasonable because the modifications made to the EERS framework established in prior Commission orders are instituted without notice, due process or record substantiation. Given the seriousness of these omissions, the Moving Parties respectfully request that the Order be immediately stayed pending clarification, reconsideration and rehearing of the issues set forth herein.

## II. LEGAL STANDARD

Pursuant to RSA 541:3 and 541:4, a party may move for rehearing of a Commission order within 30 days of the order by specifying every ground upon which it is claimed that the order is unlawful or unreasonable. The Commission may grant rehearing or reconsideration where a party

states good reason for such relief. *Public Service Company of New Hampshire*, Order No. 25,361 (May 11, 2012) at 4. Good reason may be shown by identifying specific matters that were overlooked or mistakenly conceived by the deciding tribunal, or by identifying new evidence that could not have been presented in the underlying proceeding. *Id*. at 4-5. Within 30 days of the filing of a motion for rehearing, the Commission must grant, deny, or suspend the order or decision complained of pending further consideration, and the suspension may be upon such terms and conditions as the Commission may prescribe. RSA 365:21.

## III. REQUEST FOR REHEARING/RECONSIDERATION

### A. Failure to Provide Adequate Notice as Required by Law

As the New Hampshire Supreme Court recently reaffirmed, "[t]hat a governmental tribunal must utilize fair procedures is elemental; and it is well-established that due process guarantees apply to administrative agencies." *Appeal of Pelmac Industries, Inc*., 2021 WL 4783944 (N.H. Supreme Ct., Oct. 13, 2021) at *11 (citation omitted). Both utilities and their customers are entitled to due process in Commission proceedings.[5] The Court has consistently held that "[w]hile due process in administrative proceedings is a flexible standard, this court long has recognized that the PUC has important quasi-judicial duties, and we therefore require the PUC's 'meticulous compliance' with the constitutional mandate where the agency acts in its adjudicative capacity, implicating private rights, rather than in its rule-making capacity." *Appeal of Concord Steam*

[5] The movants are aware that, in *Appeal of the Office of the Consumer Advocate*, 148 N.H. 134 (2002), the Court concluded that residential utility customers did not have a due process right to a hearing when the Commission approved an amendment to a previously approved special contract under RSA 378:18. Although the Court suggested that several federal district courts and some state jurisdictions have declined to recognize "a utility customer's due process property interest in the setting of utility rates," *id*. at 139 (citations omitted), the Court did not go that far as a matter of New Hampshire constitutional law. The lack of a property interest among utility customers when the Commission considers a previously approved special contract – a very narrow regulatory inquiry -- does not mean customers enjoy no due process rights in the circumstances of the instant case where customers have an interest not just in their rates but also in their access to energy efficiency programs that provide desirable services and save them money.

*Corp.,* 130 N.H. 422, 428 (1988) (internal citations omitted). RSA 541-A:31, III requires that "all parties shall be afforded an opportunity for an adjudicative proceeding after reasonable notice" and that such notice shall include "[a] short and plain statement of the issues involved." This notice requirement is central to due process in administrative proceedings, as "[a] fundamental requirement of the constitutional right to be heard . . . that affords the party an opportunity to protect the [party's] interest through the presentation of objections and evidence." *Appeal of Concord Steam Corp.,* at 427-428.

As noted above, the Order of Notice in this docket delineated the following issues to be considered:

> [I]ssues related to whether the proposed Plan programs offer benefits consistent with RSA 374-F:3, VI; whether the proposed Plan programs are reasonable, cost-effective, and in the public interest consistent with RSA 374-F:3, X; whether the proposed programs will properly utilize funds from the Energy Efficiency Fund as required by RSA 125-O:23; and whether, pursuant to RSA 374:2, the Electric Utilities and Gas Utilities' proposed rates are just and reasonable and comply with Commission orders.

Order of Notice at 2.

As the Order of Notice plainly states, the issues to be covered in the proceeding related exclusively to the Proposed Plan (which was ultimately amended by the Settlement Agreement) pending before the Commission for consideration. In addition, the Order of Notice expressly recognized that the NH Utilities were seeking approval of the EERS Plan "in accordance with Order No. 25,932 (August 2, 2016) (approving establishment of an Energy Efficiency Resource Standard) and Order No. 26,323 (December 31, 2019) (approving 2020 Update Plan and establishing process for development and submission of 2021-2023 Plan)." *Id.*

The Order of Notice is devoid of any indication that the Commission intended to revisit any of the principles established in its prior EERS orders or to restructure the EERS framework or any of its component parts. Nor did the Order of Notice provide any notice that the reasonableness

of existing SBC or LDAC rates were under consideration. In keeping with the actual scope of the notice, none of the parties (including the Moving Parties) presented evidence on matters embedded in the existing EERS structure such as the general appropriateness of performance incentives (Order at 40-41); the carrying forward of budgets from one year to the next or reconciling overspending the budgets in the same manner (Order at 42-43); justification of which benefit/cost test to apply (Order at 39); whether to continue to fund EM&V work (Order at 46); the reasonableness of the approved rates for 2018-2020 (Order at 27); and the requirement that the NH Utilities pursue private funding and/or funding derived from sources other than ratepayers (Order at 47).

The Moving Parties did not offer evidence on any of these issues because none of these issues were noticed and, as a result, there was no burden on the Moving Parties to do so. Therefore, contrary to the findings set forth in the Order, the Moving Parties did not fail to meet a burden of proof on any of these issues. A burden of proof does not exist for unnoticed matters. Because the Commission's ruling on unnoticed issues deprived the Moving Parties of the "fundamental requirement of the constitutional right to be heard," the Order is unlawful. *Appeal of Concord Steam Corp*., at 427; *see also* RSA 365:28 (requiring Commission to provide "notice and hearing" before setting aside or modifying previous orders).

Determining the appropriate benefit-cost tests is one example of the issues decided by the Order that fall outside the scope of issues noticed or heard in this proceeding. The Moving Parties presented no evidence on which benefit-cost test to use, because the Granite State Test and secondary tests were just recently adopted by the Commission in 2019. In Order No. 26,322 issued December 30, 2019, the Commission noted that the "cost-effectiveness framework was informed by an extensive review of state policies as defined by statute, interpreted by Commission

precedent, and guided by the state energy strategy." Order No. 26,322, at 8. The Commission further found that use of the Granite State Test "will improve energy efficiency program screening by placing a greater emphasis on the utility system impacts than our current [Total Resource Cost] test." Order No. 26,322 at 9. Given these recent pronouncements, the NH Utilities were obligated, by Commission order, to apply the Granite State Test and secondary tests when evaluating programs for inclusion in the Proposed Plan. Relying on Order No. 26,322, the NH Utilities applied the Commission-approved tests to all programs in the Proposed Plan. Because there was no notice (as required by RSA 365:28 and fundamental due process principles) that benefit-cost tests adopted by the Commission in 2019 would be revisited in this docket, or that the old Total Resource Cost Test would be reinstated, the Order's rejection of the Granite State Test is unlawful and unreasonable.

Another example is the Order's elimination of "carryforwards," which eliminates the ability to reconcile costs and revenues. Order at 49. Because the reconciling component of the SBC rate, which requires the carryover of over and underspending from year to year, was not noticed as an issue to be decided in this docket, the Moving Parties had no opportunity to present evidence on the reasonableness of it. If the reconciling component of the SBC rate had been properly noticed as an issue to be reviewed by the Commission in this docket, the Moving Parties could have explained the routine nature of reconciling budget underspending and overspending, including the fact that energy efficiency programs necessarily over- and under-recover their related projected costs, and why this aspect of the rate is necessary and appropriate for administering the energy efficiency programs that by their nature carry over from month to month and year to year. Instead of identifying this issue for adjudication in this docket, the Order of Notice actually

acknowledged the long-standing practice of carrying forward unspent funds from a prior program year to the following year's budget. Order of Notice at 1-2.

In light of this acknowledgement in the Order of Notice, and the lack of notice as required by RSA 365:28 and fundamental due process principles, there was no reason for the Moving Parties to address the carryforward issue during the proceedings – as there was no reason to think that the long-standing practice would be considered and abandoned by the Commission. Moreover, as the Order was issued only six weeks prior to the conclusion of the 2021 program year, even if the structural modifications to the EERS could somehow be viewed as lawful, they can only apply *prospectively* beginning no sooner than January 1, 2022, and cannot apply retroactively to 2021. Decisions of the Commission that modify existing tariffs and approvals previously rendered by the Commission cannot lawfully apply on a retroactive basis. *See Appeal of Pennichuck Water Works*, 120 N.H. 562, 566 (1980)("'it is a basic legal principle that a rate is made to operate in the future and cannot be made to apply retroactively…'")(internal citation omitted).

As for EM&V work, the Initial EERS Order established that "[r]igorous and transparent EM&V is essential to a successful EERS, to ensure that the efficiency programs actually achieve planned savings in a cost-effective manner." Initial EERS Order at 61. This general premise had not been subject to any dispute, either by a party or by the Commission itself, in the five years since the Initial EERS Order was issued. However, the Order upends the funding for, and scope of, EM&V work by requiring that EM&V spending be "significantly reduced" for 2022, and completed by December 31, 2022. Order at 46. Because the Moving Parties were not notified of or heard on the issue of whether EM&V work should continue throughout the triennium, the Order is unlawful and unreasonable.

Also, while the amount of, and formula for, the calculation of performance incentives has been debated, the existence and application of such incentives has not been in dispute since before the establishment of the EERS. The Initial EERS Order explicitly details the ways that performance incentives encourage the utilities to "pursue exemplary performance in program administration and delivery and to put efficiency investment on an equal footing with other earnings opportunities available" (Initial EERS Order at 60), and this application of those incentives has not once been disputed by the Commission or any party appearing before it. Every order since the Initial EERS Order has reiterated this standard. Order Nos. 25,932 at 60, 26,207 at 14, and 26,323 at 10. Because performance incentives were neither disputed nor noticed, and because performance incentives have been an undisputed component of the EERS since its inception, the Order's elimination of performance incentives is unlawful and unreasonable. Again, as referenced above with respect to the reconciling component of the SBC rate, the Order was issued six weeks prior to the conclusion of the 2021 program year, and therefore should not apply to 2021. The Commission's decisions cannot lawfully modify previously approved tariffs or prior approvals of the Commission on a retrospective basis; the Commission's decisions must have prospective effect. *See Appeal of Pennichuck Water Works*, 120 N.H. at 566.

Lastly, without proper notice, the Order reverses rates previously approved by the Commission. *See* Order Nos. 26,095; 26,207; 26,323. Specifically, the rates approved in the 2018-2020 EERS plan were found to be just and reasonable by the Commission in Order No. 26,095. There is nothing in the record, nor in the Order, showing a change in circumstances justifying any conclusion that the rates pertaining to the 2018-2020 EERS plan have become unjust or unreasonable and would justify a regressive rate trajectory unwinding those rates. No change in

circumstance was discussed or presented on the rates for 2018-2020 and no notice was ever provided that those rates would be at issue in this proceeding.

Accordingly, for the reasons set forth above, the unnoticed elements of the Order are unlawful and unreasonable, and should be reconsidered. The parties to the docket were not afforded appropriate notice and opportunity to be heard on those issues as is required by fundamental due process principles applicable to the Commission's decision-making in an adjudicatory proceeding.

**B. Misapplication of Legal Standards**

The Order explicitly relies on a number of statutes and standards to frame the Commission's authority to determine whether the Settlement Agreement and Proposed Plan with its component parts are just, reasonable and in the public interest. In addition to the statutes cited, the Order also specifically acknowledges the authority of the Initial EERS Order, stating that this prior decision, along with RSA 374-F:3, VI, establishes the legal basis for the EERS framework. Order at 30. The Order goes on to say that "[t]his statutory framework ***along with the Commission's subsequent orders*** clearly establish the Commission's regulatory role in approving any proposed EERS programs." Order at 31. In addition to the errors in statutory application described below, the Order invokes and selectively quotes the Initial EERS Order and written decisions that precede it, disregarding substantially all of the Initial EERS Order's reasoning, and wholly ignoring the Commission's subsequent orders relating to the development and implementation of the EERS and the plans that execute it. This departure from years of Commission precedent is unreasonable (particularly without notice or due process), and directly contravenes the Order's own premise for establishing the Commission's regulatory role in relation to the EERS programs. Because the Order misinterprets the statutory mandates and legal standards

applicable to the Proposed Plan and Settlement Agreement, the Order must be reconsidered in light of the statutory and legal authority discussed below.

As an initial matter, the Order omits any reference to, or acknowledgement of, RSA 4-E:1, requiring the State to adopt a 10-year energy strategy ("State Energy Strategy"), and within which the Legislature required "consideration of the extent to which demand-side measures including efficiency … can cost-effectively meet the state's energy needs, and proposals to increase the use of such demand resources to reduce energy costs and increase economic benefits to the state." RSA 4-E:1, II. The 2014 version of the State Energy Strategy acknowledges that "the State must set specific efficiency goals and metrics to measure progress" and concludes that the Commission should do so by opening a proceeding to establish "energy efficiency ***savings goals*** based on the efficiency potential of the state, ***aimed at achieving all cost-effective efficiency***." 2014 New Hampshire State Energy Strategy, Executive Summary at ii (emphasis added).[6] Consistent with that directive, in 2015 the Commission opened Docket No. DE 15-137,[7] which commenced a year-long process that resulted in the development and establishment of the EERS with the Initial EERS Order, issued directly pursuant to the mandate of the State Energy Strategy by creating, "a policy that sets specific targets or goals for energy savings, which utility companies serving New Hampshire ratepayers must meet" that is "consistent with the [] legislative mandate to consider energy efficiency a first-priority supply resource." Initial EERS Order at 2, 56.

The Order, however, does not mention savings goals that would provide targets toward which the NH Utilities would strive as the State Energy Strategy directs the Commission to do,

---

[6] The State Energy Strategy is set forth at: https://www.nh.gov/osi/energy/programs/documents/energy-strategy.pdf.

[7] Docket No. DE 15-137 followed an earlier investigative docket, Docket No. IR 15-072, where the Commission received "unanimous support for the Commission's establishment of an EERS at this time, under existing statutory authority, to advance a policy of energy-efficiency as a least-cost-supply resource for electric and natural gas utilities." May 8, 2015 Order of Notice in Docket No. DE 15-137, at 2.

nor does the Order account for the goal of achieving energy efficiency as a cost effective, first-priority resource. Rather, the Order selectively invokes RSA 374-F and *Appeal of Algonquin Gas Transmission*, 170 N.H. 763, 774 (2018), to suggest that a focus on "reducing electricity costs for customers" takes priority over the goals of the EERS, in reaching the unfounded determination that the SBC and LDAC rates supporting the programs proposed in the Settlement Agreement were unjust and unreasonable. The Order sets arbitrary rates without articulating guidance for savings goals. Order at 35, 38.

In so doing, the Commission misinterpreted the Restructuring Act, which does not treat energy efficiency as an aspect of electric service to be transferred to the competitive market (as the Legislature mandated for supply-side resources) but, rather, treats energy efficiency as among certain "public benefits" the Commission is authorized to approve for recovery via the non-bypassable System Benefits Charge. *See* RSA 374-F:4, VI (the section of the Restructuring Act's "interdependent policy principles" per RSA 374-F:1, III, which purpose is to secure "Benefits for All Consumers"). The General Court was plainly instructing the Commission to safeguard and promote these benefits *alongside, and in addition to,* what were presumed to be the rate-lowering effects of competition among energy providers. This amounts to an implicit recognition that energy efficiency yields benefits to customers that are not necessarily captured via near-term rate relief because those benefits are more long term in character. The Commission explicitly recognized that "[w]hile rates may increase slightly for all customers in the short-term in order to recover the cost of an EERS, customer bills will decrease when their energy consumption decreases are reflected in reduced grid and power procurement costs." Initial EERS Order at 57.

This, in turn, accounts for the previous determination of the Commission that all energy efficiency programs administered by the NH Utilities must "meet a cost-effectiveness test that

projects greater benefits than costs *over the life of the measures*, ensur[ing] that the programs and spending of ratepayer funds are just, reasonable, and least cost." Initial EERS Order at 59 (emphasis added). Using an equation for cost-effectiveness – the well-established formula for determining when program benefits outweigh costs, and thus when such expenditures reflect just, reasonable and least cost spending of customer funds – mirrors the legislative statement of the state's energy policy in RSA 378:37 to "maximize the use of cost-effective energy efficiency." Notwithstanding that the Legislature's energy policy statement expressly requires maximizing the use of cost-effective energy efficiency, the Order *makes no reference to it*. This oversight alone constitutes good cause for rehearing.

Further, the Least Cost Integrated Resource Plan statute, RSA 378:38 *et seq*, and the least cost principles enshrined therein necessitate that rate increases and short-term bill impacts be evaluated in context. But the Order arbitrarily finds that "[b]ecause the record does not contain direct comparisons of cost of energy savings to supply alternatives, or information on how the program portfolios were maximized to achieve economic benefits . . . the least cost showing requirement in from [*sic*] Order 25,392's framework has not been adequately demonstrated." Order at 34. As a first matter, no such "direct comparisons" have ever been required in connection with the EERS and were not noticed as being at issue in this proceeding. Moreover, a focus on such direct comparisons is unreasonable as it eliminates any consideration of the cost-effectiveness of the programs on their own merits, which is the more accurate least cost showing requirement the Commission endorsed in Order No. 25,932 and a standard that reasonably and correctly focuses on whether the programs provide long-term savings compared to the cost of supply alternatives, consistent with the State's energy policy as well as the requirements of least cost planning in RSA 378:37-:40.

This is why the Commission previously found in the Initial EERS Order that the demonstration of cost-effectiveness justifies a determination that increases to the SBC rate are lawful and appropriate:

> Failing to increase the funding to support higher savings goals at this time not only fails to provide the Joint Utilities' customers with viable and proven options for energy at least cost, but also fails to capture other benefits for customers. The Commission's oversight, and ***the requirement that all programs meet a cost-effectiveness test that projects greater benefits than costs over the life of the measures, ensures that the programs and spending of ratepayer funds are just, reasonable, and least cost***.

Initial EERS Order at 58-59 (emphasis added).

The record in this case thoroughly demonstrates the cost-effectiveness of programs in the Proposed Plan according to the Commission-approved benefit-cost testing model and applicable law. The Order, therefore, should be reconsidered to apply the proper legal standards to the record in this manner.

### C. Decisions Unsupported by, and Contradicting, Record Evidence

Beyond the failure to apply the proper legal standards and the failure to provide proper notice, the Order also overlooks, misunderstands, or misapplies relevant and undisputed facts in the record. Because many of the issues decided in the Order lack record support or are contradicted by the record, these issues must be reconsidered.

In contrast to the Order at issue, the Initial EERS Order illustrates the importance and weight that should be given to the year-long effort that goes into the stakeholder process and development of triennial plans submitted to the Commission, as well as the year-long effort of developing the administrative record for the docket when reaching a final decision on a plan, even in the face of rate increases:

> [O]ur approval of the Settlement Agreement's rate increases is based on a record developed over the course of a year following a year-long investigation by the Staff

> of EERS potential, both of which were contributed to by numerous experienced and knowledgeable stakeholders and experts. Also, we note in making our decision, the support of the Settlement Agreement by the diverse parties, including the Consumer Advocate, The Way Home, and others. The record and support by parties with diverse interests, along with the customer protection measures built into the EERS framework, as described below, give us confidence that any short-term rate impacts will be outweighed by the benefits to customers, the grid, and the New Hampshire economy.

Initial EERS Order at 54.

Similarly, development of the Proposed Plan and Settlement Agreement took a total of two years' effort from diverse stakeholders who subsequently developed the evidentiary record on the Settlement Agreement considered by the Commission. The Order, however, makes a number of decisions that do not rely on the Proposed Plan, the Settlement Agreement, or any other material in the record, despite the Commission's clear statement (indicated above) that a lengthy stakeholder process yields meaningful record evidence.

**Equitable Benefits**

For example, the Order concludes the Moving Parties failed to demonstrate that the rates in the Proposed Plan provide equitable benefits to all consumers, and therefore there is no showing that the rates are just, reasonable or in the public interest. Order at 35. However, this conclusion lacks sufficient reasoning as required by RSA 363:17-b. In support of its conclusions, the Order refers to RSA 374-F:3, VI, which states in relevant part: "Restructuring of the electric utility industry should be implemented in a manner that benefits all consumers equitably and does not benefit one customer class to the detriment of another. Costs should not be shifted *unfairly* among customers."[8] Aside from citing this statute regarding restructuring, the Commission provides no

[8] The only cost shifting within the energy efficiency programs is a portion of the C&I revenues that go to help fund the Low Income programs. All remaining C&I funds strictly fund C&I projects and all residential funds strictly fund residential projects, including a similar portion directed to the Low Income programs. *See* Exhibit 1, part 1, Bates page 32.

further reasoning for the conclusion in the Order rejecting the proposed rates as unequitable in the Proposed Plan as modified by the Settlement Agreement. This finding, therefore, is lacking in support and fails to acknowledge that the statute prohibits only *unfair* cost shifting, which requires equitable—not equal—benefits to customers.

Commission precedent in the Initial EERS Order, relied upon by the Order, also supports the conclusion that equitable benefits are distinguishable from inequitable benefits resulting from unfair cost shifting, as follows:

> While the cost benefit tests ensure benefits to all customers, it is true that those who participate in efficiency programs are likely to benefit most. They will receive immediate benefits from bill reductions, improved comfort, and higher home or business value. Those advantages are in addition to the utility system benefits enjoyed by all customers. In return, however, customer participants must invest time and take full advantage of financial incentives or technical assistance, and they often must pay additional out-of-pocket expenses. ***Non-participating customers enjoy the benefits from load and system improvements***.

Initial EERS Order at 57 (emphasis added).

The Initial EERS Order details how these differentiated benefits result in just and reasonable rates that are in the public interest, even for non-participants. Conversely, the Order at issue here fails to address to any extent how the rates in the Proposed Plan, as modified by the Settlement Agreement, are just and reasonable -- although the Proposed Plan demonstrates in detail that benefits of the programs, while different for participants compared with non-participants, inure to all customers consistent with the principle of ensuring equitable benefits and avoiding unfair cost shifting. The Order's sole reference to the record on this issue concludes that certain non-participant customers will not see "commensurate" benefits to the costs they would pay, without ever defining what the Commission now believes "commensurate" benefits would be. Order at 33. The portions of the record cited by the Commission support only a determination that

costs and benefits are different for participants than non-participants, but such differences have never served as the defining characteristic of what is equitable in relation to implementation of the energy efficiency program. Thus, the Order unreasonably omits any rationale for the conclusion that the rates in the Proposed Plan do not result in equitable benefits. *See* Order at 33, 35.

The Proposed Plan took an extra measure in its purpose to assure equitable benefits, which was disregarded and misconstrued by the Commission in its decision. This is the advent of different SBC rates for C&I (commercial and industrial) and residential customers. The Order interpreted this change as unequitable based solely on the fact that C&I programs produce more kWh savings than their residential counterparts. Order at 33. In reality, the different rates are entirely justified and appropriate because the C&I program participants will be the ones directly benefiting from the kWh savings generated by the programs. Although kWh savings provide indirect benefits to all customers, the differentiated rates between customer sectors address the fact that C&I customers receive more direct benefits than residential customers. Exhibit 1, part 1, Bates pages 40-41. Therefore, C&I customers pay a greater proportion of the total SBC funds collected.

The Order overlooks this record support and mistakenly applies this fact to reach the conclusions that the proposed rates are not commensurate with benefits and that the benefits to customers are not equitable. Without any acknowledgement of the relationship of utility rates to the program funding and direct customer benefits, the Order cannot support a finding that the rates in the Proposed Plan are not just, reasonable and in the public interest. Rehearing, therefore, is warranted.

In fact, although the proposal to establish different SBC rates for the residential and C&I customers was introduced for the first time in the Proposed Plan, the natural gas utilities have had

Commission-approved, differentiated LDAC rates between the two customer classes since the inception of the energy efficiency programs. The Order also sets different natural gas rates for the two customer classes, and while the Order largely holds the maximum rate per therm steady for residential customers between the second and third year of the term, it mandates a 21 percent reduction in the LDAC rate for C&I customers without citing to any evidence to support the differential treatment. Order at 38.

**Performance Incentives**

Similarly, the Order does not support the elimination of performance incentives for the NH Utilities with citations to the record or sufficient reasoning. The Order erroneously asserts that the Commission authorized performance incentives only on a temporary basis, relying on Order No. 23,574 which was issued in 2000 to establish guidelines for post-competition CORE energy efficiency programs.[9] However, there is nothing in the cited order that establishes performance incentives as temporary.

Rather, Order No. 23,574 explains that performance incentives, as a new feature at that time, would require close ongoing scrutiny to ensure they continue to meet the standard for offering the incentives and balance interests of shareholders and customers. More importantly, the only authority relied upon in the Order for elimination of the performance incentives beyond this misinterpreted reference to Order No. 23,574 is a passing reference to various statutes that have only indirect bearing on any incentives. *See* Order at 41 (listing RSA 378:7, 378:28, 374-F:3, and 378:39). There is no reasoning that explains the basis for the Commission's revisionist history of Order No. 23,574, nor does the Order provide any explanation or reference to the record in support

[9] The CORE programs were the utility-administered energy efficiency programs preceding the adoption of the EERS.

of the conclusion that the Moving Parties "have not demonstrated that the existing Performance Incentives meet the applicable standards." Order at 40.

Additionally, though the Order refers to Order No. 23,574, the standard for authorizing performance incentives has been further refined in the 21 years since that order was issued. In fact, contrary to the Order's conclusion eliminating Performance Incentives, a Performance Incentive Working Group met for months at the direction of the Commission in Docket No. DE 17-136, and that Working Group was led by then-PUC staff. The Working Group issued a final report recommending the existing Performance Incentive framework and explaining why Performance Incentives are important and serve to motivate the pursuit of all cost-effective energy efficiency. The Commission subsequently approved the recommended Performance Incentive framework, providing further evidence of Commission support for the provision of Performance Incentives, as opposed to the elimination thereof.[10]

As the Initial EERS Order explained, performance incentives are designed to motivate utilities "to pursue exemplary performance in program administration and delivery and *to put efficiency investment on an equal footing with other earnings opportunities available*." Initial EERS Order at 60 (emphasis added). This description is consistent with the concern of Order No. 23,574 to "balance the interests of shareholders and customers," yet this objective is inexplicably abandoned in the instant Order with respect to performance incentives. Although energy efficiency programs funded chiefly via the SBC and LDAC charges do not implicate a utility's interest in earning a reasonable return on investment, the Commission has consistently sought a kind of symmetry by giving utility shareholders a reason to deploy excellent and effective energy

[10] The report was filed in Docket No. DE 17-136 and can be found here: https://www.puc.nh.gov/EESE%20Board/EERS_WG/20190913-EERS-WG-PI-FINAL-REPORT.pdf

efficiency programs that corresponds to earnings in supply-side investments that are bolstered by excellent and effective utility management. By eliminating performance incentives, the Commission is treating energy efficiency differently than other utility investments on which the utility can earn a return, contrary to more recent and current Commission precedent. *See*, Order Nos. 25,932 at 60, 26,207 at 14, and 26,323 at 10. Passing reference to a decision from 2000 regarding post-competition energy efficiency programs, and overlooking more recent and relevant Commission precedent regarding EERS, undermines the findings in the Order and falls substantially short of meeting the requirements for a final decision under RSA 363:17-b.

The Order justifies its conclusion to eliminate performance incentives by stating that "taking into account the implementation of rate mechanism options including Decoupling, lost base revenue ("LBR"), and the lost revenue adjustment mechanism ("LRAM"), as well as the maturity of programs that yield measurable savings . . . Performance Incentives are no longer just and reasonable and in the public interest in the context of ratepayer funded EE." Order at 41. This conclusion – which is not supported by any reference to the record – misinterprets the purpose of those rate mechanisms by mistakenly conflating them with the purpose of performance incentives. Decoupling, LBR and the LRAM are all variations of the *same* rate reconciliation mechanism that allows the NH Utilities to recover the portion of the revenue lost to energy efficiency, which the Commission has already determined is just and reasonable in the course of a utility rate case. The purpose of those mechanisms is not to compensate the utilities for exemplary performance, but rather to assure the utilities have a reasonable opportunity to achieve recovery of the revenue requirements that the Commission has determined are appropriate for the utility to collect to conduct their business. This is described in the Initial EERS Order:

> The LRAM [which recovers LBR] is not designed to increase the revenues recovered by the utilities, and lost revenues are not considered a cost for the purpose

> of the cost/benefit test used to assess efficiency programs in the Core or within the EERS. Specifically, without the LRAM, or a change in the way rates are designed today [such as with decoupling], the utilities may lose revenue that the Commission has already determined in the utility's rate case is just and reasonable for them to recover.

Initial EERS Order at 59.

Although the existence of LRAM/LBR and revenue decoupling is a factor in determining the level of performance incentives, they should be treated as completely separate from the offering of performance incentives, as the two mechanisms have distinctly different purposes. One is to make the utilities whole from a loss to their existing revenue requirement due to conservation and the implementation of energy efficiency; the other is to spur exemplary execution of the energy efficiency programs—consequently, maximizing all cost-effective energy efficiency—by providing an incentive that corresponds to the investment returns that are available to utilities in connection with supply-side investments and the rates supporting those investments. *Id*.

In fact, the Performance Incentive Working Group recognized that utility performance incentives more than pay for themselves in improved design and implementation of energy efficiency programs.[11] The Order's assertion that the LRAM/LBR and decoupling sufficiently compensate the NH Utilities so that performance incentives are no longer warranted mistakes the purpose and intent of each mechanism and does not in any way justify the removal of either. In light of this evident confusion of the purpose and intent of revenue decoupling, LRAM/LBR and performance incentives, and in light of the absence of any adequate justification in the Order for

---

[11] See Performance Incentive Working Group report, discussed in footnote 7, supra, filed to Docket No. DE 17-136: https://www.puc.nh.gov/EESE%20Board/EERS_WG/20190913-EERS-WG-PI-FINAL-REPORT.pdf[12] The Order of Notice in the instant docket acknowledges that "unspent funds from prior program years for both the Electric Utilities and Gas Utilities, including interest, are carried forward to the following year's budget." Order of Notice at 2.

elimination of performance incentives (in addition to the matter not being properly noticed), reconsideration is warranted.

Finally, the Order directs that the eliminated performance incentive budget be "redirected" to the energy efficiency programs. Order at 41. This directive misconceives the manner in which performance incentives are budgeted and earned. As a result of the Order, there is no budget to redirect, as the Settlement Agreement and Proposed Plan were rejected, along with the corresponding budgets. The EERS directs savings goals to be set first; then budgets; and lastly, rates are set based on those goals. By setting the rate first, there are no budgets or funds to redirect from one place to another.

**Budget Carryforward and Overspend**

The Order's elimination of the process regarding program budget carryforward and overspending was also not noticed for the proceeding and must be reconsidered as well, as it is contrary to precedent and policy[12] and unsupported by the record. The lack of notice that the Commission was going to review the carryforward issue constitutes sufficient grounds for reconsideration on its own; however, the lack of record support or reasoning for the decision also requires rehearing. Without citing to the record or providing rationale, the Order concludes that "[y]ear-to-year budget carryforwards do not properly balance the ratepayer's interest in paying the lowest rates possible because they result in ratepayer funds being held without commensurate benefits accruing to ratepayers in a timely manner." Order at 42. In addition to these deficiencies, the Order fails to explain what the Commission means by "lowest rates possible" and "timely manner." The Order provides no citation to any order, statute, or other authority for the premise

[12] The Order of Notice in the instant docket acknowledges that "unspent funds from prior program years for both the Electric Utilities and Gas Utilities, including interest, are carried forward to the following year's budget." Order of Notice at 2.

that the "lowest rates possible" is the appropriate bar for setting the SBC, and the movants are unaware that "just and reasonable" has ever been defined in this way in New Hampshire. Furthermore, that is not how the SBC, a legislatively authorized rate, is set.

The SBC rate was explicitly authorized by RSA 374-F:3, VI to collect funds to pay for energy efficiency programs which, as articulated via state policy and approved in the Initial EERS Order, should be used to support the pursuit of all cost-effective energy efficiency. The SBC rate is designed pursuant to overall savings goals the programs are to achieve. Carrying forward underspent budgets does not "withhold" funds from customers and, in so finding, the Commission has apparently misunderstood the effect of this practice. Essentially, as with any enterprise (including government agencies and programs) that operates according to a budget, some amount of carryover is a practical necessity if the enterprise is to avoid the kind of service interruptions that an absolute and strict adherence to annual budgeting conventions would require. Notably, the Commission cites no evidence of record to suggest that the NH Utilities have been unreasonably "withholding" unspent SBC and/or LDAC revenue via the budget carryforward process.

Eliminating carryforward of underspent budgets draws an arbitrary line based on the calendar year, when the practical reality of program performance and spending does not differentiate between dollars carried forward from March to April any more than it does December to January. As should be self-evident, the energy efficiency programs do not start and stop annually to assure that no projects or project costs carry from one year to the next. Likewise, it would be inappropriate to treat the funding for programs in this manner. The Order does not cite any authority or policy to support this arbitrary and unprecedented shift in funding, and nothing in the record supports this decision. Moreover, nothing in legislation requires eliminating carryforward funds, and doing so is inconsistent with the intention of RSA 378:37 to favor

maximizing the use of cost-effective energy efficiency and demand side resources. In view of these deficiencies, the determination to eliminate the carryforward of underspent funds should be reconsidered.

Similarly, the decision to have budget overspending paid for by utility shareholders[13] is equally unsupported by reasoning, the record, Commission policy or law. It is unreasonable to hold the NH Utilities responsible at the end of the year for the risk of under-recovery from a Commission-approved and prudently operated program. For example, the cause of the deviation from budget could be due to the fact that the utility's actual sales were lower than forecasted at the beginning of the year. Such a practice raises the specter of confiscatory rates, particularly because it would not require a showing of imprudence or bad management. With respect to overspending budgets, the Order states, "[i]f the Utility has spent more than the budget, or actual amount collected, in any program year, whichever is less, the cost shall be borne by the Utility's shareholders." Order at 41-42. Nothing else is said on this matter. There is nothing in the Order or the record providing any legal citation, grant of authority, or even any reasoning to support this arbitrary decision. Much the opposite, not only is this decision contrary to the goal of putting energy efficiency on equal footing with other available utility investments, as the Initial EERS Order held it should be, it creates a marked disadvantage for energy efficiency as an all-risk endeavor for the utilities. This construct creates a paradigm where a utility could execute its energy efficiency plan perfectly, spending precisely to the penny the budgeted amount, yet still be in a position of under-recovering its costs strictly due to a reduction in sales volumes due to forecasting variability. Both prior to and after the creation of the EERS, overspending, within the boundaries approved by the Commission, of successful program budgets has been reconciled during the

[13] As a not-for-profit, member-owned electric cooperative, NHEC does not have "shareholders"; it is therefore unclear what the Commission intended with regard to NHEC's overspent budgets.

following program year.[14] To reverse course without notice, legal authority or sufficient justification is not just or reasonable and runs contrary to Commission precedent, all without sufficient due process. The Order, therefore, must be reconsidered.

**Lost Base Revenue**

Furthermore, although the Order explicitly rejects the Proposed Plan and Settlement Agreement, the Commission does adopt part of the Settlement Agreement that applies to LBR to the extent it is consistent with the DOE's recommendations. The basis for rejecting other portions of the Proposed Plan and Settlement Agreement, while accepting this portion, is unclear. Also, even though the Commission purports to adopt this portion of the Settlement Agreement, the Order "further directs" that a number of adjustments be made to the way LBR is calculated. Order at 40. However, some of the required adjustments lack the explanations necessary for the utilities to actually implement them. The need for explanation is further discussed in the request for clarification below; however, even with clarity, the decision is improper. In the Order, as noted, the Commission has modified LBR, and it has done so without notice or record support. Although the decision regarding how LBR ought to be calculated certainly falls within the Commission's general regulatory purview, nothing in the record addresses how LBR is calculated because, significantly, it was not an issue noticed at the outset of this docket. Therefore, these adjustments should be reconsidered even if further clarification might be provided.

---

[14] https://www.puc.nh.gov/Regulatory/Docketbk/2012/12-262/ORDERS/12-262%202013-02-01%20ORDER%20NO%2025-462%20APPROVING%20ENERGY%20EFFICIENCY%20PROGRAMS.PDF 105% of sector budget approved in DE 12-262 (Page 6) 105% of total budget in 2019 PI working group final report (Page 12), incorporated for 2020 Plan assumptions and going forward:https://www.puc.nh.gov/EESE%20Board/EERS_WG/20190913-EERS-WG-PI-FINAL-REPORT.pdf

**Home Energy Assistance Cap**

As a final matter, the proposed increase to the cap on Home Energy Assistance ("HEA") projects from $8,000 to $20,000 was summarily rejected without support or reasoning. The HEA Program is a fuel-neutral weatherization program designed to reduce energy use from both electric and gas appliances, lighting, and HVAC systems in the homes of income-qualified customers – *i.e.*, people who confront challenges in paying for the energy they need to heat and light their homes. Under the Plan Proposal as modified by the Settlement Agreement, the per-project incentive cap was included at $20,000 to accommodate additional and more comprehensive energy efficiency improvement measures for these customers, consistent with the requirements of RSA 378:37 that the use of cost effective energy efficiency be maximized.

As with many of the issues discussed above, the Order simply states that the Moving Parties failed to meet their burden and that increasing the cap would result in "unequal benefits to program participants." Order at 43. There is no standard that creates any requirement of equal benefits to program participants and all program participants will almost certainly have differing benefits to various extents depending on the energy efficiency opportunities available. But aside from the reliance on claimed unequal benefits, the Order simply states the Moving Parties failed to meet their burden; no explanation follows. As the Proposed Plan speaks directly to the merits of increasing this cap, (*See* Exhibit 1, part 1, Bates pages 130-136), and as the Commission cites to no evidence (or lack of specific evidence) to justify its decision, the increase on the HEA cap should be reconsidered.

## IV. REQUEST FOR CLARIFICATION AND STAY

In addition to the issues for rehearing and reconsideration outlined above, the NH Utilities require clarification on numerous elements within the Order before any compliance filing

contemplated by the Order can reasonably be made with the Commission.[15] The Moving Parties acknowledge the Commission's December 6 order denying Liberty's December 3, 2021, motion for a stay. However, due to the lack of clarity on the items discussed below, the NH Utilities cannot reasonably comply with the December 15th filing date. Therefore, the Moving Parties respectfully request that the effect of the Order be stayed pending clarification of the issues below, as well as resolution of the rehearing/reconsideration issues discussed above, and that the terms of the previous governing order, Order No. 26,440, be reinstated during the interim to maintain the status quo until the issues raised by the Order are resolved.

For example, the Order requires that the December 15th program proposal include "only programs consistent with this order." (Order at 28). However, there is either insufficient or conflicting information throughout the Order that makes it impossible to know with any reasonable certainty whether any filing made on December 15 will actually comply with the Order. To be certain, the NH Utilities have no intent to be out of compliance with the Order regardless of whether the NH Utilities agree with the outcome. However, compliance at this time requires further clarity on the following items, at a minimum:

1) The Order requires that any new plan show "commensurate" benefits, but does not define the term "commensurate." Order at 33. For example, it is not clear whether program benefits are to be compared between programs; between participants and non-participants; between customer sectors; between customer rate classes, or some other comparison or balance.

[15] The NH Utilities currently are required to submit a compliance filing on December 15, 2021.

2) As noted, the Commission revised the benefit-cost test, but did not indicate the manner in which benefit-cost tests are to be applied. The Order indicates that the recently approved Granite State Test is now insufficient, but then directs the Utilities to use this test as well as the Total Resource Cost Test to determine which programs to offer in 2022 and beyond. It is not clear whether the NH Utilities are to use both of the benefit-cost tests identified or how the results of each test will be used to determine which programs may be implemented. In addition, the Order states that any benefit-cost test is to be "fully objective" (Order at 39), but the Order does not define or specify what "fully objective" means.

3) The terms "equal" and "equitable" benefits are seemingly used interchangeably in the Order. Order at 11, 35, 43. However, equal benefits to all customers, or even all program participants, are not possible. Further detail is needed as to what constitutes equitable benefits, particularly if standards established in prior Commission decisions no longer apply. This is necessary so that programs can be properly designed.

4) EM&V spending is to be "significantly reduced" in the program proposal, and to be completed by the end of 2022. However, the term "significant" is not defined. Order at 46. Without knowing the level of approved spending, it is not possible to construct budgets for the overall program. It is also unknown what to do with evaluation work that was scoped to provide insight and recommendations for program year 2023 and beyond given the requirement that "all EM&V work [is] to be completed by December 31, 2022."

5) Elimination of EM&V also significantly impacts the ability for the programs to meet the requirements of ISO-NE's Forward Capacity Market Rule 1, which mandates that all passive demand resources from energy efficiency programs be certified prior to being entered into the forward capacity market ("FCM"), in order to receive funding. This is because savings from energy efficiency measures need to be verified to be bid into the FCM, and thus receive payment. Refer to Exhibit 1, Part 1, Bates 30 for the projected FCM revenues for 2021-2023. It is unclear whether the impact on FCM revenues was an intended side effect of the other required cost reductions. Should the electric utilities fall short of cleared capacity obligations in the future due to reduced energy efficiency portfolios, the utilities will have to shift their obligation to other market actors or face penalties in the Forward Capacity Market.

6) The Order references, without context, the concept of "found revenues" relating to LBR. Order at 40. The Order does not define such revenues, nor describe what makes those revenues "found." The Order does not discuss why those revenues should apply to the calculation, nor specify how they are to be calculated or counted in determining LBR. Without further clarity on this issue, LBR cannot be definitively calculated.

7) The Order directs that the eliminated performance incentive budget be "redirected" to the energy efficiency programs. Order at 41. However, there is no budget to redirect, as the Settlement Agreement and Proposed Plan were rejected, along with the corresponding budgets. The EERS directs savings goals to be set first; then budgets; and lastly, rates are set based on those goals. By setting the rate first, there

are no budgets or funds to redirect from one place to another, so additional clarity is required.

8) The Order determines that the programs in the Proposed Plan are, in general, not just, reasonable and in the public interest, but does not establish threshold criteria for what other programs or proposals would meet the just and reasonable standard. It is necessary for the NH Utilities to have clarity on the criteria to be evaluated when designing programs for Commission consideration.

9) Clarity is needed on whether the prior Commission requirement for the electric utilities to produce at least 55% of their savings as kWh savings still exists or if it has changed in light of the changes to the programs.

10) Non-electric and non-gas savings are not referenced in the Order. However, information is needed on how to value these savings, particularly in light of the concerns relating to benefit-cost testing, noted above.

11) Programs that are "not solely ratepayer funded" are not identified or defined. Order at 47. It is not clear that the Order means something other than programming or measures co-funded by customer resources, through third party lenders or on-bill financing, or funded by Regional Greenhouse Gas Initiative ("RGGI") proceeds and FCM revenues, all of which were part of and supported in the 2021-2023 Plan Proposal. Further, information is needed as to what constitutes a program that would qualify under the Commission's definition of "not solely ratepayer funded".

12) The requirement that the NH Utilities propose programs with the "lowest per unit cost" (Order at 47-48) creates confusion regarding overall program structure and offerings. For example, C&I programs generally have a lower per-unit cost than residential programs. The Moving Parties assume that the Commission did not intend to eliminate all or most residential programs. Clarification is therefore required as to the criteria to be applied to determine the lowest per unit cost.

13) There is no flat, per-unit cost for any program. Per-unit costs vary between the individual measures that make up a full program offering, and most customer projects include a variety of eligible measures packaged to maximize energy savings and meet customer needs. Clarification is required for the criteria to be used in evaluating which programs will qualify as the lowest per-unit cost.

14) Clarification is also needed on what is meant by the requirement to report on "calculations on the corresponding dollar savings per unit of energy estimated to have been produced by each program during the prior program year… broken out by participating and non-participating ratepayers, by ratepayer class (Residential or Commercial & Industrial)." Order at 45. "Dollar savings per unit of energy estimated to have been produced" is unclear whether this is the inverse of the utility's cost to save each unit of energy or if it is something new. Energy is not "produced" by the NHSaves programs, it is avoided. Assuming the Commission meant energy avoided rather than energy produced, the directive could be interpreted to mean the amount of benefits resulting from the avoided energy use, but it is unclear whether those benefits should be from a single program year (i.e., annual savings) or the net present value benefits over the life of the measure (i.e.,

lifetime savings). Further, it is unclear whether the benefits are to be calculated based on the Avoided Energy Supply Components ("AESC") as indicated by the NH Utilities' benefit-cost models, or if it should include estimated non-energy impacts related to maintenance and operations, health and environmental impacts or on some other basis. Finally, there are multiple forms of energy that the NHSaves programs avoid, including electricity (and related demand), natural gas, oil, propane, kerosene, and wood. Additional resources related to water and wastewater are also avoided, generating benefits to customers and to municipal water supply and wastewater systems. Therefore "dollar savings per unit of energy" is not specific enough to calculate and clarification is needed.

15) Regarding the second portion of the above requirement that savings be "broken out by participating and non-participating ratepayers, by ratepayer class" (Order at 45), it is unclear how the Commission would have the NH Utilities perform this calculation, or even if it can be calculated. Since the beginning of the programs, measure and program benefits calculated by NH Utilities have relied on the AESC analysis undertaken by a third-party consultant procured by utilities and other parties throughout the New England Region. The results of this study, which is undertaken every three years, enables energy efficiency program administrators to calculate the estimated net present value of benefits related to avoided supply, capacity, distribution and transmission, demand reduction induced price effects ("DRIPE"), fossil fuel resources, wood, water and sewer costs. The benefits resulting from programs therefore do not accrue solely to participating or non-participating customers, but rather reflect benefits that accrue both to participants

through avoided energy use, as well as to the regional grid and natural gas systems. Further explanation is therefore needed before this requirement can be complied with.

16) The Order asserts that 15 percent of program costs being allocated to overhead and administrative costs are of particular concern to the Commission. Order at 44. However, the Order says nothing further about what constitutes appropriate administrative and overhead costs. Also, to the extent the Order is requiring that the administrative and overhead costs be lowered, it is unclear from which of the six categories outlined in the Order these reductions come (i.e. from all equally, or from only select categories by a specific amount). Additionally, it's unclear as to which of these categories are viewed as overhead or administrative costs. Accordingly, the Commission should clarify the degree of adjustment it is requiring and the manner in which the adjustment is to be calculated and applied.

17) Requirements for reporting savings calculations on "gross savings" needs to be clarified (Order at 45), and whether realization rates, in-service rates and net-to-gross factors developed by EM&V to isolate the impact of the energy efficiency programs is to be reported on at all, and if so, in what context.

18) To the extent that the reference to discount rates (Order at 45, 48) and estimated future prices of energy (Order at 48) are distinct from those provided by the NH Utilities as part of their benefit-cost models historically, then clarification is needed.

19) The programs currently operate under the agreement that any unspent HEA funds are to be carried forward into the following year to be spend on HEA projects in

the subsequent year. The NH Utilities need clarification as to whether these carryforwards are eliminated as well.

20) It is unclear whether 2021 carryforward balances should be calculated in the aggregate or that balances be shown for each sector.

21) The Order makes specific reference to the RSA that legislatively directs use of the state's proceeds from the RGGI auctions. RSA 125-O:23, directs that certain RGGI auction proceeds be used for specific low-income and municipal energy efficiency programs, with the remainder to all-fuels energy efficiency programs "distributed among residential, commercial, and industrial customers based upon each customer class's electricity usage to the greatest extent practicable." The portion of the RSA included in quotes in the Order refers to an all-fuels RFP program that is run currently by the Department of Energy and was previously run by the Commission. This all-fuels program portion of the RGGI funds does not come directly to the NH Utilities and the requirement to distribute the funds based on each customer class's usage is a requirement that falls to the DOE in their administration of the funds, not to the NH Utilities. Given this misapplication of the RSA, further clarification is needed regarding what the Commission intends or requires with respect to the referenced quote. RSA 125-0:23 does designate specific funding amounts to the NH Utilities for low-income and municipal programs, which were included in the Proposed Plan according to legislative direction and past precedent from prior approved Plans. Further clarification is needed regarding whether the Commission intends for the NH Utilities to utilize those RGGI funds in a manner that is different from the Proposed Plan.

22) Pages 42-43 of the Order state that if a utility has spent more than the budget, or actual amount collected in any program year, whichever is less, the cost shall be borne by the utility's shareholders. As a not-for-profit, member-owned electric cooperative, NHEC does not have "shareholders." It is therefore necessary that the Commission clarify how NHEC should treat overspent amounts.

23) The Order sets the energy efficiency portion of the SBC, but not the LBR portion; the NH Utilities that have LBR will require a hearing to set that rate, and the last approved LBR will remain in place until a hearing can be held, or an order *nisi* issued. Also, applicable to all of the NH Utilities, if there are programs for 2022 and 2023 that aren't approved by the Commission in their entirety, the Order says to reduce the SBC rate accordingly – such an adjustment would also require a hearing, but the order is silent as to how this process would occur. Clarification is needed as to the hearing and approval process for these rate changes.

WHEREFORE, the Moving Parties respectfully request that the Commission:

A. Grant rehearing of the issues identified in this Motion for the reasons set forth in Section III, above, which are that the Commission's decision is not in accordance with New Hampshire law; is the product of a proceeding that was not properly noticed as required by law; is based on misapplied legal standards and prior Commission decisions, and rendered conclusions that are unsupported or contradicted by the evidentiary record;

B. Provide clarification of the issues identified in Section IV, above, that arise from the Order and impact the NH Utilities' December 15th compliance filing requirement;

C. Grant a temporary stay of the Order, pending the clarification of the above-listed elements and resolution of this matter;

D. Extend or temporarily suspend the Order's December 15 filing requirement pending the clarification of the above-listed elements and resolution of this matter;

E. Reinstate the terms of Order No. 26,440, extending the 2020 SBC rates and program structure pending the resolution of the above-mentioned requests; and

F. Grant any such further relief as may be just and reasonable.

Respectfully submitted,

The NH Utilities: New Hampshire Electric Cooperative, Inc.; Public Service Company of New Hampshire d/b/a Eversource Energy; Unitil Energy Systems, Inc.; Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty; and Northern Utilities, Inc.; the Office of the Consumer Advocate; Clean Energy New Hampshire; Conservation Law Foundation; and Southern New Hampshire Services

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
D/B/A EVERSOURCE ENERGY

Date: December 10, 2021

By: _____
Jessica A. Chiavara
Counsel

NEW HAMPSHIRE ELECTRIC COOPERATIVE
By its Attorneys,
Orr & Reno, P.A.

By:_ __
Susan Geiger, Esq.

UNITIL ENERGY SYSTEMS, INC.

By:__ _
Patrick H. Taylor, Esq.
Senior Counsel

NORTHERN UTILITIES, INC.

By:_ _
Patrick H. Taylor, Esq.
Senior Counsel

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY UTILITIES

By:___/s/ Michael Sheehan_____
Michael Sheehan, Esq.
Senior Counsel

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP. D/B/A LIBERTY UTILITIES

By:____/s/ Michael Sheehan_____
Michael Sheehan, Esq.
Senior Counsel

OFFICE OF THE CONSUMER ADVOCATE

By:__
Donald M. Kreis, Esq.
Consumer Advocate

CONSERVATION LAW FOUNDATION

By:___/s/ Nicholas Krakoff_____
Nicholas Krakoff, Esq.
Staff Attorney

CLEAN ENERGY NEW HAMPSHIRE

By:___ ___
Samuel Evans-Brown
Executive Director

SOUTHERN NEW HAMPSHIRE SERVICES, INC.

By:_____
Ryan Clouthier
Deputy Director

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY UTILITIES

By:_____
Michael Sheehan, Esq.
Senior Counsel

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP. D/B/A LIBERTY UTILITIES

By:_____
Michael Sheehan, Esq.
Senior Counsel

OFFICE OF THE CONSUMER ADVOCATE

By:_____
Donald M. Kreis, Esq.
Consumer Advocate

CONSERVATION LAW FOUNDATION

By:_____
Nicholas Krakoff, Esq.
Staff Attorney

CLEAN ENERGY NEW HAMPSHIRE

By:_____
Samuel Evans-Brown
Executive Director

SOUTHERN NEW HAMPSHIRE SERVICES, INC.

By:_____
Ryan Clouthier
Deputy Director

**STATE OF NEW HAMPSHIRE**
**BEFORE THE**
**PUBLIC UTILITIES COMMISSION**

**Docket No. DE 20-092**

**ELECTRIC AND GAS UTILITIES**

**2021-2023 Triennial Energy Efficiency Plan**

**DEPARTMENT OF ENERGY'S MOTION FOR REHEARING AND/OR CLARIFICATION OF ORDER NO. 26,553**

NOW COMES the Department of Energy ("DOE"), a party to this proceeding, and moves pursuant to RSA 541:3 and N.H. Code Admin. R. Puc 203.07 for rehearing and/or clarification of Order No. 26,533 (November 12, 2021)("Order Denying Triennial Plan" or "Order"), which sets rates relating to the electric and natural gas utilities 2021-2023 Triennial Energy Efficiency Plan ("Triennial Plan"), while also ordering further processes relating to a to-be-filed Program Proposal and budgets. In support of this Motion, the DOE states as follows:

1. Pursuant to RSA 541:3, the Commission may grant rehearing when a party states good reason for such relief. Good reason may be shown by identifying new evidence that could not have been presented in the underlying proceeding or by identifying specific matters that were overlooked or mistakenly conceived by the deciding tribunal.[1] A successful motion for rehearing does not merely reassert prior arguments and request a different outcome.[2] RSA 541:4 requires a motion for rehearing "shall set forth fully every ground upon which it is claimed that the decision or order complained of is unlawful or unreasonable."

2. Several aspects of Order No. 26,553 require clarification and may provide good reason for rehearing, including those related to: (1) the appropriate benefit-cost test; (2) treatment of the 2021

[1] *Public Service Company of New Hampshire*, Order No. 25,239 at 4-5 (June 23, 2011).
[2] *Id*. at 5.

Avoided Energy Supply Costs Study; (3) the existence of, and budget for, Evaluation, Measurement, and Verification ("EM&V") activities moving forward; (4) the use of gross and net savings figures; (5) the allocation of budgets between customer sectors and programs; (6) the impact of forecasted versus actual revenues; (7) the impact of budgetary underspends; and (8) the level of process due to the parties for review of the Program Proposal.

## I. Benefit-Cost Test

3. Benefit-cost analysis is a systematic approach for assessing the cost-effectiveness of investments by comparing the net present value of the benefits and costs of potential investments.[3] New Hampshire's least cost integrated resource planning statutes require prioritization of energy efficiency and other demand side resources during utility planning processes when available options have equivalent financial costs, equivalent reliability, and equivalent environmental, economic, and health-related impacts.[4] Benefit-cost analysis is the vehicle that allows consistent quantification of financial costs, reliability, environmental economic, and health related impacts — regardless of whether an investment is a demand side investment, or a distribution/transmission/supply side investment — so the Commission can evaluate resources on equal footing. In the context of energy efficiency program planning, benefit-cost screening is also a mechanism that can inform which measures and programs will provide net benefits to ratepayers, and how funds are allocated to prioritize certain measures and programs. From 2000-2020, the Commission screened the cost-

[3] National Standard Practice Manual: Benefit Cost Analysis for Distributed Energy Resources. (August 2020) Page 30. (Observing that that benefit-cost analysis "is widely used by businesses for deciding whether to proceed with projects, investments, programs, initiatives, or other courses of action… [and] is frequently used by utilities, both for making internal resource investment decisions and to justify investment decisions to regulators and other stakeholders." Available at: https://www.nationalenergyscreeningproject.org/wp-content/uploads/2020/08/NSPM-DERs_08-24-2020.pdf

[4] See, RSA 378:39. Although the terminology of RSA 378:37-39 focuses on investment that are "least-cost," RSA 378:37 clarifies that it "shall be the energy policy of this state to meet the energy needs of the citizens and businesses of the state at the lowest *reasonable* cost." While the least cost planning statute directs consideration of health-related impacts, the Granite State Test does not directly quantify those impacts, and instead they are considered within a secondary test.

effectiveness of energy efficiency programs under the Total Resource Cost (TRC) test.[5] The TRC generally measures the costs and benefits that accrue to both the utility system and to program participants, including participant costs (such as the customer copay for a given measure) and participant benefits (such as improved occupant comfort, productivity, and health) whose quantifications are sometimes contentious.[6]

4. In 2018, the Commission authorized a Benefit-Cost Working Group to solicit and hire a consultant to conduct a review of issues relating to the cost-effectiveness test for energy efficiency programs in accordance with the framework established in the National Standard Practice Manual.[7] Using that framework, the Working Group led the development of a Report,[8] and ultimately recommended adoption of a new primary cost-effectiveness screening test known as the Granite State Test (GST).[9] The Commission adopted the Granite State Test as the primary cost-effectiveness screening test on December 30, 2019, with an effective date of January 1, 2021.[10] In justifying adoption of the GST, the Commission cited the GST's focus on utility system impacts, as compared to the TRC, and provided the following illustrative example:

> Use of the GST as the primary test will improve energy efficiency program screening by placing a greater emphasis on the utility system impacts than our current test. For example, in evaluating the cost-effectiveness of a lighting retrofit at a small business under the TRC, program evaluators consider the costs and benefits that accrue to the utility system and the program participant who installed the lighting measure. Evaluating that same lighting retrofit under the GST, program evaluators would consider the costs and benefits that accrue to the utility system but would not generally

---

[5] *See*, Order No. 23,574 at 14 (November 1, 2000) (Establishing the total resource cost test as the standard for cost-effectiveness screening in New Hampshire.)
[6] DE 17-136. Benefit-Cost Working Group Recommendation. Page 4. (October 31, 2019). Available at: https://www.puc.nh.gov/regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_FILING_WORKING_GROUP_REC.PDF
[7] Order No. 26,207 at 8 (December 31, 2018).
[8] DE 17-136. New Hampshire Cost-Effectiveness Review. Application of the National Standard Practice Manual to New Hampshire. Available at: https://www.puc.nh.gov/regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_NH_COST_EFFECTIVENESS_REVIEW.PDF
[9] *Supra*, at note 6.
[10] Order No. 26,322 (December 30, 2019) (Approving Benefit Cost Working Group Recommendation and establishing the Granite State Test as the primary test for cost-effectiveness screening effective January 1, 2021.).

> consider those impacts accruing to program participants (e.g., the participant's improved productivity, comfort, property value, and share of installation costs). We find that this emphasis on utility system impacts, which accrue to program participants and non-participants equally, will more appropriately target those measures and programs that lower utility system costs, minimizing disparate treatment of program participants and non-participants.[11]

5. In the Order Denying the Triennial Plan, the Commission found that the GST "is overly dependent on subjective factors," "cannot be expected to be reasonably understood by the public," and "cannot be solely relied upon for benefit-cost testing."[12] In light of these findings, the Commission directed that program benefits and costs be screened and reported using both the GST and the TRC, including for the purposes of the Program Proposal.[13]

6. Based on the Order, it is unclear whether the GST or TRC should be the primary test for cost-effectiveness screening moving forward. The DOE requests the Commission clarify that the TRC should be provided for illustrative purposes and considered a secondary test, and that the GST shall continue as the primary cost effectiveness test moving forward, including for development of the Program Proposal.[14] A Program Proposal that uses the TRC as its primary test would look vastly different than a Program Proposal that uses the GST as its primary test because the choice of which benefits and cost are considered would have a significant impact on the program prioritization the Commission directed occur during development of the Program Proposal.[15] For example, the TRC considers a program participant's copay a cost of the program, even though it is not within the program budget or recovered from ratepayers, while the GST does not consider participant copays a

---

[11] *Id*. at 9.
[12] Order No. 26,553 at 39.
[13] *Id*. at 39, 47.
[14] Order No. 26,322 established the GST as the primary test, along with two secondary tests that would be used for informational purposes only.
[15] Order No. 26,553 at 1. (Directing the Joint Utilities to "identify energy efficiency programs that provide the greatest benefit per unit cost with the lowest overhead and administrative costs within the approved budget and file a program proposal for review and approval by the Commission.")

cost of the programs.[16] If the Commission had instead intended for the TRC to be used as the primary test moving forward, the DOE requests reconsideration and/or rehearing of that decision, given the that the Commission appears to have overlooked facts related to its previous embrace of the GST, as well as the lack of evidence in the record regarding the subjectiveness/understandability of the GST compared to the TRC.

## II. Avoided Energy Supply Cost Study

7. In order to transparently, reliably, and consistently determine the utility system benefits that will occur as a result of energy efficiency investments, every two to three years public utility commissions, state energy offices, technical experts, utility program administrators, and other stakeholders from the New England States oversee the development of a region-wide avoided cost study.[17] That study forecasts future costs relating to the supply, transmission, and distribution of energy that may be avoided for each kWh, kW, and MMBtu of energy efficiency program savings. At the time the Triennial Plan was filed, the most recent edition of this study was the 2018 Avoided Energy Supply Cost Study (AESC), so that edition was used for development of the Triennial plan.[18] In the time that passed between the initial Triennial Plan filing and the Order No. 26,533, the 2021 AESC was issued in March 2021, and then updated and re-released in May 2021.[19] The 15-year levelized avoided energy supply costs projected in AESC 2021 are overall significantly less than those projected in AESC 2018. For example, summer peak avoided retail capacity costs have decreased by

[16] A participant copay is the amount paid towards an efficiency measure that is funded by the person choosing to install the measure, not by ratepayers. For example, a $5 lightbulb purchased at the store that qualified for a $2 rebate would have a cost of $5 under the TRC and a cost of $2 under the GST.
[17] *See Generally*, Synapse Energy Economics, Inc. Avoided Energy Supply Costs in New England Landing Page. Available at: https://www.synapse-energy.com/project/avoided-energy-supply-costs-new-england-aesc
[18] Avoided Energy Supply Components in New England: 2018 Report. (October 24, 2018). Available at: https://www.synapse-energy.com/sites/default/files/AESC-2018-17-080-Oct-ReRelease.pdf
[19] Avoided Energy Supply Components in New England: 2021 Report. (May 14, 2021). Available at: https://www.synapse-energy.com/sites/default/files/AESC%202021_20-068.pdf

approximately 44%, avoided retail energy costs have decreased by approximately 28%, and benefits associated with demand reduction induced pricing effect have decreased by approximately 50%.[20]

8. In the Order Denying the Triennial Plan, the Commission directed the Joint Utilities to "file a copy of any AESC update released in 2021 into the instant docket."[21] However, the Order remains silent on which set of avoided costs the Joint Utilities should use to develop their Program Proposal. Since the avoided costs in the 2021 AESC are significantly less than the avoided costs in the 2018 AESC, a Program Proposal developed using the now outdated 2018 AESC would provide an inaccurate assessment of avoided costs, lead to an inaccurate prioritization of programs based on inaccurate benefits, and risk characterizing programs as cost-effective when they may not be cost-effective under the AESC 2021 figures. Furthermore, a Program Proposal that uses AESC 2018 as its source of avoided costs would look vastly different than a Program Proposal that uses AESC 2021 as its source of avoided costs because the decrease in certain avoided costs in AESC 2021 would have a significant impact on the program prioritization the Commission directed occur during development of the Program Proposal.

9. In light of the ambiguity regarding which AESC Study shall be used for the purpose of developing the Program Proposal, the DOE requests the Commission clarify that the more recent version of the AESC Study be used for development of the Program Proposal. If the Commission had instead intended for the Program Proposal to be based on AESC 2018 avoided cost projections, the DOE requests reconsideration and/or rehearing of that decision because the material impact of AESC

---

[20] *Id*. at 5. The illustrative percentage reductions in avoided costs cited are for the West Central Massachusetts reporting zone, rather than New Hampshire, but the New Hampshire-specific values that were developed by the study are likely similar.

[21] Order No. 26,553 at 44. The Commission also found "the least cost showing requirement in from [sic] Order 25,932's framework has not been adequately demonstrated," because the record did not contain "direct comparisons of cost of energy savings to supply alternatives." AESC 2018 is the direct comparison of the cost of energy savings to supply alternatives, was used for compiling the Triennial Plan and related benefit cost models, and can be found on the Commission's website within its EM&V repository, available at: https://www.puc.nh.gov/Electric/Monitoring_Evaluation_Report_List.htm.

2021 on avoided costs is a fact that could not have been known to the Commission, since AESC 2021 was finalized several months after the Commission closed the evidentiary record in this proceeding, and no administrative notice was taken of the updated study.[22]

## III. Evaluation, Measurement, and Verification

10. Evaluation, Measurement, and Verification (EM&V) is a term for studies or actions "that have the objective of verifying energy savings, estimating future savings, and identifying ways to improve program delivery and results."[23] Since 2000, New Hampshire has completed or taken part in approximately 150 of these studies, which are generally used to: (1) evaluate when intervention in a particular market may be warranted (market assessments); (2) verify past savings and ensure future savings estimates are as accurate as possible in light of past results (impact evaluations); and (3) ensure that processes used to deliver programs provide the most savings at the lowest cost per program (process evaluations).[24] As observed by the United States Department of Energy, "common practice suggests that a reasonable spending range for evaluation (impact, process, and market) is 3% to 6% of a portfolio budget."[25] In line with this common practice, New Hampshire typically allots 5% of energy efficiency program budgets towards EM&V, but generally spends less than the allotment, having spent between 70% and 74% of the EM&V budget in 2018, 2019, and 2020.[26]

11. One particularly important justification for conducting EM&V is that ISO-New England requires consistently updated EM&V studies for any utility seeking to bid the demand reductions

---

[22] The Commission received testimony during the evidentiary phase of the proceeding that the 2021 AESC would be released in March 2021 and that avoided costs would likely decline significantly. December 21, 2021, Transcript (Tab #64) Page 136, Lines 2-18.
[23] Order No. 26,323 at 9. (December 21, 2019)
[24] New Hampshire Public Utilities Commission. Completed Monitoring and Evaluation Study Repository. Available at: https://www.puc.nh.gov/Electric/Monitoring_Evaluation_Report_List.htm
[25] *See Generally*, US Department of Energy. SEE Action Guide for States: Evaluation, Measurement, and Verification Frameworks – Guidance for Energy Efficiency Portfolios Funded by Utility Customers. Page 34. (January 2018). Available at: https://www.energy.gov/sites/default/files/2021-07/EMV-Framework_Jan2018.pdf
[26] Docket No. DE 17-136. These figures are derived from Page 23 of the Fourth Quarter Reports for 2018 (Tab 116), 2019 (Tab 198), and 2020 (Tab 244).

associated with an energy efficiency program into the Forward Capacity Market.[27] During the previous triennial plan, the Joint Utilities received approximately $23 million in revenues associated with verified energy efficiency program demand reduction from the Forward Capacity Market; these revenues directly offset the need for ratepayer funding sources.[28]

12. The Commission has long recognized that "The importance of a thoughtful and thorough monitoring and evaluation program cannot be overstated,"[29] and more recently approved the re-engagement of an EM&V consultant for the 2021-2023 Triennium, while also observing that three evaluation studies were planned to begin in 2020.[30] Consistent with the Commission's previous directives, the DOE solicited and contracted with an independent EM&V consultant, as approved by the Governor and Council on August 4, 2021. Similarly, the EM&V working group has continued work in 2021 on two of the three studies previously identified by the Commission, namely, the Large Business Impact and Process Evaluation, as well as the development of the Technical Reference Manual.[31]

13. In the Order Denying the Triennial Plan, the Commission observed that the proposed EM&V budget of $16 million was unreasonable, required that 2022 EM&V budgets be "significantly reduced," directed that all EM&V work be completed by December 31, 2022, and directed the EM&V Working Group to submit a plan "in advance of any costs being incurred related to EM&V during the triennium."[32]

---

[27] ISO New England Manual for Measurement and Verification of Demand Reduction Value from Demand Resources: Manual M-MVDR. Section 15-2. (June 1, 2014). Available at: https://www.iso-ne.com/static-assets/documents/2017/02/mmvdr_measurement-and-verification-demand-reduction_rev6_20140601.pdf
[28] Docket No. DE 17-136. Joint Utilities' 2018 (Tab #116), 2019 (Tab # 198), and 2020 (Tab # 244) Fourth Quarter Annual Reports. Page 18.
[29] Order No. 23,574 at 21 (November 1, 2000); *See* also, Order No. 25,932 at 61 (August 2, 2016) (stating "[r]igorous and transparent EM&V is essential… to ensure that the efficiency programs actually achieve planned savings in a cost-effective manner")
[30] Order No. 26,323 at 5, 9 (December 31, 2019).
[31] The EM&V Working Group also began a study relating to the appropriate baselines for use in savings estimation.
[32] Order No. 26,553 at 46 (November 12, 2021).

14. In light of the Commission's past guidance regarding EM&V, and ongoing EM&V studies, the DOE requests clarification of several aspects of the Order's EM&V-related directives. Given that the Commission had previously approved the use of an independent EM&V consultant during the 2021-2023 Triennium, and three studies remain ongoing at this time, the DOE requests the Commission clarify that the ongoing EM&V studies and the requisite consulting expertise shall continue at least until the conclusion of the existing contracts. If the Commission had instead intended for those costs to cease by the end of 2022, regardless of whether their studies and contracts are complete, the DOE requests reconsideration and/or rehearing of that decision, given that the Commission appears to have overlooked facts related to its previous embrace of those costs, and in light of the lack of evidence in the record demonstrating that such costs are unreasonable.

15. Similarly, the Commission's directive relating to cessation of all EM&V work by December 31, 2022 appears to overlook the fact that EM&V is an ongoing necessity for ISO-NE FCM revenue eligibility, for savings accuracy, and program administration more broadly. At its most basic, EM&V is a necessary ratepayer protection measure for any jurisdiction which offers ratepayer funded energy efficiency programs. Without EM&V, there is no continued assurance that efficiency programs are being delivered at the lowest reasonable cost. In light of this, the DOE requests reconsideration and/or rehearing of the Commission's directive requiring cessation of all EM&V work by December 31, 2022.

## IV. Net v. Gross Savings Figures

16. When determining the level of kW, kWh, and MMBtu savings that result from an investment in energy efficiency, two different methods are generally used: gross savings and net savings. Gross savings is "The difference between energy consumption of the affected equipment or facility with versus without the EE project or EE measure in place, without consideration of program influence or

attribution."[33] Net savings indicates the percentage of observed savings which are *actually attributable to a program intervention*, removing savings attributable to "free riders" who would have taken the action without the program intervention,[34] and adding "spillover" savings that are attributable to the program intervention but occur outside of the measure or program being examined.[35] Spillover generally increases claimable savings, while free ridership generally decreases claimable savings.

17. A primary benefit of measuring and reporting net savings rather than gross savings is that it can help program administrators and regulators understand when a market has reached the end stages of the market transformation cycle, so they may plan an exit strategy for program incentives for that market. Free ridership is a direct indicator of whether a market barrier exists that would otherwise prevent a ratepayer's investment in efficiency measures for a particular market. A measure or program with a low net savings percentage due to high free ridership faces no market barriers and should be discontinued, while a high net savings percentage and low or no free-ridership is evidence that action would not have been taken without the program intervention, likely due to market failures or barriers such as information asymmetries, existing energy market price distortions, capital market imperfections, split-incentives, principle-agency problems within firms, and the "bounded" rationality

[33] US Department of Energy. State and Local Energy Efficiency Action Network. SEE Action Guide for States: Evaluation, Measurement, and Verification Frameworks—Guidance for Energy Efficiency Portfolios Funded by Utility Customers. (January 2018) Page 72. Available at: https://www4.eere.energy.gov/seeaction/system/files/documents/EMV-Framework_Jan2018.pdf

[34] An example of **free ridership** is when a customer becomes aware of, and receives, a weatherization program rebate *after* they had already decided on a specific budget for their project, where the rebate does not motivate the customer to alter the budget/scope of the project or further invest the program rebate in efficiency upgrades.

[35] An example of **spillover** is when a customer notices the high efficiency outdoor lighting their neighbor was motivated to purchase because of a program rebate and is inspired by their neighbor to purchase similar high efficiency lighting, but does not receive a program incentive for their purchase.

of consumer decision-making.[36] In short, a net savings percentage near or approaching 100% is strong evidence that a program intervention overcame a market barrier.

18. In the Order Denying the Triennial Plan, the Commission observes that the Settling Parties have agreed to a qualified transition to net savings figures, but directs that the Joint Utilities file Program Oversight filings on March 31 of each year containing financial information regarding the prior program year expressed as *gross* savings, rather than net savings.[37] However, the Order remains silent on whether the Joint Utilities should use net savings projections or gross savings projections to develop the Program Proposal. Since net savings benefits would be significantly less than gross savings benefits for markets such as residential and commercial lighting which face a waning need for program intervention,[38] a Program Proposal developed using gross savings figures would provide an inaccurate assessment of program benefits, lead to an inaccurate prioritization of programs based on inaccurate benefits, and risk characterizing programs as cost-effective when they would not in actuality be cost-effective. Furthermore, the Order repeatedly emphasizes the importance of programs narrowly tailored towards reducing market barriers to investment in energy efficiency,[39] but a potential continued focus on gross savings is directly antithetical to these directives.

19. In light of the ambiguity regarding whether net or gross savings shall be used for the purpose of developing the Program Proposal, the DOE requests the Commission clarify that, for those measures where the Technical Reference Manual and Settlement prescribe it, net savings shall be used

---

[36] Levine, M., et al. Lawrence Berkeley National Laboratory. *Energy Efficiency, Market Failures, and Government Policy*. (March 1994) Page 14-19. Available at: https://eta-publications.lbl.gov/sites/default/files/energy-efficiency-market-failures-and-government-policy.pdf

[37] Order No. 26,553 at 45.

[38] As noted in Elizabeth Nixon's testimony in this proceeding (Tab # 8, Bates 22), commercial and industrial lighting represents approximately half of the triennial plan's planned savings, represents a market that was rapidly moving towards transformation in November of last year, and may no longer warrant the level of incentives contemplated in the Triennial Plan. *See also*, Massachusetts Energy Efficiency Advisory Consultants. *The Future of C&I Lighting in Massachusetts: A Continued Major Source of Savings, or in Decline?* September 25, 2019. Page 13-15. Available at: http://ma-eeac.org/wordpress/wp-content/uploads/TheFuture-of-CI-Lighting-October-2019.pdf

[39] Order No. 26,553 at 29, 31, 32, 45 and 47.

for development of the Program Proposal.[40] If the Commission had instead intended for the Program Proposal to be based on gross savings, the DOE requests reconsideration and/or rehearing of that decision because the material impact of using net savings for program prioritization appears to have been a fact overlooked or mistakenly conceived in Order No. 26,553.

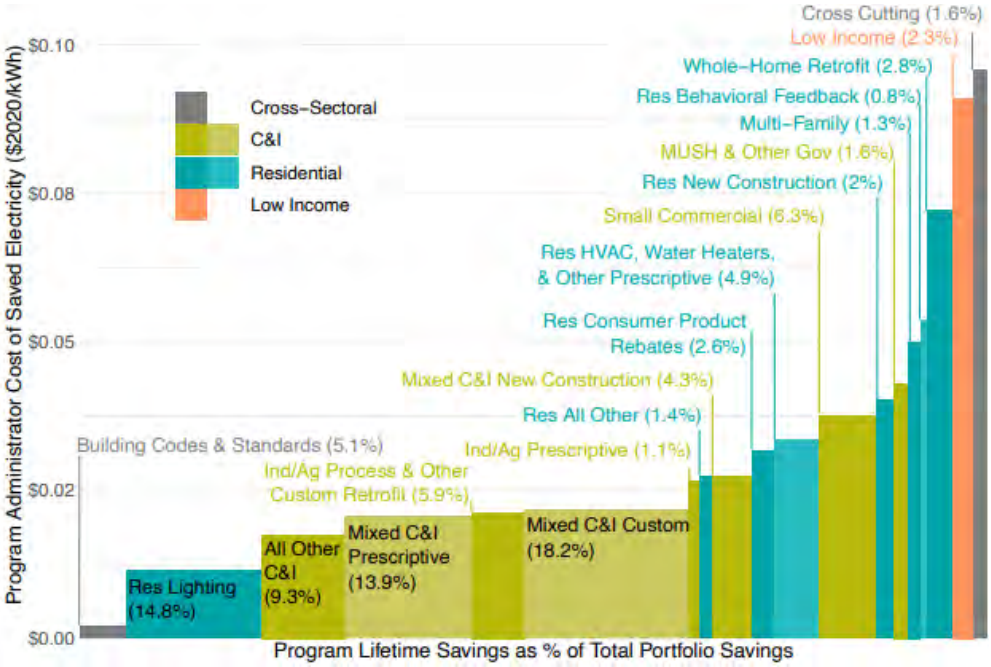
## V. Allocation of Budgets Between Customer Sectors and Programs

20. The Commission Staff, now the DOE, participated extensively in the collaborative processes that led to the development of the Triennial plan. Based on this experience, the DOE understands that the measure/program mix in any plan is based on a series of interdependent factors, including benefit-cost analysis, intergenerational/inter-sector equity considerations, and the need for program diversity, amongst other things. In the same way that supply-side resource homogeneity can be problematic for reliability,[41] demand side resource homogeneity can be problematic for energy efficiency program offerings. As a general rule, commercial and industrial programs provide the greatest benefit to ratepayers at the lowest per-unit cost. However, in order to maintain a diversity of offerings and ensure that all ratepayers have the opportunity to become program participants, it is extremely common for ratepayer-funded energy efficiency programs to targets savings beyond the commercial sector which generally have a far higher per-unit cost than commercial sector programs. The chart

[40] Note that the utilities also take into account other adjustments, such as the realization rate, that is, the rate at which the expected savings occur, and consider those adjustments to the gross savings ("adjusted gross savings"). Any adjustments to gross savings should be considered in the development of the Program Proposal.

[41] Docket No. DE 06-097. Investigation into Public Service Company of New Hampshire's Coal Procurement. *Final Report Analysis of PSNH Coal Procurement and Transportation Operations*. (August 8, 2007) (Stating that "Utility fuel procurement involves a number of risks and uncertainties," and that "Utility fuel procurement organizations have typically developed what is termed a "portfolio strategy" to help manage these and other fuel procurement risks and uncertainties. These strategies generally address the following goals: supplier diversity; supply region diversity, transportation diversity, diversity of contract term, commodity diversity, and approaches to handling price volatility. Available at: https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-075/TRANSCRIPTS-OFFICIAL%20EXHIBITS-CLERKS%20REPORT/17-075_2019-01-09_EXH_4.PDF

below was developed by Lawrence Berkley National Laboratory and provides a review of the per unit cost of saved energy within various commonly offered energy efficiency programs from 2010-2018.[42]




It shows that commercial programs overwhelmingly provide the lowest cost per unit of energy saved, with the notable exception of residential lighting programs. During the first half of the 2010's, residential lighting programs were heavily supported prior to the transformation of that market, a transformation which resulted in net savings figures that led regulators and program administrators to eliminate those programs. The chart also demonstrates that low-income weatherization programs have some of the highest per unit costs of all the program offerings.

21. In the Order Denying the Triennial Plan, the Commission directs that the Joint Utilities "identify programs that provide the greatest benefit per unit cost with the lowest overhead and administrative costs within the approved budget and file a program proposal for review."[43] However, the Order is unclear regarding the role of program diversity in the 2022 Program Proposal, the priority

[42] Nims Frick, N., et alia. *Still the One: Energy Efficiency Remains a Cost-Effective Electricity Resource*. (August 10, 2021). Slide 14. Available at: https://eta-publications.lbl.gov/sites/default/files/cose_cspd_analysis_2021_final_v2.pdf
[43] Order No. 26,553 at 1, 47.

of low-income programs, and the degree to which the Program Proposal should focus overall funding on a single customer sector, potentially diverting funds derived from residential customers to the commercial and industrial sectors where the most cost-effective savings potential lies.

22. In light of the ambiguity regarding the impact of these considerations on the Program Proposal, the DOE requests the Commission clarify that benefit per unit cost shall be only one of the many interdependent factors considered by the Joint Utilities as they develop the Program Proposal. If the Commission had instead intended for the Joint Utilities to prioritize programs within the Program Proposal according to greatest benefit per unit cost exclusively, the DOE requests reconsideration and/or rehearing of that decision because the material impact of such a directive on program and sector prioritization (in particular, the negative impact on the residential programs) appears to have been a fact overlooked or mistakenly conceived in Order No. 26,553. Furthermore, such a directive would be inconsistent with RSA 374-F:3, VI, which requires that the programs "provide benefits to all consumers and do not benefit one customer class to the detriment of another."

23. Similarly, if the Commission had intended for the Joint Utilities to prioritize programs within the Program Proposal according to greatest benefit per unit cost exclusively, the DOE also requests reconsideration and/or rehearing of that decision so that evidence relating to the impact on the Weatherization Assistance Programs (WAP) managed by the DOE may be received and considered by the Commission. The WAP program and the ratepayer funded Home Energy Assistance (HEA) program are generally delivered in tandem, with funding for a given installation often derived from both programs. Low-income weatherization programs such as the WAP and the HEA program have among the highest per-unit costs of all program offerings, and WAP may require significant alteration if HEA program funding is significantly reduced beginning in 2022. The Triennial Plan would have funded HEA program budgets at approximately $73 million from 2021-2023, but budgets closer to

those during the previous triennium, as the Commission has directed, would fund those same programs at approximately $30 million.[44] Inasmuch as the Commission has overlooked potential impacts on the WAP programs in directing HEA program funding reductions in 2022 and 2023, the DOE requests reconsideration and/or rehearing of this issue.

## VI. Impact of Forecasted v. Actual Revenues

24. Energy efficiency budgets are set prospectively and are generally based on the Commission-approved $/kWh or $/therm rates but are also impacted by several forecasted variables that affect the revenues collected by the Joint Utilities to form the budget. As noted in the Triennial Plan, "Actual sales may differ [from projected sales], resulting in potentially more or less SBC or LDAC revenue available for energy efficiency programs." In addition, Regional Greenhouse Gas Initiative (RGGI) and FCM proceeds are estimated and are also likely to differ from actual revenues."[45]

25. In the Order Denying the Triennial Plan, the Commission sets an energy efficiency funding rates that it deems acceptable for 2021-2023, and directs the Joint Utilities to file budgets based on those rates.[46] The Commission also directs that "If the Utility has spent more than the budget, or actual amount collected, in any program year, whichever is less, the cost shall be borne by the Utility's shareholders."[47]

26. Although the DOE appreciates the Commission's focus on programs that are budget conscious, the directive that any budget overspends be recovered from shareholders — when paired with several revenue inputs which are beyond the control of the Joint Utilities, such as FCM revenues, RGGI revenues, lost base revenues, and actual sales volumes which vary significantly based on

---

[44] See Docket No. DE 20-092, Exhibit 2 at Bates 335, and Docket No. DE 17-136, Exhibit 2 at Bates 182-188. Assuming a budget of $8,000 for each weatherization project, that funding disparity translates to approximately 5,000 fewer HEA program participants than proposed in the Triennial Plan.
[45] Exhibit 1, at Bates 33.
[46] Order No. 26,553 at 36, 38, and 49.
[47] *Id*. at 42-43.

weather and cannot be known until the end of the year — could create a situation where the Joint Utilities will likely either plan 'buffer' budgets at a level below those directed by the Commission or eliminate programs entirely each December if annual sales volumes appear less than projections. This 'start/stop' effect could result in significant program disruptions, a situation that has previously been identified as problematic in the contractor community.[48] It is unclear to the DOE whether the Commission intended to except from its directive those instances where actual FCM revenues, RGGI revenues, lost base revenues, or sales volumes vary from initial projections. In light of this ambiguity regarding the impact of budget inputs that must be forecasted, the DOE requests the Commission clarify that budget overspends relating solely to the difference between forecasted and actual sales volumes, FCM revenues, RGGI revenues, and lost based revenues may be reconciled in the following program year. The Commission has historically allowed reconciliation of energy efficiency funding across program years.[49] Such reconciling mechanisms are not unique to this Commission, and are mirrored in many other Commission-approved rates which are similarly based on forecasted volumes or other projected factors.[50] If the Commission had instead intended to penalize the Joint Utilities for budgets overspending directly tied to forecasted variables largely outside of the control of the Joint Utilities, the DOE requests reconsideration and/or rehearing of that decision because it overlooks the likely impacts relating to program "start/stop" effects and the likelihood that the Joint Utilities would plan "buffer" budgets to shield them from the potential detrimental impacts of forecasted variables.

---

[48] Docket No. DR 96-150. Report to the New Hampshire Public Utilities Commission on Ratepayer Funded Energy Efficiency Issues in New Hampshire. Page A29. (July 6, 1999) (Stating "A major complaint heard about these incentive programs was their disruptive "start/stop" nature related to availability of funding.") Available at: https://www.puc.nh.gov/Electric/96-150%20%20NH%20Energy%20Efficiency%20Working%20Group%20Final%20Report%20(1999).pdf

[49] Order No. 25,062 at 12. (January 5, 2010) (Approving a settlement agreement directing that the "Utilities will file performance incentive reports by June 1 of each year for the prior year, and will include a year-end reconciliation to document and identify any carry forward balances."

[50] *See generally*, Docket Nos. DE 21-109 (Eversource 2021 Transmission Cost Adjustment Mechanism), DE 21-121 (Unitil Stranded Cost Recovery and External Delivery Charge Reconciliation and Rate filing), and DE 21-063 (Liberty Utilities Annual Retail Rate Filing).

## VII. Impact of Budgetary Underspends

27. Ratepayer funded energy efficiency programs have existed in New Hampshire for approximately 30 years.[51] Since 2018, those programs existed within the Commission-established Energy Efficiency Resource Standard (EERS) framework, in which the Commission provided the Joint Utilities with savings targets, a cost recovery mechanism, performance incentives, and lost base revenues.[52] Prior to the EERS framework, electric utility industry restructuring in the early 2000's led the Commission to approve 'CORE' program offerings, which provided the Joint Utilities with a rate that would dictate savings targets, and a performance incentive, but no lost base revenues.[53] For approximately a decade prior to the CORE programs, the New Hampshire utilities offered utility-specific Conservation and Load Management (C&LM) programs. Certain utility C&LM programs faced spending well below Commission-approved budgets.[54]

28. In the Order Denying the Triennial Plan, the Commission found that "Performance Incentives are no longer just and reasonable and in the public interest in the context of ratepayer funded EE," and directed that the "Performance Incentives be eliminated effective December 31, 2021."[55]

29. In light of the historical evidence regarding the potential for budgetary underspends, the DOE requests the Commission clarify that the elimination of the performance incentive was intended as a precursor to the establishment of an alternative incentive or penalty mechanism to encourage the

---

[51] During the majority of this time, performance incentives have been included in the program cost-benefit analysis used to determine if a program portfolio results in just and reasonable rates.
[52] Order No. 25,932 (August 2, 2016).
[53] Order No. 23,574 (November 1, 2000)
[54] Order No. 21,366 at 4 (September 20, 1994) (Stating "Staff introduced an exhibit during the final hearing which indicates that PSNH in fact dramatically underspent its C&LM funds during the period in question. For instance, during the period of May 16, 1991 through the end of 1991 PSNH spent only 32 percent of the funds available for C&LM programs. In 1992 only 18 percent of available funds were utilized. Overall, for the time period in question PSNH only spent 28 percent of its available C&LM funds."); *See also*, Order No. 20,186 at 7 (July 23, 1991)(Stating "While the commission is concerned with GSEC's underspending on residential programs and believes the company needs to be encouraged to increase its spending to at least projected levels, at this point we believe it is premature to adopt the Consumer Advocate's recommendation that the C&LM factor for the residential class remain at the original authorized level ($.00423/kilowatthour)."
[55] Order No. 26,553 at 41.

program administrators to achieve levels of energy efficiency savings consistent with the rates set by the Commission. Under traditional cost of service ratemaking, utility shareholder profit is enhanced by continued investment in capital assets upon which the Company may earn a rate of return. In practice, this leads companies to seek out capital-intensive technologies and/or take advantage of other opportunities to build rate base. For distribution utilities, one of the largest historical opportunities for rate base growth has been focused on capacity related investments. Energy efficiency programs have the potential to diminish the need for these investments through their ability to reduce demand growth.[56] If there is no incentive to meet the targets that result from the Commission approved rate, and no consequence for failing to meet those targets, a likelihood exists that the Joint Utilities will not meet the targets associated with the Commission-approved rate.

30. If the Commission did not intend to replace the performance incentive with an alternative penalty or incentive mechanism, the DOE requests reconsideration and/or rehearing of that decision because the Commission received no evidence in the record supporting this action, and because that decision overlooks existing incentives inherent in the cost-of-service ratemaking that will discourage the Joint Utilities from procuring energy efficiency at the levels directed by the Commission in its Order, and similarly overlooks the value of penalties/incentives as a tool for ensuring programs are optimized for ratepayer benefit.

**VIII. Due Process and the Program Proposal Timeline**

31. When the Commission approved the EERS, it emphasized the importance of stakeholder involvement in plan development:

> Involving energy service stakeholders in the development and implementation of the EERS is important, because they are directly connected to the provision of energy and efficiency services… We approve the Settling Parties' recommendations for an EERS process, including the pre-filing collaborative preparation of a plan for the first triennium with the assistance of a planning expert. We agree that such a process will

[56] Docket No. 21-030. Direct Testimony of Larry Blank at 13. (November 23, 2021). Tab 67.

> likely result in a more efficient and less adversarial adjudicative proceeding following the plan's filing for Commission review and approval.[57]

For both the 2018-2020 and 2021-2023 Triennial Plan, the parties to this proceeding, outside stakeholders, and the Joint Utilities have successfully engaged in this pre-filing collaborative process, to narrow the number of issues in contention before the Commission when it receives Triennial Plan filings. After the pre-filing collaborative process, adjudicative proceedings are held over a period of approximately four months to ensure that affected persons may avail themselves to a sufficient level of process relating to the Commission's implementation of a rate based on the Triennial Plan.

32. In the Order Denying the Triennial Plan, the Commission directed that the Joint Utilities file 2021, 2022, and 2023 Energy Efficiency budgets and a Program Proposal on December 15, 2021.[58] The Commission also direct that the "Joint Utilities and Stakeholders shall calculate annual budgets… identify[ing] the programs which provide the greatest energy efficiency savings at the lowest per unit cost with the lowest overhead and administrative costs for further implementation."

33. In light of the previous timelines associated with Triennial Plan development, the Commission's directive that the Joint Utilities work with Stakeholders to develop the new budgets and 2022 Program Proposal, and the possibility that the Commission will make material clarifications to Order No. 26,553 responsive to rehearing/clarification motions, the DOE requests the Commission clarify that it intends to begin an adjudicative process relating to the Program Plans and involving a timeline of approximately 4 months *after* the Commission has resolved any motions for clarification, reconsideration, or rehearing it has received. As noted in the body of this pleading, there are a number of elements within Order No. 26,553 requiring clarification, the clarification of which will likely have a material impact on the Program Proposal, program prioritization, and related budgets.[59]

---

[57] Order No. 25,932 at 60-62.
[58] *Id* at 49.
[59] This is true even when the budgets are set based on the rate prescribed in Order No. 26,553.

34. These elements include: (1) the appropriate benefit-cost test; (2) treatment of the 2021 Avoided Energy Supply Costs Study; (3) the existence of, and budget for, Evaluation, Measurement, and Verification ("EM&V") activities moving forward; (4) the use of gross and net savings figures; (5) the allocation of budgets between customer sectors and programs; (6) the impact of forecasted versus actual revenues; (7) the impact of budgetary underspends.

35. If the Commission had not intended for the Program Proposal filings to be followed by an adjudicative process involving a reasonable timeline (approximately 4 months) *after* the Commission has resolved any motions for clarification, reconsideration, or rehearing it has received, the DOE hereby requests reconsideration/rehearing of that decision, so the rights of all parties with respect to Program Proposal development may be preserved. The Commission's directives related to the above-described issues, depending upon how they are clarified, will likely result in a Program Proposal which is drastically different from the Triennial Plan, and which has not undergone a review process before the Commission.

36. While the DOE defers to the Commission's rate setting authority regarding the rate to be used for development of the Program Proposal and associated 2022 and 2023 budgets, we request that until such time as all parties have been afforded the level of process to which they are entitled, and a Program Proposal is approved by the Commission, no change occur in the program offerings or associated rates. Inasmuch as this request may be inconsistent with Order No. 26,553, the DOE hereby requests the Commission reconsider and/or rehear the decision to direct a change in rates without having first reviewed the Program Proposal, or having afforded the parties an adequate process for review of the Program Proposal.

**WHEREFORE**, for the reasons set forth herein, DOE respectfully requests that the Commission:

1. Grant rehearing and/or clarification as provided above; and

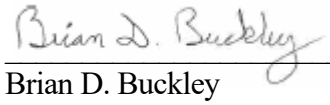
2. Grant such further relief as is just, equitable, and appropriate.

Respectfully submitted,
Department of Energy
By its Attorney,

/s/ Brian D. Buckley

Brian D. Buckley, #269563
Staff Attorney/Hearings Examiner
21 S. Fruit St, Suite 10
Concord, NH 03301
(603) 271-1188
Brian.D.Buckley@Energy.NH.Gov

I hereby certify that, on December 10, 2021, a copy of this Response has been sent electronically to the Service List in this matter.



Brian D. Buckley

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

ELECTRIC AND GAS UTILITIES

2021-2023 Triennial Energy Efficiency Plan

Docket No. DE 20-092

**LISTEN COMMUNITY SERVICES' MOTION FOR REHEARING, CLARIFICATION AND STAY OF ORDER NO. 26,553**

Pursuant to New Hampshire Code of Administrative Rules Puc 203.07, RSA 541:3, and RSA 541:5, LISTEN Community Services respectfully requests rehearing and clarification of Order No. 26,553 (Nov. 12, 2021) (the "Order") issued by the New Hampshire Public Utilities Commission ("PUC") in Docket No. DE 20-092. LISTEN also moves for a temporary stay of Order No. 26,553 and respectfully requests that the PUC reinstate the terms of Order No. 26,440 pending resolution of this matter. Through this motion, LISTEN joins the motion for rehearing, clarification and stay of Order No. 26,553 filed by the Settling Parties on December 10, 2021, and adopts the arguments made, the issues raised, and the relief requested by the Settling Parties for purposes of this motion.

The PUC should grant a temporary stay to avoid irreparable harm to low-income ratepayers that will result from the Order. New Home Energy Assistance (HEA) projects have been suspended indefinitely.[1] One of LISTEN's clients recently called its staff because she is concerned that she will not be able to afford her heating bills during the winter now that her planned energy efficiency measures through the HEA program have been indefinitely postponed. Given the rising energy costs forecasted for this winter and the drastic impact Order No. 26,553

[1] Hoplamazian, Mara, *PUC decision creates uncertainty for low-income energy assistance programs*, NHPR (Nov. 23, 2021, 4:52 PM), *available at* https://www.nhpr.org/nh-news/2021-11-23/puc-decision-creates-uncertainty-for-low-income-energy-assistance-programs (accessed Dec. 9, 2021).

has had on the HEA program, the PUC should grant a stay to resolve the legal and practical issues raised by the Settling Parties and LISTEN. In support of this motion, LISTEN states as follows:

## I. LISTEN Has Standing To File A Motion For Rehearing Pursuant To Puc 203.07 And RSA 541:3.

The New Hampshire Supreme Court has held that ratepayers and representatives of ratepayers have standing to challenge a PUC decision even if they were not a party to the administrative proceeding as long as they are directly affected by the decision. *Appeal of Richards*, 134 N.H. 148, 156-57 (1991) (holding that ratepayers are directly affected by rate decisions). LISTEN is a ratepayer and has participated in the statewide energy efficiency program. LISTEN greatly benefited from its participation in the program and hoped to take advantage of the program again in the future. Through its Housing Helpers and Heating Helpers programs, LISTEN provides critical support to individuals and families in the Upper Valley who are struggling to cover their housing and utility costs, especially the elderly and families with young children. Most of LISTEN's clients apply for energy efficiency services through their local Community Action Agency when they apply for Fuel Assistance benefits.

LISTEN and the low-income ratepayers that it serves have been directly affected by Order No. 26,553 because the Order has resulted in the suspension of new energy efficiency projects. The Order also reduces their opportunity to participate in the statewide energy efficiency programs because it drastically reduces the budget and seeks to fundamentally alter the structure of the Energy Efficiency Resource Standard (EERS). On information and belief, there is still a significant waitlist for the HEA Program that predates the suspension of the Program due to Order No. 26,553. At least one of LISTEN's clients was scheduled to receive energy efficiency measures through the HEA Program in early 2022, but her project has been

suspended indefinitely. She contacted LISTEN because she is concerned that she will not be able to afford her heating costs this winter as a result.

While LISTEN meets the requirements of Puc 203.07 and RSA 541:3 to file this motion as a ratepayer and a representative of ratepayers who have been negatively impacted by the Order, LISTEN also will be filing a petition to intervene as a full party in the docket.

## II. LISTEN Adopts And Reiterates The Positions In The Settling Parties' Motion For Rehearing, Clarification And Stay Filed on December 10, 2021.

LISTEN adopts and reiterates by reference the legal arguments made, the issues raised, and the relief requested by the Settling Parties in their motion. In the interest of brevity, LISTEN does not set forth those arguments and issues herein. LISTEN also submits its motion to raise additional reasons why a motion for rehearing, clarification and stay should be granted based on the harmful impact the Order will have on low-income ratepayers.

## III. The PUC Unlawfully Reversed Years Of Precedent And Settled Issues In Violation Of Due Process, RSA 365:28, and the Doctrine of *Stare Decisis*.

The PUC process resulting in the issuance of the Order was fundamentally unfair, in violation of the procedural due process and statutory rights of LISTEN and its clients under Articles 2 and 15 of the New Hampshire Constitution and New Hampshire RSA 365:28. LISTEN's clients include individuals who were found eligible for and approved for the HEA Program, and who are now left without such assistance as they face the coming winter.

In this case, the PUC overturned years of precedent and set aside several prior orders without proper notice and an opportunity for interested parties to be heard on issues resolved in prior proceedings. For the PUC to modify an existing order, "the modification must satisfy the requirements of due process and be legally correct." *Appeal of Off. of Consumer Advoc.*, 134

N.H. 651, 657–58 (1991) (internal citation omitted). Due process is satisfied only if the PUC modifies an order after notice and a hearing. *Id.*; RSA 365:28.

When the PUC opened Docket No. DE 20-092, it was to review the proposed 2021-2023 Statewide Energy Efficiency Plan and to determine if the Plan is reasonable, cost-effective, and in the public interest. The Order of Notice specifically states that the PUC would review whether the "proposed rates are just and reasonable and *comply with Commission orders*." The PUC did not provide any notice that the well-established structure of the EERS was at issue, and none of the parties advocated for a return to the framework that existed before the PUC adopted the EERS in Order No. 25,932 (Aug. 2, 2016) (the "Initial EERS Order").

In was in this context that the parties and stakeholders proceeded. They spent two years developing the 2021-2023 Plan, which was an even more comprehensive process than the development of the 2018-2020 Plan. The public process to develop the 2021-2023 Plan was approved by the Commission.[2] It was the Commission that instructed stakeholders to develop a Plan consistent with the EERS framework and prior Commission orders. The stakeholders, which included representatives from the C&I and residential sectors, thus reasonably relied on prior EERS orders interpreting the applicable statutes when determining the Plan's savings goals and program design. "[C]onsistency is a fundamental force in administrative law" and "the law requires an explanation for deviations from past practices." 2 Admin. L. & Prac. § 5:67 (3d ed.).

In this case, Order No. 26,553 does not adequately explain why the Commission reversed years of precedent and adopted positions that were not advocated by any party. Now, after almost one year into the triennium, the PUC is requiring the parties to create a new plan under an

[2] *See* Settlement Agreement dated Dec. 13, 2018, Docket No. DE 17-136, *available at* https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2018-12-13_EVERSOURCE_SETTLEMENT_AGREEMENT.PDF (accessed Dec. 9, 2021) and Order No. 26,207 (Dec. 31, 2018) (approving Settlement Agreement and the framework for developing the 2021-2023 Plan).

entirely different paradigm, one that contravenes Commission precedent. Such a significant departure after an undue delay is unlawful, unreasonable, and arbitrary and capricious. Nothing in the law, the underlying facts or conditions have changed to justify the reversal in precedent without just and compelling cause or due process of law.

For example, the Commission rejected the Granite State Test that it approved in Order No. 26,322 (Dec. 30, 2019) even though no party raised concerns about the Test or argued that it should be changed in Docket No. DE 20-092. Like the process for developing the 2021-2023 Plan, the Granite State Test was created pursuant to a Commission order that resulted in twenty-one months of public meetings and concluded with the filing of a comprehensive report and recommendation that was reviewed by the PUC. It is unclear whether or not the Commission also rejected the adoption of non-energy impacts ("NEIs") when rejecting the Granite State Test. The Commission previously ordered that NEIs should be accounted for in the Total Resource Cost Test when evaluating the cost effectiveness of the HEA Program. Order No. 26,095, Docket No. DE 17-136 (Jan. 2, 2018); Order No. 26,207, Docket No. DE 17-136 (Dec. 31, 2018). This practice continued unchanged with respect to the low-income program when the Commission adopted the Granite State Test. *B/C Working Group Recommendations Regarding New Hampshire Cost-Effectiveness Review and Energy Optimization through Fuel Switching Study*, Docket No. DE 17-136 at 5 (Oct. 31, 2019) approved via Order No. 26,322 (Dec. 30, 2019).

Elimination of the NEIs would have an adverse impact on the HEA Program because the absence of NEIs would reduce the HEA benefit/cost ratios. That change could jeopardize the existence of the HEA Program in light of the Commission's Order (at pages 47 and 48) that the Utilities identify (and presumably implement) only the EERS programs with the highest energy savings and lowest per unit costs going forward. The Commission should clarify whether NEIs

still apply to the HEA Program as they were calculated in the prior Total Resource Cost Test or whether NEIs were intended to be eliminated from the test in Order No. 26,553.

The Commission also rejected an increase to the cap on HEA projects even though all the parties recommended that the cap be increased. The disagreement among the parties was about the amount of the increase, but no one advocated that the cap should remain at $8,000. The Commission staff (now staff of the New Hampshire Department of Energy, or "DOE") testified that the cap should be increased to $12,000. In Order No. 26,553, the PUC does not cite to any evidence that supports maintaining the cap at $8,000, and could not, because the only evidence presented was in support of increasing the cap.

The doctrine of stare decisis disfavors such a reversal of precedent from this Commission. The doctrine, which is the idea that a ruling body will stand by yesterday's decision, "commands great respect in a society governed by the rule of law." *In the Matter of Blaisdell*, 174 NH 187, 188 (2021) (affirming a 4-part test applicable to overruling precedent). "Thus, when asked to reconsider a holding, the question is not whether we would decide the issue differently de novo, but whether the ruling has come to be seen so clearly as error that its enforcement was for that very reason doomed." *Id.* (citations omitted). Here, there is no justification provided to overturn prior rulings and orders issued in this forum. The PUC acted unlawfully when it ignored its own precedent, without just and compelling cause, and without affording adversely affected parties with a prior opportunity to receive notice and be heard in this matter. The PUC further acted unlawfully when it failed to articulate a reasoned decision why it did what it did.

Additionally, it is unreasonable, unjust, and unlawful to overturn years of Commission precedent of interpreting the applicable statutes when the legislature has not interfered with the

Commission's interpretation of the statutes. *Cf. Appeal of Pub. Serv. Co. of New Hampshire (New Hampshire Pub. Utilities Comm'n)*, 141 N.H. 13, 22 (1996). While the legislature did amend RSA 374-F:3, VI so that it must approve future increases to the system benefits charge ("SBC"), it specifically exempted the 2021-2023 EERS Plan. Moreover, this amendment suggests that the legislature approves of the fundamental EERS framework since the statute specifically references the Initial EERS Order and requires that the utilities use 20% of the collected SBC funds for the low-income energy efficiency programs. *See* RSA 374-F:3, VI. If the legislature wanted to make further changes to the EERS framework as established by Order No. 25,932, it could have done so. Such a major departure from prior Commission precedent is not only unjust and unreasonable, but it contravenes the very purpose of the statutes that govern the HEA Program. The Order is also contrary to the principles of reliability, stability, and customer expectations regarding the energy efficiency programs and services that are in high demand.

## IV. The PUC's Order Eliminates or Drastically Reduces The HEA Program By Requiring That The Utilities Only Pursue Programs With The Highest Energy Efficiency Savings, At The Lowest Per Unit Cost, Contrary to PUC Precedent And Statutory Requirements That The HEA Program Be Protected.

The legislature has declared that "it shall be the energy policy of this state . . . to maximize the use of cost-effective energy efficiency." RSA 378:37. The legislature has also recognized that the benefits of restructuring the electric utility industry should be equitably distributed and that it is important to serve low-income households in New Hampshire. *See* RSA 374-F:3, V, VI. Notably for low-income customers, "[u]tility sponsored energy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers." RSA 374-F:3, X; *see also* DR 96-150, Order No. 23,574 dated Nov. 1, 2000 at 17.

The PUC has long acknowledged the importance of low-income energy efficiency programs as well. *See, e.g.*, DG 02-106, Order No. 24,109 (Dec. 31, 2002) 87 NH PUC 892 at 897-99. For example, the Commission has a well-established policy that provides special protection to the low-income programs by prohibiting the transfer of low-income funds without prior Commission approval. *See, e.g.,* DG 02-106, Order No. 24,109 (Dec. 31, 2002), 87 NH PUC 892 at 899 ("low income program budgets are dedicated and those budgets cannot be siphoned away to other programs"). The PUC has recognized that "well-designed, statewide [low-income] programs could help to alleviate the apparent persistence of 'undesirable market conditions.'" DR 96-150, Order No. 23,574 (Nov. 1, 2000) at 17. In Docket No. DE 17-136, Roger D. Colton submitted pre-filed direct testimony explaining that the market barriers affecting the low-income programs "persist at the same or increased levels" in 2018 compared to eighteen years ago when the Commission cited the conditions in support of adopting low-income programs. *See* Docket No. DE 17-136, Pre-Filed Direct Testimony of Roger D. Colton ("Colton Testimony") dated Nov. 2, 2018 at Bates 14-16. Mr. Colton further explained that large waiting lists in the HEA Program and data about low-income households in New Hampshire demonstrated that the need for low-income energy efficiency was high and the demand was great. *See* Colton Testimony dated Nov. 2, 2018 at Bates 12, 17-18, 21-22.

The Commission should grant LISTEN's motion for rehearing to give the parties an opportunity to provide testimony about the current need, especially considering the devastating economic impact of the COVID-19 pandemic on low-income households. The 2021-2023 Plan as modified by the Settlement Agreement would have served twice as many low-income households compared to the number served in 2018-2020. Testimony of Kate W. Peters, Transcript of hearing held Dec. 16, 2020 at 198-201. Eversource, on behalf of the Settling

Parties, testified that this was especially important because low-income customers have higher energy burdens than non-low-income households, which means they spend a larger percentage of their household income on utility costs.[3] Testimony of Kate W. Peters, Transcript of hearing held Dec. 16, 2020 at 198-201. The low-income energy efficiency program has been recognized nationally as an exemplary program[4] and is critical in the state's efforts to reduce energy costs for all New Hampshire ratepayers. The resulting savings help families afford other daily necessities like food and medicine. In addition, studies have shown that energy efficiency programs not only promote more affordable utility service in the long run, but also lead to safer and more comfortable homes and to improvements in health outcomes.

The Commission arbitrarily decided to reverse its prior decisions and reduce the HEA budget over time without hearing any testimony about the current demand for the Program and the market barriers unique to low-income ratepayers. This is not only unreasonable and unlawful, but it is contrary to the goals of the EERS and New Hampshire public policy, which direct the utilities to pursue *more* energy efficiency. When the Commission approved the creation of the EERS, it approved an increase in the budget for the HEA Program because "low income customers face greater hurdles to investment in energy efficiency than other customer [sic]." Order No. 25,932 at 64. The Commission found that the increase in the budget was "appropriate in order to comply with legislative directives and to reduce energy consumption for those customers who need it most." *Id.* Since the Commission issued Order No. 25,932, the legislature amended RSA 374-F:3, VI to further *increase* the HEA budget.

---

[3] Utility customers in New England have the second highest rate of household energy insecurity in the country. *See* U.S. EIA, *Residential Energy Consumption Survey* (2015), *available at* https://www.eia.gov/consumption/residential/ and U.S. EIA, *Residential Energy Consumption Survey* (2015) Table HC11.1: Household energy insecurity, a*vailable at* https://www.eia.gov/consumption/residential/data/2015/hc/hc11.1.xlsx.

[4] The New Leaders of the pack: ACEEE's Fourth National Review of Exemplary Energy Efficiency Programs, January 2019, *available at* https://www.aceee.org/research-report/u1901 (accessed Dec. 9, 2021).

The increases to the HEA budget were part of a long-term goal, agreed to by parties and stakeholders and approved by the Commission, to achieve "all cost-effective energy efficiency" in New Hampshire through the EERS. *See* Order No. 25,932 at 1, 16, 55. This long-term goal was reiterated in the New Hampshire 10-Year Energy Strategy. NH Office of Strategic Initiatives, *New Hampshire 10-Year Energy Strategy*, April 2018 at 39.

Order No. 26,553 eliminates or drastically reduces the HEA Program even though the Commission has long held that the Program is important and does not have to screen as cost-effective given the nature of the low-income residential sector. *See e.g.,* Order No. 23,574, *In Re Elec. Util. Restructuring*, 85 N.H.P.U.C. 684 (Nov. 1, 2000) (holding that low-income programs and educational programs could still be approved by the Commission even if they do not surpass a 1.0 benefit/cost ratio when discussing the *Report to the New Hampshire Public Utilities Commission on Ratepayer-Funded Energy Efficiency Issues in New Hampshire*, July 6, 1999); Order No. 25,932 (recognizing that low-income customers face "greater hurdles" to investment in energy efficiency and increasing the low-income budget is "appropriate to comply with legislative directives and to reduce energy consumption for those customers who need it most," citing to RSA 374-F:3).

The Commission's directive in Order No. 26,553 "to identify the programs which provide the greatest energy efficiency savings at the lowest per unit cost with the lowest overhead and administrative costs for further implementation" will have the greatest negative impact on the most vulnerable population who the Commission previously stated are "those customers who need [energy efficiency] the most." *See* Order No. 25,932. Application of this directive to the HEA program could effectively eliminate it. This type of directive never applied to the HEA program because of the nature of the low-income sector and the unique market barriers that do

not exist in other residential or C&I programs. Moreover, the Commission issued this directive without any notice that it would be considering a fundamental paradigm shift and without hearing evidence about the HEA waitlists or the current market barriers in the HEA Program. This amounts to a violation of LISTEN's due process rights as articulated in paragraph III above.

In addition, the Order's apparent directive to shift the funding paradigm from ratepayer funded energy efficiency programs to market based, privately funded programs could result in defunding the HEA program altogether. While it is unclear what the Commission intended, a purely market-based approach ignores this Commission's long-standing recognition of the multitude of market barriers facing low-income consumers.

Instead of increasing funding for the HEA programs, the Commission's Order may result in effectively defunding or in significantly reduced funding for the low-income programs. On page 47 of the Order, the Commission noted that in order to harness the power of competitive markets, the EERS framework includes a requirement that private funding be pursued and utilized to the greatest extent possible. The Commission then ordered that the Joint Utilities' Program Proposal going forward must include programs that are not solely ratepayer funded. It is unclear exactly what the Commission envisions by this pronouncement, but it appears to be the beginning of a significant paradigm shift towards privately funded market-based energy efficiency programs. This could result in a significant reduction in funding for the low-income HEA programs. This paradigm change, however, ignores the past recognition by the Commission that low-income customers have little or no discretionary income and face almost insurmountable market barriers, and are thus effectively shut out of the private market. At its worst, the Order could mean the effective end of low-income energy efficiency programs.

Therefore, the Commission should grant LISTEN's motion for rehearing, clarification and stay of Order No. 26,533.

WHEREFORE, LISTEN respectfully request that the Commission:

A. Grant rehearing of the issues identified in the Settling Parties' Motion dated December 10, 2021 and in this Motion for the reasons set forth in both motions, which are that the Commission's decision is not in accordance with New Hampshire law; is the product of a proceeding that was not properly noticed as required by law; is based on misapplied legal standards and prior Commission decisions; and rendered conclusions that are unsupported or contradicted by the evidentiary record;

B. Provide clarification of the issues identified in the Settling Parties' Motion dated December 10, 2021 and in this Motion, that arise from the Order and impact the NH Utilities' December 15, 2021 compliance filing requirement;

C. Grant a temporary stay of the Order's December 15, 2021 filing requirement, pending the clarification of the aforementioned issues and resolution of this matter;

D. Reinstate the terms of Order No. 26,440, extending the 2020 SBC rates and program structure pending the resolution of the above-mentioned requests; and

E. Grant any such further relief as may be just and reasonable.

Respectfully submitted,
LISTEN Community Services
Through its attorney
New Hampshire Legal Assistance

Date: December 13, 2021

By: _____

Raymond Burke, Esq.
rburke@nhla.org
Stephen Tower, Esq.
stower@nhla.org

**STATE OF NEW HAMPSHIRE**
OFFICE OF THE GOVERNOR

CHRISTOPHER T. SUNUNU
Governor

December 14, 2021

Jared Chicoine, Commissioner
New Hampshire Department of Energy
21 S. Fruit Street, Suite 10
Concord, NH 03301

Re: 2021-2023 Triennial Energy Efficiency Plan

Dear Commissioner Chicoine,

I write to you regarding the Public Utilities Commission's recently-issued order related to New Hampshire's 2021-2023 Triennial Energy Efficiency Plan. I would like to commend you for the motion that the Department of Energy filed raising concerns about that order and urge you to continue your work supporting the people of New Hampshire.

In a time of pandemic, economic inflation, and rising energy prices, New Hampshire's ratepayers are facing severe challenges. Had the proposed settlement agreement in this docket been approved, New Hampshire's ratepayers would have seen significant increases to the System Benefits Charge (SBC) – increases as high as 168% for some commercial and industrial customers over the 2020 rates. This would have represented a crushing price hike on our job creators and the economic engine of our economy: NH small businesses. I firmly believe in the value of energy efficiency to New Hampshire's ratepayers and grid, yet such sharp hikes in the SBC rates would represent a heavy burden for our main street businesses at a time when inflation is running rampant and staffing shortages are making it hard to operate even small family businesses.

However, I share the concerns that you in the Department of Energy and other stakeholders have brought forward regarding the execution of the order. Considering the unique circumstances and timing surrounding this docket, the Public Utilities Commission's order presents clear operational complications for New Hampshire's energy efficiency programs. Given the tight timelines to implement plans with the start of the new year, the resignation of the previous chair, and the pending recusal of a newly confirmed Commissioner, there are legitimate questions about how this order will affect the viability of New Hampshire's energy efficiency programs in the very near future.

**107 North Main Street, State House - Rm 208, Concord, New Hampshire 03301**
**Telephone (603) 271-2121 • FAX (603) 271-7640**
**Website: http://www.governor.nh.gov/ • Email: governorsununu@nh.gov**
**TDD Access: Relay NH 1-800-735-2964**

I hope the Public Utilities Commission will address the concerns that may prevent stakeholders from adequately operationalizing New Hampshire's energy efficiency programs in the coming months. Implementing change of this magnitude should be approached in a methodical way to secure long-term benefits for our ratepayers.

Thank you for your actions in this proceeding and for all you do for the people of New Hampshire.

Sincerely,

Christopher T. Sununu
Governor

**107 North Main Street, State House - Rm 208, Concord, New Hampshire 03301**
**Telephone (603) 271-2121 • FAX (603) 271-7640**
**Website: http://www.governor.nh.gov/ • Email: governorsununu@nh.gov**
**TDD Access: Relay NH 1-800-735-2964**

BUSINESS & INDUSTRY ASSOCIATION
New Hampshire's Statewide
Chamber of Commerce

December 14, 2021

Mr. Daniel Goldner, Chairman
New Hampshire Public Utilities Commission
21 Fruit Street, Suite 10
Concord, NH 03301

**RE: Docket No. DE 20-092 2021-2023 Energy Efficiency Plan; Motion for Rehearing, Clarification and Stay of Order No. 26,553**

Dear Chairman Goldner,

I'm writing to express the Business and Industry Association's (BIA) support for the Commission to move for an immediate stay of Order No. 26,553 (the Order), that severely impairs New Hampshire's energy efficiency program.

BIA is New Hampshire's statewide chamber of commerce and leading business advocate. We also serve as the New Hampshire Manufacturing Association and are the official affiliate of the National Association of Manufacturers. We represent over 400 leading employers across the state in a variety of industries, including energy efficiency. Member firms employ 89,000 people in New Hampshire, which represents one in seven jobs and contribute $4.5 billion annually to the state's economy. Many of our members are large energy consumers in manufacturing, healthcare, and financial services, and educational institutions. All members have properties or branches within New Hampshire and are located throughout the state and large campuses (with associated large energy bills).

BIA supports the motion for rehearing, clarification and stay, and urge the Commission to immediately stay the Order. A stay of the Order will provide certainty and stability for energy efficiency programs that businesses need by maintaining status quo system benefits charge (SBC) rates. Businesses utilize energy efficiency programs to help offset the upfront costs of undertaking measures and projects that help reduce the ongoing operating costs of the participating businesses. By having program certainty and continuity in place, businesses are not only able to reasonably rely on what offerings are and will remain available, they can also plan for more complex or larger projects that may take longer to implement and install, which also typically result in significant amounts of energy savings. New Hampshire businesses need certainty and consistency regarding energy efficiency funding and programs. Operating without certainty and funding of energy efficiency programs will needlessly and wastefully contribute to the increased use of energy in the State of New Hampshire, and businesses will lose money in the long run without the benefits of these programs.

While the BIA continues to oppose the doubling of the energy efficiency funding as proposed to the Commission in the Settlement Agreement in Docket No. DE 20-092, BIA strongly supports energy efficiency, and fully opposes the significant reduction of funding for energy efficiency programs. The BIA

maintains that a more modest approach to future SBC increases is required than that proposed by the 2021-2023 Settlement Agreement. Increasing costs substantially and rapidly for commercial and industry customers is bad for employers and the state's economy. Extending the 2020 SBC rates program structure is the best way to sustain energy efficiency while protecting New Hampshire businesses from immediate and significant electricity cost increases.

BIA asks the Commission to motion to stay the Order to ensure stability for energy efficiency funding and programs for New Hampshire's businesses at the prior 2020 SBC program rate structure, as doing so will help enable those businesses to thrive. Thank you for considering this request.

Respectfully submitted,

David Juvet
Senior Vice President of Public Policy/Interim President
Business & Industry Association of New Hampshire

CONCORD MONITOR

(https://www.concordmonitor.com)

Opinion > Columns (/Opinion/Columns/)

# Sen. Jeanne Shaheen: Partisan politics compromise the bipartisan consensus around energy efficiency

By JEANNE SHAHEEN (/byline?byline=By JEANNE SHAHEEN)
For the Monitor
Published: 12/16/2021 6:30:39 AM
Modified: 12/16/2021 6:30:05 AM

While it doesn't always make the front page news, Democrats and Republicans in Congress have long partnered on energy efficiency for the benefit of our environment and our pocketbooks.

The facts don't lie: smart investments in energy efficiency pay for themselves by helping to lower energy bills while also reducing harmful emissions and making buildings more comfortable places to live and work.


For years, I've led efforts with Sen. Rob Portman, a Republican from Ohio, to pass the Energy

bipartisan partnership most of the provisions from our bill have become law, including in the bipartisan infrastructure bill that was recently signed by President Biden.

The bipartisan consensus around energy efficiency is why I found it so baffling that New Hampshire's Public Utilities Commission (PUC) chose to reject a widely supported and robust energy efficiency plan that funds NHSaves, an award-winning energy efficiency program with a proven track record in New Hampshire.

It's shameful that the State's partisan politics are dismantling this successful program. Deviating from more than a decade of precedent in the State, the PUC recently voted not only to reject a broadly supported plan for the next three years but also to slash existing funding sources for NHSaves.

NHSaves provides families with energy audits, rebates and educational programs that go a long way for Granite Staters to weatherize their homes and purchase energy-efficient appliances. The program also helps businesses, industry and municipalities reduce their operating costs and increase productivity.

Over the last three years or so, NHSaves supported $1.5 million home energy efficiency projects and nearly 10,000 businesses, generating an estimated $3.37 in benefits for every dollar invested. The PUC's decision is rooted in politics, not evidence, is opposed by industry and efficiency advocates alike, and it hurts Granite Staters in the process.



Energy efficiency is the fastest, cheapest way to meet our economy's energy needs. Energy efficiency lowers the demand for electricity, which is especially important for reducing peak demand among consumers as our coldest months settle in. Energy efficiency doesn't just help those who undertake the projects, it helps us all.

In addition, energy efficiency is a flourishing economic sector and job creator, which is more important today as we fight our way back from the financial impact of the pandemic. New Hampshire is already feeling the effects of the PUC's disastrous decision, which canceled projects in our State putting Granite State independent contractors suddenly out of work. The well-being of our families and businesses should always supersede partisan politics, and the PUC's unwarranted and ill-conceived decision underscores that point.

The bipartisan infrastructure law includes $6 billion for energy efficiency programs like weatherization, supporting the implementation of building energy codes. Most critically, it is a shining example of what common ground looks like between Democrats and Republicans on policies that benefit our economy and prioritize sustainability.

It also epitomizes how out-of-step New Hampshire Republicans are with the rest of their party and the majority of Americans. NHSaves has always been and should continue to be a partner in these types of historic investments that will help New Hampshire families keep more money in the bank, allow businesses to participate in this booming industry and empower our State to take

The PUC's decision is cutting off crucial economic and environmental opportunities for our residents and communities. It should be reconsidered or swiftly overturned.

*(Jeanne Shaheen is New Hampshire's senior U.S. senator.)*

facebook (/keyword/?keyword=facebook)

*My Turns are opinion-based essays submitted by Monitor readers and members of the community. The views expressed in My Turns are those of the writer and do not necessarily reflect the views of the Concord Monitor and its staff. Learn more about the Monitor's opinion policy here. (https://www.concordmonitor.com/Opinion/Opinion-Policy)*