

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DE 17-136**

**Public Service Company of New Hampshire d/b/a EverSource Energy,  
and Unitil Energy Systems, Inc.**

**2018-2020 New Hampshire Statewide Energy Efficiency Plan**

**Order Approving Commercial and Industrial Demand Reduction Initiative**

**ORDER NO. 26,232**

**April 5, 2019**

**APPEARANCES:** Matthew J. Fossum, Esq., for Public Service Company of New Hampshire d/b/a Eversource Energy; 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 an initiative for 2019 in which Eversource and Unitil will offer commercial and industrial customers incentives to reduce their energy use during the summer when the demand for electricity peaks. The Commission previously approved System Benefits Charges for Eversource and Unitil that included the cost of implementing this initiative. *Gas and Electric Utilities*, Order No. 26,207 (December 31, 2018).

**I. PROCEDURAL HISTORY**

On January 28, 2019, Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource) and Unitil Energy Systems, Inc. (Unitil) (together, the Utilities), proposed a Commercial and Industrial Demand Reduction Initiative (Initiative). The Commission held a Prehearing Conference on February 27, 2019. The Utilities requested a June 1, 2019, implementation date for the Initiative. The Utilities, the Office of the Consumer Advocate (OCA), and Staff of the Commission (Staff) participated in a technical session following the Prehearing Conference. Following discovery, Staff recommended a change to the progress

report schedule concerning the benefit/cost assessment of the Initiative. With that change, Staff recommended approval of the Initiative. The Utilities and the OCA indicated their assent to Staff's proposal regarding progress reports. On March 27, the OCA submitted comments in support of Staff's recommendation.

## **II. POSITIONS OF THE PARTIES AND STAFF**

### **A. Eversource and Unutil**

The Utilities propose to provide incentives to large commercial and industrial (C&I) customers to curtail their energy use during times of projected peak demand during the summer of 2019. The goal is to reduce demand at the time of the ISO New England (ISO-NE) system peak demand. Eversource seeks to curtail 5 MW and Unutil 1.8 MW of peak demand.

Reducing demand at the time of ISO-NE system peak demand would result in savings, primarily in the form of avoided capacity costs and possibly transmission costs.

The Utilities propose to contract with curtailment service providers (CSPs) to administer the program, including attracting C&I customers to participate, and scheduling curtailments. The Utilities would pay the CSPs \$35 per kilowatt (kW) of actual curtailed load. The CSPs would negotiate agreements with the participants specifying the levels of incentives that would flow to the customers. The Utilities project that the CSPs would request curtailments approximately 10 times during the summer, and they expect each curtailment to be between two and four hours in duration.

Curtailed load is to be measured by comparing a participant's actual load during each curtailment period to an established baseline load and averaging the curtailment levels across all the curtailment periods. The more curtailment requests a customer complies with, the higher the customer's average curtailed kW would be, yielding a higher incentive payment. Thus,

customers would be incented to curtail every time a request is made. A participant's baseline load would be determined from that participant's usage during 10 recent, similar, non-holiday weekdays. The baseline load would be subject to upward adjustment when a curtailment day was hotter than the 10 recent similar days. In those instances, the baseline load would be adjusted up to the average load experienced in the two hours immediately preceding the curtailment.

Eversource's budget for the Initiative is \$250,000, of which \$200,000 is for customer service and incentives. The remaining funds are for administration; marketing; and evaluation, measurement, and verification (EM&V). For Unital, the total budget is \$93,795, of which \$70,324 is budgeted for customer incentives and services. The remaining funds are for implementation services and EM&V.

The Utilities estimated the benefit/cost ratio of the Initiative using benefit values from the most recent Avoided Energy Supply Components study – the same avoided costs that were used to screen the other energy efficiency programs approved for the second year of the Energy Efficiency Resource Standard (EERS) triennium. At a 100 percent coincidence factor, *i.e.*, assuming the Utilities achieve 100 percent of projected curtailments at the time of the annual ISO-NE system peak demand, the Utilities estimate a benefit/cost ratio of over 4.0 for both Utilities. At a 50 percent coincidence factor (meaning that at the time of the system peak, the Utilities achieve only 50 percent of the projected curtailments), the Utilities estimated benefit/cost ratios over 2.0. The benefit/cost ratios fell below 1.0 when the coincidence factor went down to 20 percent. The Utilities stated that more precise estimates of the program benefits could be obtained using an active demand benefit/cost model.

Later this year, the Utilities plan to use an active demand benefit/cost model when evaluating the actual performance of the Initiative. The Utilities stated they would begin to report on the progress of the Initiative at the quarterly EERS meetings, with a final evaluation report submitted with or prior to the 2019 Quarter 4 EERS Report. The Utilities will review the results of the Initiative for potential inclusion in the 2020 Statewide Energy Efficiency Plan (*i.e.*, the third year in the current EERS triennium) and/or in the 2021-2023 Statewide Energy Efficiency Plan.

The Utilities are collecting the costs of the Initiative through the System Benefits Charge (SBC) rates approved in Order No. 26,207. The Utilities are not seeking to recover lost base revenue associated with the Initiative. The Utilities propose to include the cost of the Initiative in their performance incentive (PI) calculations, even though the benefits of the Initiative will not be included in the PI calculation.

#### **B. OCA**

On March 27, 2019, the OCA submitted comments supporting approval of the Initiative, and applauding the Utilities' willingness to innovate and explore new program designs. The OCA urged expeditious approval so that the Utilities could implement the Initiative in time to capture curtailments during the seasonal peak, which the OCA states occasionally occurs very early in the summer season. The OCA stated that the costs of full-scale demand reduction initiatives should be funded through a fully reconciling charge modeled after the existing reliability enhancement program, and not through the SBC.

#### **C. Staff**

As stated above, Staff recommended approval of the Initiative, with one change to the planned reporting of results. Specifically, Staff recommended that actual benefit/cost results be

presented at a quarterly EERS meeting as soon as they are available. Staff recommended that the Utilities provide a final evaluation of the Initiative using the demand response benefit/cost model with or prior to the 2019 Quarter 4 EERS Report.

Staff believes that no baseline load adjustments should be made, but recommends approval of the Initiative with the baseline adjustment provisions proposed by the Utilities, with the requirement that the Utilities provide detailed justifications in their evaluation report for any such baseline adjustments.

Regarding performance incentives, Staff does not oppose the Utilities' proposed treatment of lost base revenue and PI for purposes of this Initiative. Staff acknowledges that including the costs of the Initiative in the budget, but excluding the benefits, has the effect of increasing the PI collected by the utilities by about 6 percent of the \$344,000 budget, or \$21,000. Staff stated that it reserved the right to propose a more balanced application if the scope of the Initiative is expanded or if the program is extended or expanded to the other utilities.

### **III. COMMISSION ANALYSIS**

The Commission commends the Utilities for developing a program designed specifically at reducing peak demand during the ISO-NE system peak. The Commission has asked the utilities to explore and pursue peak reduction in several recent dockets as a means to control increasing transmission costs. *See, e.g.*, Order No. 26,142 at 5 (July 24, 2017) (stating that transmission costs are tied to peak loads and requiring Unifil to consider what measures could be taken to mitigate increases in transmission costs); DE 18-089, *Eversource Energy, 2018 Transmission Cost Adjustment Mechanism*, Hearing Transcript of July 12, 2018, at 19-20; DE 18-051, *Liberty Utilities (Granite State Electric) Corp., Annual Retail Rate Filing*, Hearing Transcript of May 9, 2018, at 46-52.

This Initiative can help lower participating customers' bills and reduce future capacity costs. The peak demand reductions may also help defer the need for costly investments in transmission infrastructure, which otherwise would be paid for by all ratepayers.

Further, the Initiative will advance the goals of the EERS concerning peak load reductions. In approving the EE programs for each of the first two years of the current EERS triennium (2018 and 2019), we noted that both participants and non-participants in EE programs benefit from on-peak and off-peak load reductions. Order No. 26,207 at 17 (approving 2019 EE programs); *Gas and Electric Utilities*, Order No. 26,095 at 18 (January 2, 2018) (approving 2018 EE programs).

The Initiative is predicted to achieve capacity and possibly transmission savings far in excess of program costs. If the Utilities are successful at curtailing their targeted loads of 5 MW for Eversource and 1.8 MW for Unitil, then the benefits are projected to exceed the costs of the program by almost a factor of five. Even at significantly lower coincidence factors, the Initiative is projected to produce savings that will exceed program costs. The Commission finds, however, that benefit/cost calculations should be updated to reflect the active demand benefit/cost model that the Utilities state they will develop prior to the end of this Initiative.

While the Commission appreciates the need to prevent the use of a static and potentially stale baseline, we also recognize that a fluctuating baseline can provide an incentive for customers to adjust their behavior and typical consumption patterns for the purpose of gaining larger incentive payments. The parameters of the Initiative should deter any load manipulation for purposes of this one-year program. With this sensitivity in mind, the Commission directs the Utilities to closely monitor any adjustments to baseload and provide detailed explanations with


supporting documentation concerning any baseline adjustments in their pilot evaluation report in 2019.

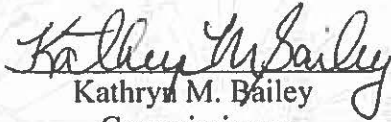
**Based upon the foregoing, it is hereby**

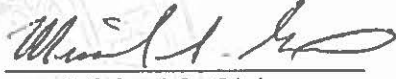
**ORDERED**, the Utilities' Demand Reduction Initiative filed January 28, 2019, is approved; and it is

**FURTHER ORDERED**, that the Utilities provide an evaluation of the Initiative using an active demand benefit/cost model with or prior to the 2019 Quarter 4 EERS Report.

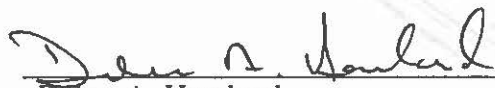
By order of the Public Utilities Commission of New Hampshire this fifth day of April, 2019.

  
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Martin P. Honigberg  
Chairman

  
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Kathryn M. Bailey  
Commissioner

  
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Michael S. Giaimo  
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Attested by:

  
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