Mid-Term Modification Request for Eversource Energy (NSTAR Electric)
December 8, 2023

NSTAR Electric Company ("NSTAR Electric" or the "Company") d/b/a Eversource Energy is committed to achieving its designated energy efficiency goals and serving its customers in the best, most equitable way through its Energy Efficiency programs. The current trajectory of spending will trigger the need for approval from the Department of Public Utilities ("Department") and the Energy Efficiency Advisory Council ("EEAC" or the "Council") through Mid-Term Modifications ("MTMs"). The Company has seen lower-than-expected performance within its Income-Eligible and Commercial & Industrial sectors. Specifically, the Company is expecting to underspend in the Income-Eligible Sector by 29 percent of its goal of $157,097,500. In addition, the Company is expected to underspend in the Commercial and Industrial Sector ("C&I") by 39 percent of its goal of $556,685,000.

The Energy Efficiency Guidelines were promulgated by D.P.U. 20-150-A on May 3, 2021 ("EE Guidelines"). Additional and supplanting directives on MTMs were provided in D.P.U. 21-129, as issued on January 31, 2022, in which the Department ordered that, a Program Administrator ("Program Administrator" or "PA") that anticipates underspending its three-year term sector budget by greater than 10 percent "shall submit its proposed modifications at the same time for (a) review by the Council, and (b) review and approval by the Department…" Accordingly, the Company has submitted this proposal simultaneously to the Council and the Department.

Income-Eligible Sector

The Company continues to deliver nation-leading income-eligible energy-efficiency programs that are achieving significant savings for vulnerable customers, and the Company anticipates expending the full budget that was planned for these measures. However, the Company had also planned for a significant amount of electrification in the income eligible sector for the 2022-2024 term, and the Company encountered more barriers to electrifying this customer segment than anticipated. These barriers include customer discomfort with an unfamiliar technology as well as technical barriers related to the unique considerations of the low-income housing stock. As a result, the amount of electrification that the Company was able to achieve in the first two years of the 2022-2024 term was substantially below planned. The Company and its implementation partners have been engaged in many activities aimed at increasing the production of electrification. The Company's vendors increased their workforce training, invested in significant new customer education materials, expanded targeted outreach to deliverable fuels across both single family and multifamily programs, and added a long-term maintenance offering to assuage customer concerns regarding heat pump reliability. and electrification production is expected to be higher in the third year of the term. However, due to the slow start, Eversource will not reach the 90% spending threshold for the income eligible sector. The Company will continue to identify and pursue all opportunities to provide income-eligible customers with cost- and energy-saving measures. Therefore, the Company seeks approval for a proposed budget decrease of $45,043,500 or a 29 percent decrease in the budget approved for the Income Eligible Sector in D.P.U. 21-129.

C&I Sector

The Company continues to deliver strong energy efficiency results for its commercial and industrial customers, and the sector overall is anticipated to perform well against its efficiency-related savings goals. However, the Company is seeing greater than anticipated challenges in electrification of existing buildings, leading to an overall underspend for the sector; the sector is projected to be at 61% of the planned budget. Therefore, the Company seeks approval for a proposed budget decrease of $217,211,000 or a 39 percent decrease in the budget approved for the C&I Sector in D.P.U. 21-129.

C&I New Buildings Program

NSTAR Electric is forecasting to spend 72 percent of the planned term budget for the New Buildings program due to lower participation than anticipated. As noted in previous filings, the Company develops its Plan based on the estimates of new construction activity provided by ConstructConnect (previously CMD Group). It appears that that database over-estimated construction activity in the NSTAR Electric region.

Despite the underspend, there has been a significant amount of savings and utilized budget from electrification measures that weren't in the initial plan. At the time of the Plan, the statewide program design did not explicitly incentivize electrification. In July of 2022, however, the Mass Save PAs revised the program construct in order to offer significantly higher incentives to buildings that electrify their heating. The New Buildings Program is expecting continued success with electrification projects through the rest of the term. The programs are also engaged in substantial efforts beyond programmatic incentives to encourage electrification, such as the development of an industry ecosystem (trade allies/workforce), recruitment of new trade allies skilled in design and installation of heat pump projects, and upskilling internal staff, implementation vendors, and long-time trade allies with expertise in heat pumps and other electrification measures.

C&I Existing Buildings Program

Eversource is projecting an underspend in the Existing Buildings program with only 60% of the budget used by the end of the term. This is primarily due to under-spending on Electrification within the Existing Building Retrofit Core Initiative as well as changes in the measure mix compared to plan for core energy efficiency measures.

One major area of decline from the planned numbers was turnkey lighting. The Company made a change to its program design in 2023 that was intended to encourage vendors to pursue deeper savings opportunities at customer sites, beyond the lighting-only projects that had made up much of the program historically. While these program changes did lead to some increase in non-lighting savings, they led to significantly lower total lighting production than the Company had anticipated. The Company is working on revising the incentive structure for 2024 to maximize both lighting and non-lighting savings.

In the non-turnkey segment, large, complex custom projects have become increasingly challenging to obtain in the C&I Sector as a result of continued economic uncertainty in the wake of the COVID-19 pandemic, particularly for segments such as property management, retail, and hospitality. Rising interest rates, inflationary effects, and supply chain delays have made new projects even more difficult to undertake. In recognition of this changing dynamic among customers, the PAs have pivoted to meet customers where they are at, working to add more prescriptive offerings to the portfolio for simpler/quicker measures that might be easier for customers to undertake. These efforts saw success, and the Company is over-spent on the New and Replacement Equipment Initiative within Existing Buildings. The Company also put more emphasis on its building controls, building management systems, and retro-commissioning offerings. These efforts were largely successful, and the Company anticipates performing well against its efficiency-related savings goals. However, since these types of projects tend to require less investment, the Program was able to achieve the savings goals at less cost than anticipated.

While these measure mix differences did have an impact on overall spend, the most significant area of underspend in the program was on Custom electrification. The Company has found that there are greater technical barriers in medium and large buildings than was understood during planning. For example, there are not heat pump technologies that can be "dropped in" as a simple replacement for existing heating sources such as hot water boilers. This is due to the technical capabilities of each; most building systems that utilize boilers are designed for water temperatures of 180 degrees, while current heat pumps can only deliver a maximum temperature of 140 degrees. Therefore, electrifying the heat would require extremely expensive and disruptive construction within the building to modify the heating distribution system. Similar technical challenges exist for other types of The Company is working with customers, manufacturers, and building design firms to develop solutions to these barriers, but it will take time beyond the timeframe of this Plan.

The Company remains committed to securing all available energy efficiency savings and to the Commonwealth's long-term decarbonization goals and has been working with customers to implement "electrification readiness" measures in the short term. These include building envelope improvements and optimization of building operations through installation of Building Management Systems (BMS) and Enhanced Monitoring-Based Commissioning (EMBCx), all of which ensures that the building is operating as efficiently as possible prior to electrification. The Company is also offering 100% cost coverage for scoping studies, to ensure that there are no barriers to customers gathering the information needed to make a decision.