

I. Introduction

National Grid (the “Company”) 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 Company observed strong performance across its Residential and Income Eligible programs, while demand in its Commercial & Industrial (“C&I”) programs lag. As such, the Company currently projects the necessity of two midterm modifications (“MTM(s)”) to its electric portfolio. First, National Grid is requesting additional funding for its Residential Hard-to-Measure Program, driven primarily by the success of the HEAT Loan core initiative. Second, the Company is requesting a decrease of greater than 10 percent to its C&I sector budget.

The currently effective Energy Efficiency Guidelines were promulgated by the Department of Public Utilities (the “Department”) in D.P.U. 20-150-A on May 3, 2021 (“Guidelines”). The Department provided further directives regarding MTMs ordering that, “a Program Administrator may not exceed its planned program budget without approval by the Department.” See Three-Year Plans Order, D.P.U. 21-120 through D.P.U. 21-129 (“Three-Year Plans Order”) at 224 (2022). Further, the Department directed that “[i]f a Program Administrator projects it will exceed a program-level budget, the Program Administrator shall simultaneously submit any proposed budget change (1) for review by the Council and (2) for review and approval by the Department.” *Id.* at 225, n.139. The Guidelines, at Section 3.8.2, also state that a Program Administrator that seeks to decrease 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 [Energy Efficiency Advisory] Council [(the “Council”)], and (b) review and approval by the Department.” Accordingly, the Company has submitted this proposal simultaneously to the Council and the Department.

II. Residential Hard-to-Measure Program

The Residential sector includes core initiatives that fall under the category of Residential Hard-to-Measure in the data tables. These Residential Hard-to-Measure core initiatives that support the Company’s implementation of its 2022-2024 Energy Efficiency Plan (“Plan”) are the following: Statewide Marketing; Statewide Database; DOER Assessment; Sponsorships and Subscriptions; Workforce Development; Evaluation and Market Research; EEAC Consultants; R&D Demonstration; HEAT Loan; and Education. For purposes of this MTM request, the Company refers to this group of core initiatives as the “Residential Hard-to-Measure Program.” These core initiatives contribute to or facilitate the Program Administrators’ (“Program Administrator(s)” or “PA”) achievement of their goals. See D.P.U. 21-120 through D.P.U. 21-129, Exhibit 1 at 187-88.

The Company’s Residential Hard-to-Measure Program has experienced greater than anticipated customer participation in the Mass Save® HEAT Loan (“HEAT Loan”). The HEAT Loan offers interest-free financing opportunities up to \$25,000, with terms up to seven years, depending on the loan provider. The “incentive” associated with the HEAT Loan is the Program Administrator’s buy-down of the interest on the loan. HEAT Loan financing is available for energy-efficient home upgrades, like the installation of air source heat pumps (central or ductless mini-split), ground source heat pumps, heat pump water heaters, insulation, and fossil fuel heating equipment. During the Plan term, the Program Administrators are offering an electrification HEAT Loan of up to an additional \$25,000 (for a total of \$50,000),

including up to \$5,000 for pre-electrification barriers, such as electrical panel upgrades, for customers who install heat pumps in their home. The electric Program Administrator administers the HEAT Loan for both electric and natural gas heated customers.

In general, the Company contends there are three reasons for increased costs: a greater number of customers than anticipated applying for financing requests; customers financing higher amounts through the HEAT Loan than in previous years; and higher prime interest rates than what were planned at the time of the Plan was filed. The Company views the volume of HEAT Loans and the prime interest rate as the biggest drivers of projected overspend in this Core Initiative. As a result, the Company projects an increase of about \$7,582,251 in HEAT Loan costs over planned in 2023. The Company estimates that increased spending on the HEAT Loan will continue throughout the Plan term. Therefore, the Company seeks approval for an increase of approximately \$7.5 million dollars over the three-year term, which would increase the total Residential Hard-to-Measure Program budget to \$99,245,847 (an 8% increase).

A. Electric Savings Associated if MTM is Approved

The increased expenditure on the HEAT Loan will not directly lead to additional electric savings. By definition, a Hard-to-Measure Energy Efficiency Program “refers to programs that have costs but do not have direct energy savings or whose energy savings may be difficult to quantify.” Guidelines, §2. However, the funding increase will support the increased customer demand for use of the HEAT Loan to finance the installation of energy efficiency measures, which themselves may result in kWh savings and/or greenhouse gas emissions reductions. The HEAT Loan also enables customers to implement energy efficiency measures that would otherwise be cost-prohibitive (when looking at the upfront costs of a particular measure or group of measures). Absent the ability for customers to finance an energy efficiency measure with the HEAT Loan, a customer may choose not to pursue installation of that efficiency measure.

III. C&I Sector

The Company serves a wide array of C&I customer sizes and types, including micro, small, medium, and large businesses, institutions, and public agencies. These customer types also span diverse industries, including business services, education, health care, hospitality, manufacturing, offices, public services, retail, and wholesale. Planning and budgeting for serving the C&I sector presents unique challenges, particularly for newer electrification measures.

National Grid expects to spend 78% of its Plan budget for the C&I New Buildings Program, and 47% of its Plan budget for the C&I Existing Buildings Program. Despite the forecasted underspend, the C&I New Buildings Program is expected to achieve 89% of its Plan lifetime MMBTU savings. The C&I Existing Buildings Program, furthermore, is expected to achieve 70% of its Plan lifetime MMBTU savings. Therefore, National Grid projects a three-year term budget underspend of approximately \$287.4 million for the C&I sector, which would bring its total C&I sector budget to \$297,306,223 (a 49% decrease).

Underspending in traditional energy efficiency measures, which affects both the C&I New Buildings Program and the C&I Existing Buildings Program, is driven by greater than anticipated market saturation, exacerbated by economic and supply chain challenges. There are higher upfront costs due to inflation, which have made projects less economically attractive to

customers, resulting in less budget spent on these projects than originally planned. Supply chain constraints, resulting in long lead times, have delayed many projects by up to a year, especially those involving custom-built equipment required for large facilities.

Large custom projects also take more time to scope, compared to prescriptive projects, a delay which results in the loss of customer interest at. Some custom project sales have been lost as customers either move forward with alternative (often less efficient) equipment, or because the customers are unwilling to commit to projects sufficiently far in advance. With customer interest lost due to delays outside of the Company's control, the budget was not spent on projects in the originally forecasted timeframe. Therefore, planned spending has been pushed into the future or reduced entirely.

National Grid is committed to mitigating these challenges through a variety of strategies:

1. **Vendor Skillset Diversification:** Historically, Small Business Turnkey vendors and Project Expeditors ("PEX's") have focused primarily on lighting measures. The Company has aggressively sought to diversify these skillsets through a combination of training, recruiting new PEX's, and encouraging PEX's to in turn recruit staff with new skillsets – particularly HVAC, refrigeration, and weatherization. The Small Business Turnkey Program is out to bid at the present time.
2. **Incentives:** Certain measure incentives, including custom measures (especially HVAC) have been increased to drive higher participation.
3. **Weatherization:** The PA's launched new weatherization pathways in 2022 with streamlined savings calculations and higher incentive offerings, attracting growing market interest.
4. **Building Management Systems ("BMS"):** The PA's launched a revamped BMS offering in 2022, which is starting to gain traction. The streamlined process, which better aligns incentives with savings, while reducing the burden on vendors to document project details, has encouraged more vendors to help customers leverage this incentive to upgrade their controls.
5. **Enhanced Monitoring-Based Commissioning ("EMBCx"):** EMBCx is a new National Grid initiative, introduced in 2023, that expands on the existing MBCx offering. Funds will be provided for analytics platforms to identify opportunities for system optimization, repairs, and new equipment (primarily HVAC). A highly qualified stable of vendors was selected to provide EMBCx services. This effort will ramp up in 2024 and beyond.
6. **New Measures:** The PA's have introduced several new traditional energy efficiency measures this term, many of which are starting to bear fruit, including packaged terminal heat pumps, high-efficiency forklift chargers, and industrial air curtains.
7. **Lighting:** Although no incentive increases are planned, the PA's may leverage the planned discontinuation of incentives for uncontrolled lighting fixtures to encourage adoption of these measures during the current Plan term.

Underspending in the C&I Existing Buildings Program is also largely due to challenges faced with electrification measures in the large building segment, which are driven by both economic and technological challenges. These challenges have resulted in significantly less heat pump installation volume than planned, with a corresponding reduction in spend compared to budget. Customers are facing high up-front costs with long payback periods, even after incentives, largely due to the relative operating cost of heating with electricity versus natural gas. In some cases, paybacks are longer than the expected life of the equipment.

There is also a limited market of delivered fuel customers. Many more large C&I customers utilize natural gas compared to delivered fuels. Additionally, large custom equipment typically has a lead time of about one year from order to delivery, causing project delays and, at times, a loss of customer interest.

Technological challenges also exist in large buildings. Heat pump technology is not currently available to replace steam, and many industrial processes require steam heat to operate, such as food manufacturing and breweries. Converting outside air systems pose complications because heat pump rooftop units (“RTUs”) need to be combined with an additional ventilation system, requiring more equipment than a one-for-one replacement for existing RTUs. Large facilities that have significant air exchange with outside air, such as garages and warehouses, are often not a good fit for heat pump technology. Some customers, furthermore, remain skeptical regarding heat pump technology performing adequately at lower temperatures.

Given these challenges, the Company is projecting that a significant portion of the underspend in the C&I sector is related to underperformance from planned electrification measures due to the limited number of Large C&I customers on delivered fuels, long paybacks for converting from delivered fuels to heat pumps for heating, and technical limitations of available technologies. While recognizing the challenges in this offering, the Company is committed to mitigating these challenges through a variety of strategies, including the following:

1. Developing the Industry Ecosystem (trade allies/workforce): This includes recruiting new trade allies skilled in design and installation of heat pump projects, as well as upskilling internal staff, implementation vendors, and long-time trade allies with expertise in heat pumps and other electrification measures.
2. Creating New measures and Custom Express Tools: This will allow the Company to streamline savings calculations, making it easier for customers and vendors to participate, and encouraging repeat participation.
3. Vendor contracts: National Grid has modified contract structures to better encourage its program vendors to pursue electrification and is actively soliciting bids from new program vendors with electrification expertise.
4. Raising Customer Awareness: Internal surveys show a 26% to 42% increase in awareness of heat pump products across all categories over the course of the Plan term.
5. Revising the C&I New Buildings Program Construct: This includes offering significantly higher incentives to buildings that electrify their heating.

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, as noted above with efforts, including building envelope improvements and optimization of building operations through installation of BMS and 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 decisions.