

## **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 has observed strong performance across its Residential and Income Eligible programs, demand in its Commercial & Industrial (“C&I”) programs lag. The Company currently projects the necessity of five midterm modifications (“MTM(s)”) to its gas portfolio. National Grid is requesting additional funding to the following Programs: Residential New Buildings & Major Renovations; Residential Existing Buildings; Residential Hard-to-Measure; and Income Eligible Existing Buildings. All of these funding requests are driven by higher than expected demand for measures across the Residential and Income Eligible portfolio, and by the success of the HEAT Loan core initiative. Additionally, the Company is notifying the Department of Public Utilities (the “Department”) of an anticipated underspend of greater than ten percent in its C&I sector.

The currently effective Energy Efficiency Guidelines were promulgated by 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 New Buildings Program**

The Residential New Buildings Program is forecasted to exceed its Department-approved 2022-2024 Energy Efficiency Plan (“Plan”) budget by 14%. As such, National Grid is requesting an additional \$2.4 million in funding. This is primarily due to the Residential New Buildings Program outperforming the predicted number of installations and incentives paid.

Specifically, the Company had planned for a reduction in the number of new homes and dwelling units receiving incentives from the gas operating companies in 2024. The Company planned for that reduction in anticipation of more homes and dwelling units moving toward all-electric construction as a result of encouragement of new program incentives. While the new construction programs have seen an increase in all-electric construction compared to prior years, the transformation of residential new construction practices proved more challenging than anticipated when planned. As identified in the MA RNC Electrification Barriers Study (DPU 23-60, 2022 EE PYR, Appendix 4D, Study 22-6), industry professionals remain skeptical of the economics, performance, grid impacts, and homebuyer preferences for all-electric homes compared to homes with natural gas heating, water heating, and cooking equipment. The Program Administrators (or “PAs”) are continuing to work closely with our market partners to provide education on the benefits of all-electric homes, with a long-term goal of fundamentally transforming building practices.

As of the time of filing, ICF, the Company's Residential New Construction vendor, has paid out more in High Rise residential gas incentives compared to this time last year. The per project incentive amount, furthermore, has gone up because projects, in general, are higher performing.

**A. Natural Gas Savings if the Residential New Buildings Program MTM is Approved**

The overperformance is also reflected in National Grid's forecasted lifetime therm savings which are expected to reach 120% compared to what was originally planned. The additional costs requested are directly tied to an overperformance in savings.

**III. Residential Existing Buildings Program**

The Residential Existing Building Program is forecasted to exceed the Department-approved Plan budget by 13%. This is primarily driven by the Residential Retail core initiative, which is forecasted to reach 149% of the forecasted spend. The discrepancy is a result of unanticipated high demand for heat pumps from gas customers, which has driven spending and the planned budget to be near 200% in 2023. In 2024, the Program Administrators are phasing out the gas heating and water equipment (furnaces, boilers, and water heaters). The rebate amounts will be lower, and National Grid expects to have minimal natural gas heating and water heating measures in Q4 2024. The Company, however, anticipates strong demand for heat pumps, which will continue to push on planned budgets.

The PAs are implementing new requirements for the installation of whole-home heat pumps which are designed to meet a homes' full heating load and to be utilized year-round. This is expected to reduce the number of \$10K whole-home rebates, as more customers would be getting smaller, partial-home rebates instead. With that in mind, National Grid still expects a high volume of heat pump adoption by gas customers in 2024, due to strong customer demand, contractor engagement, and improved rebate processing. The above forecast is based on current program design and incentives, current energy prices, and heat pump market conditions. Changes in these areas, however, could significantly impact the forecast.

**A. Natural Gas Savings if Residential Existing Buildings Program MTM is Approved**

The Residential Retail core initiative is forecasted to reach 121% of planned therm performance.

**IV. 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 Plan are: 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."

The Residential Hard-to-Measure Program core initiatives contribute to, or facilitate, the PAs' 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 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: higher than anticipated 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 filing the Plan. 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, in 2023, the Company projects an increase of about \$2,361,544 in HEAT Loan costs over planned.

The Company projects that increased spending on the HEAT Loan will continue throughout the Plan term. Under the 2022-2024 Plan construct, Heat Loan incentive costs are only covered by the Gas PAs in areas where the customer is served by a municipal light plant ("MLP"); otherwise, Heat Loan costs are covered by the electric PAs. Term to date, MLP customers are participating in the programs at much higher rates than anticipated, therefore causing Heat Loan costs to exceed what was planned.

The Company also notes that, due to an error in its 3 Year Compliance Filing, the planned expenses for Residential Statewide Marketing are not sufficient for that core initiative's needs. The budget request below includes planned spending values in line with 2022 actual spending and forecast spending for 2023 and 2024, which will ensure the continuation of National Grid's participation in the statewide marketing efforts.

Therefore, the Company seeks approval for an increase of approximately \$4.7 million over the three-year term, which would bring the total Residential Hard-to-Measure Program budget to \$26,308,521 (a 22% increase).

**A. Natural Gas Savings if Residential Hard-to-Measure Program MTM is Approved**

The increased expenditure on the HEAT Loan will not directly lead to additional natural gas 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 therm 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 efficient measure

with the HEAT Loan, a customer may choose not to pursue installation of that efficient measure.

## **V. Income Eligible Coordinated Delivery Program**

National Grid is forecasting to spend 6% above the approved budget in the Income Eligible Coordinated Delivery Program. As a result, the Company is requesting an additional \$7.7 million in increased funding due to new developments within the program that were not planned initially, but will, however, also result in increased savings. The overspend is due to two major factors: an increase in production and the rise of program costs.

Action Inc., National Grid's income eligible lead vendor, has assumed the delivery of Energy Efficiency Services for two additional CAP agencies. That has led to increased production in those territories due to Action's greater capacity, versus the historical capacity of the respective CAP agencies. The increased production will bring more income eligible participants into the program, but also increase the number of appliances delivered, driving incremental savings. This will involve an increase in the number of onboarding home performance contractors to deliver these services to the new territories, and thus, drive costs up.

Additionally, the filed budget forecasted an increase in spending in the Residential Income Eligible Coordinated Delivery Program, but based on the current robust pipeline of both single and multi-family projects, costs will be greater than originally planned for 2024. This is the result of an increase in the number of planned projects and their costs, and also the addition of new measures to the programs. The addition of new measures, including windows, and increased demand for heat pumps, have continued to drive the program costs. The rise of market prices has also influenced the cost of heating systems and appliances.

There exists an expanded pipeline of deep energy retrofit projects, which will have higher project costs, with a larger impact on the budget than anticipated, as well as an unforeseen spending on barrier mitigation measures that are necessary to be addressed prior to weatherization or other energy efficiency installations.

### **A. Natural Gas Savings if Income Eligible Coordinated Delivery Program MTM is Approved**

National Grid is projected to reach 94% of savings with the current projected spending. That is due to the unexpected increase in costs highlighted above, where the savings associated with the projects were deemed. The additional funding requested is projected to increase savings and allow the Company to achieve 100% of planned savings.

## **VI. 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 is expected to spend 85% of the planned term budget for the New Buildings Program, which will be a \$2,097,115 underspend of the available budget. Despite

the forecasted underspend, the New Buildings Program is expected to achieve 94% of the planned lifetime MMBTU savings for the term.

Underspending for traditional new construction measures has led to an overall underspend in the New Buildings Program. This is due to more stringent code requirements for new buildings that have left limited claimable savings for new projects. Previous successes in the Gas C&I sector have left fewer projects with high claimable savings as many gas properties have already achieved higher levels of efficiency or are beginning to switch to electric measures. Due to this, current projects are subject to longer lead times, higher costs, and extended timelines for return on investment. This has led to customers being less willing to undertake large custom projects and difficulty finding adequate funding due to increased costs. As such, there have been less smaller projects with fewer savings completed, and fewer incentive dollars offered, leading to the projected underspend.

Despite the underspend, there has been a significant increase in the savings and utilized budget from electrification measures that were not planned. The New Buildings Program is expecting continued success with electrification projects through the rest of the term as projects with longer lead times will be reaching completion. Adjustments will be made to account for customers willingness to switch from gas to electric, particularly with heat pump installations. That includes, modifying processes and incentives to encourage program vendors while continuing to prioritize electrification efforts with internal staff. Further adjustments include: 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.

National Grid is projecting a significant underspend in the Existing Buildings Program with only 64% of the budget used by the end of the term. The result is a \$48,757,576 underspend of the planned term budget. Savings are also expected to be below planned numbers, with current forecasts only expecting to achieve 54% of claimable savings for the term. The underspend for the Existing Buildings Program is primarily driven by the challenges faced in the Existing Building Retrofit Core Initiative, which is expected to only use 41% of the planned term budget, and achieve only 48% of claimable savings for the term.

The Existing Building Retrofit Program has been severely impacted by a gas market that has already achieved significant amounts of potential, particularly among larger customers, thus leading to less project opportunities.

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 and office space. Rising interest rates, inflationary effects, and supply chain delays have made new projects even more difficult to undertake. However, since fewer customers are willing to invest in large-scale custom projects, which tend to have higher barriers like project size and cost, there has been a greater focus on the prescriptive pathway that provides a simple and streamlined process for customers. There has been a great appetite for heat pumps from customers in small and large business spaces, and multifamily units. The prescriptive pathway has seen a higher level of volume than initially planned, but even with the higher volume the projects and incentive values are still smaller than the custom pathway contributing to the underspend.

Across the sector, incentives are currently below planned levels and will be increased for the remainder of the term to improve performance and achieve more claimable savings. Additionally, to combat the saturated gas market, new measures with substantial potential have been launched as offerings for customers to bring in new projects. Most notably, the new Building Management Systems (“BMS”) and weatherization offerings such as Enhanced Monitoring-Based Commissioning (“EMBCx”) that provides funds for analytics platforms to identify opportunities for system optimization, repairs, and new equipment.

Through targeted marketing efforts and surveys for heat pumps, there has been a noticeable increase in customer familiarity and awareness around heat pump technologies and offerings. Internal surveys have shown customer awareness of heat pump offerings has increased by 26% to 42% across all heat pump categories for the sector. With increased customer awareness there is potential for more projects in the short- and long-term future.

Steps have been taken to mitigate high costs for customers for traditional measures by partnering with a third party vendor to offer loans for projects. Similar to the Mass Save HEAT Loan, which has seen major successes, there will be no-interest loan offerings for commercial customers who have eligible custom gas projects. Improvements in the pipeline are also expected to keep a steady flow of new construction projects into the end of the term and the following plan.

Other proposed solutions for the remainder of the term include addressing vendor effectiveness within the Existing Buildings Program. Trainings have been provided for vendors to gain more expertise in weatherization and heat pump installation across the Program, with the most recent being completed during the summer of 2023. Furthermore, more funding will be allocated for additional trainings at the end of the term.

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 a decision.