STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PUBLIC UTILITIES COMMISSION

In Re: The Narragansett Electric Company	
d/b/a National Grid	**Docket No. _____**
Annual Energy Efficiency Plan for 2021	

ANNUAL ENERGY EFFICIENCY PLAN FOR 2021

October 15, 2020

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2021 RHODE ISLAND ENERGY EFFICIENCY PLAN ROAD MAP

$751.4 Million in total lifetime benefits

ECONOMIC

- **Good Green Jobs**
- **Supporting Economic Recovery**
- **Delivering Energy Savings to Rhode Island**

ENERGY SAVINGS

- **1.3 TWh** lifetime electric savings
- **$121.2 million** less than cost of purchasing electric supply
- **4.2 million MMBTU** lifetime natural gas savings
- **$14.1 million** less than cost of purchasing natural gas

INVESTMENT RESULTS

- **$341.8 million increase** in Rhode Island Gross State Product
- **873.2 thousand tons** of avoided carbon = **171,158** cars off the road
- **71% of companies** delivering energy efficiency are based in Rhode Island

2. Introduction

The Narragansett Electric Company d/b/a National Grid (National Grid or the Company) submits this 2021 Annual Energy Efficiency and Conservation Procurement Plan (Plan or Annual Plan) as the first annual plan submitted alongside the fifth triennial plan (2021-2023 Three Year Energy Efficiency and Conservation Procurement Plan) in fulfillment of The Comprehensive Energy Conservation, Efficiency and Affordability Act of 2006.

Energy efficiency is the most cost-effective way to supply new energy and meet customers' energy needs. Customers who directly participate in energy efficiency programs save energy and see direct cost savings in the form of lower energy bills. Energy efficiency also lowers long-term base load and peak demand and reduces the need for additional generation and transmission infrastructure, benefiting all customers, regardless of direct participation in the Company's efficiency programs. The purpose of the Annual Plan is to propose the programs the Company will deliver to help Rhode Island energy consumers meet their energy needs through cost effective, reliable, prudent, and environmentally responsible energy efficiency, and to identify their costs, benefits, and energy savings.

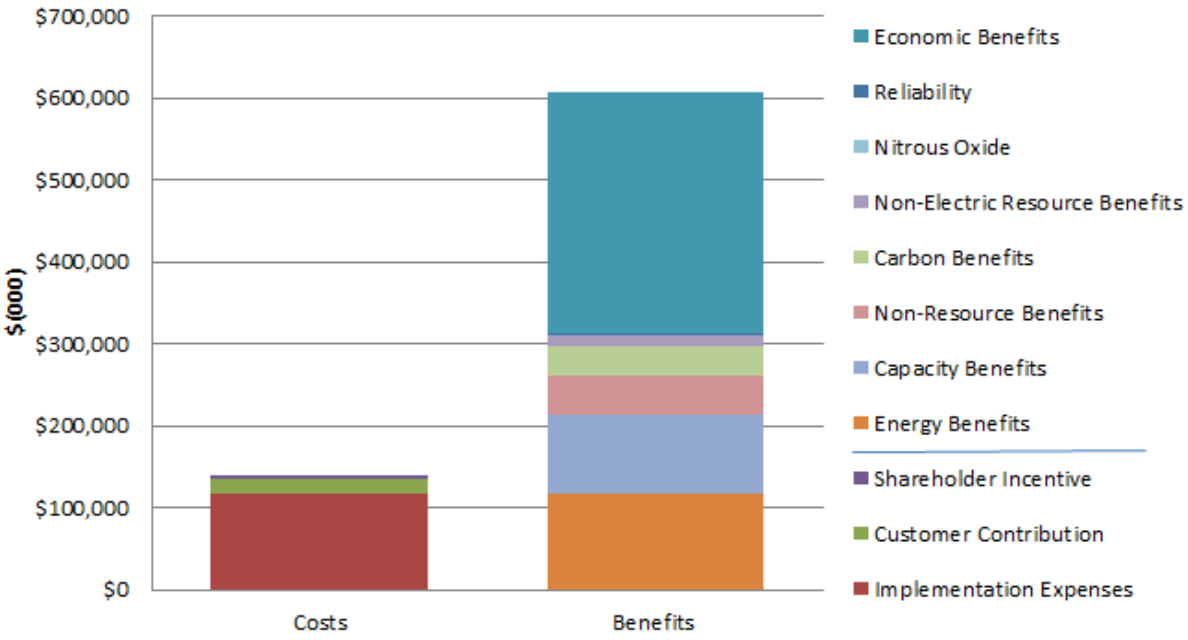
The Annual Plan identifies the energy savings goals for 2021 and describes the detailed strategies, programming, and investments the Company is undertaking to achieve these goals, while continuing to build the infrastructure needed to achieve the full savings and benefits outlined in the 2021 -2023 Three-Year Energy Efficiency Plan. In proposing this Plan, the Company is mindful of the prevailing economic conditions, including the uncertain impacts the COVID-19 pandemic will continue to have on the Rhode Island economy. The Company is also aware of the significant economic benefits that energy efficiency programming can offer towards recovery. To balance these factors, the Company set the investment budget for the 2021 year to ensure no increase of the systems benefit charge and has weighted investments toward helping those who may be hardest hit by the economic impacts, including low- and moderate-income customers and small businesses. The Company is also increasing investment in workforce development to mitigate the workforce losses due to COVID-19 and help bring new workers into growth areas of clean energy technologies. The planned programs and budgets attempt to maintain flexibility to ensure continued delivery of energy efficiency services and maintain and build clean energy jobs under multiple potential scenarios for the 2021 program year.

This Plan will create significant benefits for Rhode Island. In total, the Plan is expected to create $751,465,779 in total benefits over the life of the installed electric, demand response, and natural gas energy efficiency measures. Investments made in energy efficiency to achieve these savings will add $341,806,660 to Rhode Island's Gross State Product (GSP). The projected lifetime energy savings from this Plan will avoid 873,292 tons of carbon, the equivalent of removing 171,158 passenger vehicles from the road for one year. Energy savings and benefits are measured and verified by third-party evaluation firms.

The electric portion of the Plan will save 1,306,562 lifetime MWh over the lifetime of the installed energy efficiency measures, 139,478 net annual MWhs, and 22,723 net annual kW from passive energy

efficiency. The natural gas portion of the plan will save 4,206,444 lifetime MMBtu over the lifetime of installed natural gas measures and 425,359 annual MMBtu. For all fuels (electric, gas, oil, propane), combined the plan will save 8,577,361 net lifetime MMBtu and 854,337 net annual MMBtu.

Figure 1. 2021 Energy Efficiency Plan Costs Compared to Benefits



This Plan is submitted in accordance with the Least Cost Procurement Law, R.I. Gen. Laws § 39-1-27.7, the basis for which is the Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006, R.I. Gen. Laws § 39-2-1.2, and the Least Cost Procurement Standards, as approved and adopted pursuant to Order No. 23890 in Docket No. 5015[1] (referred to herein as the "LCP Standards"). This Plan has been developed by National Grid with feedback provided by the Energy Efficiency Technical Working Group (EE TWG) and the Energy Efficiency and Resource Management Council (EERMC).[2]

[1] RI PUC Docket 5015, Least Cost Procurement Standards http://www.ripuc.ri.gov/eventsactions/docket/5015_LCP_Standards_05_28_2020_8.21.2020%20Clean%20Copy%20FINAL.pdf

[2] Since 1991, a collaborative group has been meeting regularly to analyze and inform the Company's electric and gas energy efficiency programs. The name of this group was modified in 2019 to the Energy Efficiency Technical Working Group (EE TWG) to better reflect the roles of the parties. Presently, members of the EE TWG include: The Company, the Division of Public Utilities and Carriers (Division or DPUC) and the Division's consultant, Synapse Energy Economics (Synapse), the City of Providence, Green Energy Consumers Alliance, the Office of Energy Resources, and Acadia Center. In addition, the George Wiley Center, the Center for Justice, the Rhode Island Infrastructure Bank (RIIB), and several EERMC members and representatives from the EERMC's Consulting Team participate in the EE TWG. Since 1991, membership in the EE TWG has varied because some organizations have withdrawn, and others have joined. Further information available at: https://www.nationalgridus.com/ri-energy-efficiency-technical-working-group

The 2021 Plan satisfies the statutory requirements for Least Cost Procurement and the Least Cost Procurement Standards and is consistent with the concurrently filed Three-Year Energy Efficiency Procurement Plan (Three-Year Plan) for 2021-2023.[3] The overarching goal of both Plans is to enable Rhode Island energy consumers to meet their energy needs through cost-effective, reliable, prudent, and environmentally responsible energy efficiency.

Cost-Effective Savings

The primary goal of the Plan is to create energy and economic cost savings for Rhode Island consumers through energy efficiency. To that end, the electric-funded portion of the Plan will create electric and delivered fuels savings of 1,306,562 net lifetime MWhs, 139,478 net annual MWhs, and 22,723 net annual kW from passive energy efficiency. In addition, the Plan will generate savings of 39,339 net annual kW from active demand reduction measures. The natural gas-funded portion of the Plan will create savings of 4,206,444 net lifetime MMBtus and 425,359 net annual MMBtus. The Plan will generate total benefits of $751,465,779 over the life of the measures. Of these total benefits, $606,490,655 come from electric efficiency, passive demand reductions, and active demand response. $144,975,124 in benefits derive from natural gas efficiency. This adds up to significant benefits for Rhode Island's residential, commercial, industrial, and income eligible energy customers. The Annual Plan is cost-effective, with a cost that is lower than the cost of energy supply for both electricity and natural gas, satisfying the requirements prescribed in R.I. Gen. Laws § 39-1-27.7 (a)(2) and the Standards. The Plan also satisfies PUC Order No. 22851 by demonstrating how it advances the Docket 4600 principles and goals for the electric system detailed in Section 14.[4]

Table 1 includes a high-level summary of the Electric-funded and Natural Gas-funded portions of the Plan. Table 1 represents a more detailed table of the programs included under the "Active Demand Response (kW)" column shown in Table 1.

[3] The Company intends to submit the Three-Year Plan to the PUC on October 15, 2020, at the same time this Annual Plan is filed.

[4] PUC Report and Order No. 22851 accepting the Stakeholder Report. Written Order issued July 31, 2017.

Table 1. 2021 Energy Efficiency and Demand Response Program Plan Summary

Electric Programs by Sector [3]	Implementation Spending ($000)[1]	Customer Contribution ($000)	Annual Savings (MWh)	Lifetime Savings (MWh)	Lifetime Savings (MMBtu) (Electric, Gas, Delivered Fuels)	¢/lifetime kWh	Summer Annual Demand Savings (kW) [5]	Active Demand Response (kW)	Total Benefits ($000)	RI Test B/C Ratio	Participants [6]
Non-Income Eligible Residential	$38,563	$3,798	53,062	196,358	1,198,321	21.6	7,528	5,739	$108,064	2.44	449,906
Income Eligible Residential [3]	$18,704	$0	5,387	71,068	499,734	26.3	557	N/A - Income Eligible customers can participate in all Non-Income Eligible Residential programs.	$45,004	2.27	8,430
Commercial and Industrial	$57,847	$14,638	81,029	1,039,136	2,672,861	7.0	14,638	33,600	$453,422	6.05	3,778
Regulatory	$1,691										
Subtotal	$116,806	$18,436	139,478	1,306,562	4,370,916	10.4	22,723	39,339	$606,491	4.31	462,114

Gas Programs by Sector	Implementation Spending ($000)	Customer Contribution ($000)	Annual Savings (MMBtu)	Lifetime Savings (MMBtu)	Lifetime Savings (MMBtu) (Gas)	$/lifetime MMBtu	Total Benefits ($000)	RI Test B/C Ratio	Participants
Non-Income Eligible Residential	$16,612	$6,371	168,933	1,544,017	1,544,017	14.89	$47,323	2.01	162,961
Income Eligible Residential	$10,042	$0	27,183	578,522	578,522	17.36	$33,521	3.20	4,661
Commercial and Industrial	$9,619	$3,374	229,243	2,083,905	2,083,905	6.22	$64,131	4.69	1,071
Regulatory [2]	$642								
Subtotal	$36,917	$9,745	425,359	4,206,444	4,206,444	11.09	$144,975	3.00	168,694
TOTAL Plan	**$153,723**	**$28,181**			**8,577,361**		**$751,466**	**3.99**	**630,808**

(1) Implementation spending does not include customer contributions, shareholder incentive, or commitments.

(2) Regulatory Includes contributions to the Office of Energy Resources and EERMC.

(3) In addition to Income Eligible Residential programs, Income Eligible customers can participate in all Non-Income Eligible Residential programs.

(4) Electric Programs are funded by the Electric Energy Efficiency Charge but also include Delivered Fuels energy savings.

(5) The Summer Annual Demand Response (kW) measures passive demand savings.

(6) The unit measure for participation varies by program. See Attachment 5, Table E-7 and Attachment 6, G-7 for participation goals by program.

Table 2. 2021 Active Demand Response Program Plan Summary

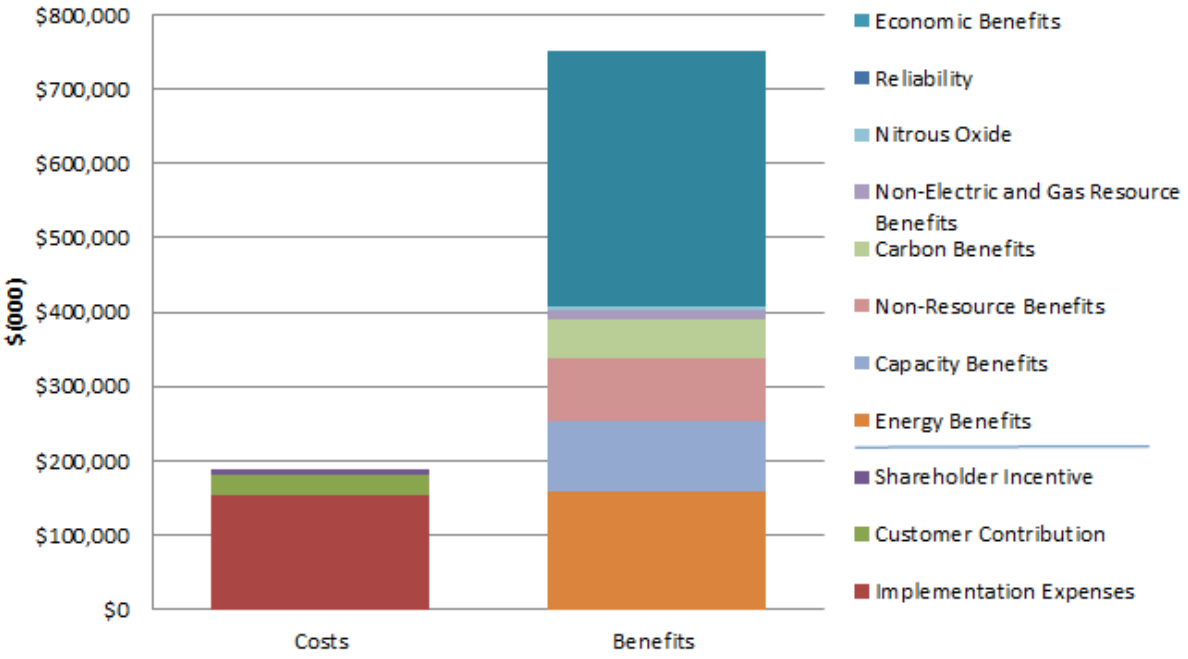
Programs	Implementation Spending ($000)	Customer Contribution	Active Demand	$/kw	Total Benefits	RI Test B/C	Participation
Residential	$1,960	$-	5,739	$341.49	$12,019	6.13	4,178
Commercial	$2,990	$-	33,600	$88.99	$29,465	9.85	180
Total	**$4,950**	$-	**39,339**	**$125.83**	**$41,484**	**8.38**	**4,358**

(1) All Residential electric customers (including Income Eligible customers) are eligible to participate in the Residential ConnectedSolutions program if they have the necessary equipment – a smart thermostat and central air conditioning, or a behind the meter battery.

Benefits of Investment in Energy Efficiency

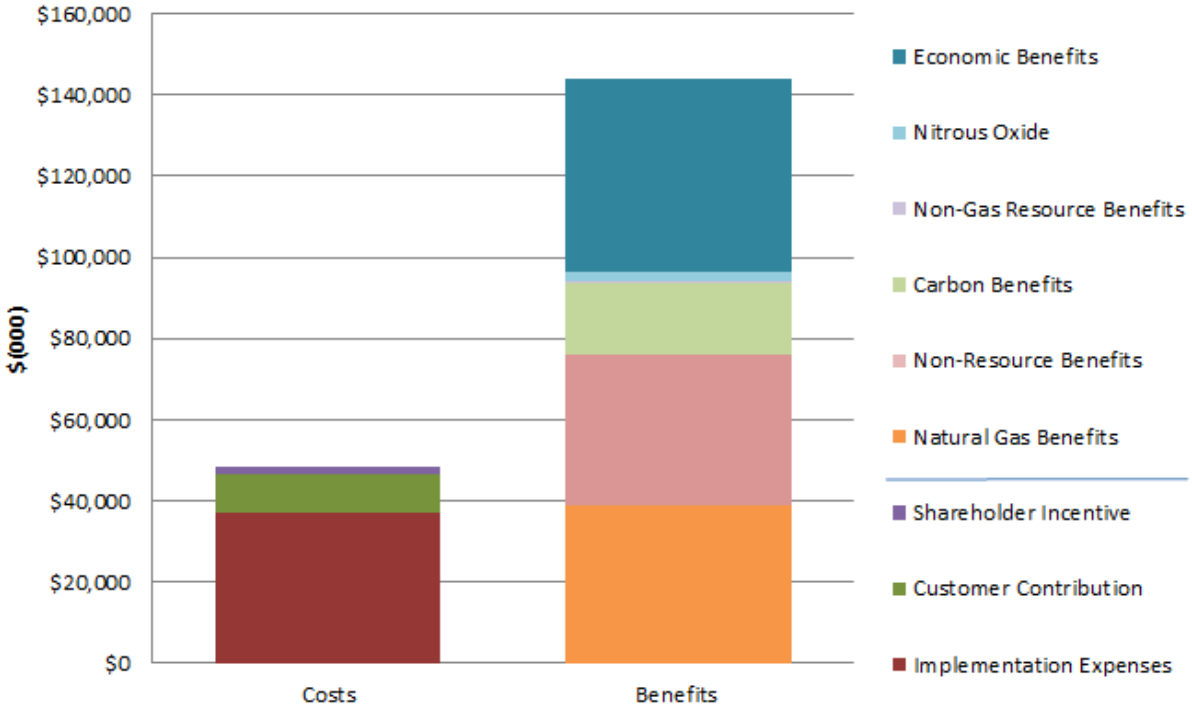
Each $1 spent on the electric energy efficiency portfolio will create $4.31 in benefits over the lifetime of the investment, and every $1 spent on the natural gas portfolio will create $3.00 in benefits over the lifetime of the investments. Figure 2 and Figure 3 below detail the costs and benefits for the electric and gas portfolios, respectively, calculated using the Rhode Island Test. A detailed summary of the benefits and costs included in the Rhode Island Test is included in Attachment 4 Rhode Island (RI) Benefit Cost Test.

Figure 2. Annual Plan Total Benefits and Total Costs (RI Test) for the Electric Portfolio[5]



[5] For more information on how and why these costs and benefits are calculated and included, see Attachment 4 Rhode Island Benefit Cost Test Description. For more information on the costs and expenses summarized here see Attachments 5 and 6.

Figure 3. Annual Plan Total Benefits and Total Costs (RI Test) for the Natural Gas Portfolio



The electric, gas, and delivered fuel energy efficiency measures proposed in this Plan will avoid over 873,292.[6] This is the equivalent of removing approximately 171,158 passenger vehicles from the road for one year.[7]

The Company expects that investments made in energy efficiency under this Plan will add $341,806,660 to Rhode Island's Gross State Product (GSP).[8] The vast majority of jobs associated with the Annual Plan's energy efficiency investments are local because they are tied to the installation of equipment and materials. An analysis of National Grid's 2019 energy efficiency programs found that 71% of companies involved in the Company's energy efficiency programs are either headquartered or have a presence in Rhode Island.[9] Investments in energy efficiency contribute to Rhode Island's economy overall and benefit business owners and their employees who deliver these programs and services.

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[6] Takes into account the net impact of EE measures on carbon emissions. The marginal carbon emission rates are from "Avoided Energy Supply Components in New England: 2018 Report" Appendix K. pages 368-370.
[7] https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
[8] Macroeconomic multipliers for the economic growth and job creation benefits of investing in cost-effective energy efficiency from "Review of RI Test and Proposed Methodology" prepared for National Grid by the Brattle Group, January 31, 2019.
[9] Peregrine Energy Group, "Analysis and Recommendations regarding the Current and Future Workforce associated with Rhode Island Energy Efficiency Programs," May 5, 2019 (filed as part of National Grid's 2018 Year-End Report).

The cost of procuring 1,306,562 net lifetime MWh electric energy efficiency savings through the Plan is $121,277,547 less than if that electric load was met by purchasing additional electric supply. The cost of procuring 4,206,444 MMBtu lifetime natural gas energy efficiency savings through the Plan is $14,186,986 less than if that natural gas load was met by purchasing additional natural gas supply.[10]

This cost-effective Plan includes an investment of $122.3 million in the cost-effective the electric energy efficiency portfolio in 2021. If approved, this will be funded by $16.0 million in proceeds from the ISO New England (ISO-NE) Forward Capacity Market (FCM), revenues from the existing energy efficiency program charge of $0.01323 per kWh, and revenues from a fully reconciling mechanism of $0.00000 per kWh pursuant to R.I. Gen. Laws § 39-1-27.7(c)(5) to fully fund the cost-effective electric energy efficiency programs for 2021.[11]

This Plan also includes an investment of $38.6 million in the cost-effective natural gas energy efficiency portfolio in 2021. If approved, this investment will be funded by revenues from the existing energy efficiency program charge of $1.011 per dekatherm for residential customers and $0.704 per dekatherm for non-residential customers plus revenues from a fully reconciling mechanism of $0.000 per dekatherm for residential customers and $0.000 per dekatherm for non-residential customers pursuant to R.I. Gen. Laws § 39-1-27.7(c)(5) to fully fund the cost-effective natural gas energy efficiency programs for 2021.[12]

The Planning Process and Major Changes

While many of the programs and strategies contained in this Annual Plan have a history of market traction and delivered savings, this Plan is distinct from prior annual and three-year plans. Both the 2021-2023 Three-Year Plan and this Annual Plan are delivered in a context that is new in three important respects.

First, both plans have benefited from and focused on the areas of opportunity identified in the Rhode Island Energy Efficiency Market Potential Study (Market Potential Study) commissioned by the EERMC and completed by Dunsky Energy Consulting in May 2020. The PUC codified the maximum potential identified by the study as the approved Targets in Docket 5023. In setting these Targets, the EERMC did not apply the filters of prudency and reliability that are required of the Company's proposed investments in energy efficiency.

Second, both Plans have been guided by a new set of LCP Standards, including an extensive set of "principles of program design" and a new accelerated timeline for concurrent filing of the Three-Year and Annual Plans, thereby eliminating any deviations between them.

[10] For more information on how this was calculated, see Section 3 of the Main Text, "Cost of Annual Plan Compared to the Cost of Energy Supply"
[11] See Attachment 5 Electric EE Program Tables, Table E-1 for list of funding sources and calculation of the charge.
[12] See Attachment 6 Gas EE Program Tables, Table G-1 for list of funding sources and calculation of the charge.

Lastly, the Plans have been drafted as Rhode Island and the nation grapple with the COVID-19 pandemic and an evolving understanding of equity and the need for systemic change to achieve shared values of equity.

The 2021 Plan also marks a major milestone – the complete transformation of the residential lighting market and the final year incentives will be offered for residential lighting at the retail level. As the highly cost-efficient savings secured in previous plan cycles from lighting are reduced as a portion of program portfolio savings, the Company continues to seek new opportunities to drive deeper savings and transform additional markets. Consequently, this Plan focuses on building upon existing customer relationships to encourage comprehensive measures that accrue greater savings over their lifetime. Because these deeper and more comprehensive measures have higher upfront costs to secure the levels of claimable energy savings provided by lighting in previous plan cycles (i.e. they produce fewer savings per dollar invested), cost control and efficiency are key.

National Grid staff collaborated with the EERMC consultant team to identify measures from the Market Potential Study to inform the savings programs and strategies included in this Annual Plan. This has resulted in specific emphasis in program design on deeper measures of weatherization (insulation and air sealing), heating and hot water measures, particularly for residential and small business customers, and an increasing focus on combining sophisticated building and equipment controls alongside high potential measures offered to commercial and industrial customers. Building on the successes achieved through prior plans, this plan continues to expand active demand response programs.

The Company has engaged the TWG throughout the planning process to leverage their expertise and seek their feedback. In early 2020, TWG members were asked to identify their priorities for the next three years. TWG members also previewed and provided input on key themes and major changes in a Three-Year Plan Outline Memorandum circulated in April 2020 and reviewed and provided detailed feedback on the draft 2021-2023 Three-Year Plan and draft 2021 Annual Plan. The Company is grateful for the substantive critiques and innovative ideas that have come through this process of continued engagement. The Company has incorporated the priorities of TWG stakeholders into many components of this Annual Plan. The discussions of equity, in particular, have helped shape and elevate the Company's explicit equity commitments, establishing equity as an overarching strategic objective of this Annual Plan and adding multiple specific, measurable actions across the portfolio of efficiency programs. The Company looks forward to filing both the 2021 Annual Plan and 2021-2023 Three-Year Plan with the PUC in October.

How to Read This Plan

For ease of review, this Plan has been organized to align with the revised LCP Standards. There are three overarching sections: Strategies and Approaches to Planning; Consistency with Standards; and Funding Plan, Budget and Goals. The **Strategies and Approaches to Planning** section provides a detailed discussion of the Company's approach to implementing the principles of program design outlined in the LCP Standards and provides high-level program descriptions, along with the major enhancements and

innovations planned for 2021. This section also includes a discussion of program participation, pilots and demonstrations and assessments, evaluation, measurement and verification, and coordination with other energy programs. The **Consistency with Standards** section explains how the Plan meets Prudency (including a detailed discussion of equity and rate and bill impacts), Reliability, Environmentally Responsible, and Cost Effectiveness requirements, as set forth in the LCP Standards. **The Funding Plan, Budget and Goals** detail these elements and discusses the performance incentive plan and performance metrics.

The nine Attachments to this Annual Plan provide additional detail on specific Plan elements. **Attachment 1 Residential & IES Programs** and **Attachment 2 C&I Programs** provide detail on program eligibility criteria, offerings, implementation and delivery, customer feedback, 2021 changes with accompanying rationale, and proposed evaluations for each program. **Attachment 3 Evaluation, Measurement, and Verification Plan** reviews evaluation studies completed in 2020, details studies planned for 2021, and provides a recap of historical studies. **Attachment 4 RI Benefit Cost Test** presents the assessed cost-effectiveness of this Annual Plan. **Attachments 5 and 6** contain funding, budgets, goals, and cost-effectiveness tables for the electric and gas energy efficiency programs, respectively. **Attachment 7 Rate and Bill Impacts** provides a detailed analysis of the electric and gas bill impacts resulting from this Plan. **Attachment 8** details, for each sector, 2021 **Pilots, Demonstrations, and Assessments**. **Attachment 9 Cross-Program Summary** documents how the programs described in this Plan relate to other specific National Grid programs.

This Annual Plan is filed in combination with the 2021-2023 Three-Year Plan. The Three-Year Plan outlines the Company's overall programmatic focus and strategies, including illustrative and provisional budgets and savings goals for the three years of implementation. It lays out a vision for National Grid's continued transformation of the energy efficiency sector in Rhode Island, including key themes and areas of focus for 2021-2023. This Annual Plan solidifies that vision for the year 2021, formalizing budgets and savings goals associated with time tested programs, while outlining program enhancements and innovations planned for 2021, which will inform subsequent years of the implementation period.

STRATEGIES AND APPROACHES TO PLANNING

3. Programs and Priorities

3.1 Strategic Overview of Programs and Priorities

This Annual Plan is built as the first year of a new 2021-2023 Three-Year Energy Efficiency Plan, drafted and filed concurrently. The Three-Year Plan sets the Company on a trajectory to ensure that Rhode Island has a robust and resilient energy efficiency infrastructure, particularly as the market for energy efficiency transforms with changes in the lighting market. The Three-Year Plan and this Annual Plan will help continue the trajectory of Rhode Island homes and businesses towards greater efficiency, while maintaining considerations of the COVID-19 pandemic and its impacts on customers and economic conditions. The Plan seeks to guarantee that all Rhode Island energy consumers, regardless of their geographic location, income, home ownership status, primary language, business size, or other relevant barriers are empowered to be active in their energy choices, control their energy use, and enjoy the economic, environmental, and cost savings benefits of energy efficiency.

This Annual Plan includes substantial program enhancements and innovations designed to secure deeper, more comprehensive savings in 2021. The Plan also supports continued innovation and evolution, building enabling tools to accelerate the transition of Rhode Island homes and businesses to increasing levels of efficiency in future years. It balances the pursuit of energy and financial savings from current technologies and programs with the need to also identify new technologies, finance channels, and programs to continue delivering savings to Rhode Island customers for years to come. The Plan achieves savings by implementing the following key strategic priorities set out in the Three-Year Plan:

- Expand and deepen customer relationships.
- Drive adoption of comprehensive measures.
- Expand Active Demand Response
- Achieve cost optimization and efficiency.
- Apply a deeper equity lens across all program planning and delivery.

Section 3.1.1 explains how the principles of program design included in the new LCP Standards have been applied to this Annual Plan, highlighting examples and providing direction on where deeper discussion may be found within the Plan. Sections 3.2 and 0 provide high-level summaries of program designs and changes for 2021 to Residential, Income Eligible Services, and Commercial and Industrial Programs. Section 3.4 offers detail on the cross-cutting programs for 2021, including the Community-Based Initiative, codes and standards, and workforce development. Lastly, Section 3.5 provides participant definitions and planned participation numbers.

3.1.1 Principles of Program Design

This Annual Plan has been guided by the newly revised LCP Standards, which provide an extensive set of principles of program design, listed below. This Plan's approach to incorporating these principles follows, with references to other areas of the Plan that provide greater detail.

Integration With Other Energy Programs and Policies

- Designed where possible, to complement the objectives of Rhode Island's energy programs and policies, and describe the interaction of EE Plans with these other programs, including, but not limited to, the System Reliability Procurement Plan; the Renewable Energy Standard; the Renewable Energy Growth Program; the Net Metering Program; and the Long-Term Contracting for Renewable Energy Standard; all energy supply procurement plans; and Infrastructure, Safety, and Reliability Plans.

Innovation

- Energy Efficiency Plans shall address new and emerging issues as they relate to Least-Cost Procurement as appropriate, including how they may meet State policy objectives and provide system, customer, environmental, and societal benefits.

Comprehensiveness

- The distribution company shall design EE Plans to ensure that all customers have an opportunity to benefit and realize both near-term and long-lived savings opportunities, and to deliver system-wide and location-specific savings.

Equity

- The portfolio of programs proposed by the distribution company shall be designed to ensure that all customers have equitable opportunities to participate in the offerings of EE Plans and a fair allocation of costs and benefits.

Build on Prior Plans

- The distribution company shall describe in an EE Plan the recent energy efficiency programs offered and highlight how the EE Plan supplements and expands upon these offerings at the appropriate level of detail, including, but not limited to, new measures, implementation strategies, measures specifically intended for demand or load management, and new programs as appropriate.

Build on Prior Programs

- Distribution company program development shall proceed by building upon what has been learned to date in distribution company program experience, systematically identifying new opportunities and pursuing comprehensiveness of measure implementation, as appropriate and feasible.

Plan Based on Potential Assessments

- At a minimum, the distribution company shall use any Targets and other Report recommendations approved by the PUC pursuant to Chapter 2 as a resource in developing its Three-Year Plan. The distribution company shall include in its Three-Year Plan an outline of proposed strategies to supplement and build upon these assessments of potential. The distribution company may also use other assessments or Report recommendations provided that such assessments or Report recommendations were not previously and specifically rejected by the PUC.

Unlocks Capital and Effectively Uses Funding Sources

- EE Plans shall include a Section outlining and discussing new strategies to make available the capital needed to effectively overcome barriers to implement projects in addition to direct financial incentives provided in order to cost-effectively achieve the Least Cost Procurement mandate. Such proposed strategies shall move beyond traditional financing strategies and shall include new capital availability strategies and partnerships that effectively overcome market barriers in each market segment in which it is feasible to do so.

Integration of Gas and Electric Energy Efficiency Programs

- EE Plans shall address how the distribution company plans to integrate gas and electric energy efficiency programs to optimize customer energy efficiency and provide benefits from synergies between the two energy systems and their respective programs.

Strategies to Achieve Targets

- Plans shall be developed to propose strategies to achieve the energy efficiency savings targets that shall be proposed by the Council and approved by the PUC for that three-year period. Such strategies shall secure energy, capacity, and system benefits and also be designed to ensure the programs will be delivered successfully, cost-effectively, and cost-efficiently over the long term. In addition to satisfying other provisions of these Standards, the EE Plans shall contribute to a sustainable energy efficiency economy in Rhode Island, respond to and transform evolving market conditions, strive to increase participation and customer equity, and provide widespread consumer benefits.

Investments on Behalf of All Customers

- Energy Efficiency investments shall be made on behalf of all customers. This will ensure consistency with existing program structure under which all customers pay for, and benefit from, Rhode Island's efficiency programs.

Efficacy

- All efforts to establish and maintain program capability shall be done in a manner that ensures quality delivery and is economical and efficient. The distribution company shall include wherever possible and practical partnerships with existing educational and job training entities.

Parity Among Sectors

- While it is anticipated that rough parity among sectors can be maintained, as the limits of what is cost-effective are identified, there may be more efficiency opportunities identified in one sector than another. The distribution company shall design EE Plans to capture all resources that are cost-effective and lower cost than supply. The distribution company shall consult with the Council to address ongoing issues of parity.

Cost-Effectiveness

- The distribution company shall propose a portfolio of programs that is cost-effective. Any program with a quantified benefit-cost ratio greater than 1.0 (i.e., where quantified benefits are greater than quantified costs), should be considered cost-effective. Consistent with the PUC's guidance issued in Docket No. 4600A, qualitative benefits and costs may be considered in determining cost-effectiveness. The portfolio must be cost-effective and programs must be cost-effective.

This Annual Plan has been designed to **integrate** with Rhode Island's energy programs and policies. Section 6 Coordination with Other Energy Policies and Programs provides details on the Plan's connection to specific state policies. The program descriptions found in Attachment 1 Residential & IES Programs and Attachment 2 C&I Programs offer additional specific detail on implementation and delivery, how the energy efficiency programs help customers achieve additional state energy policy goals, and information on energy programs beyond those run directly by the Company, such as programs for connecting to renewable energy sources and electrification opportunities.

This plan offers **innovations** in program design alongside a systematic approach to bringing innovative new technologies and approaches forward as outlined in the Three-Year Plan and in Section 4 Pilots, Demonstrations and Assessments, with additional detail in Attachment 8 Pilots, Demonstrations and Assessments. In addition, this plan features innovations designed in real time to respond to challenges presented by the COVID-19 pandemic, such as the development and refinement of virtual auditing for the residential Energy*Wise* programs[13] and new and creative marketing methods[14] for reaching customers, including developing and placing new over-the-top (OTT) and connected TV (CTV) ads, which play before streamed programming, and targeted video ad campaigns at drive-in movie theaters.

Comprehensiveness is a core design principle and a core strategy for both the 2021-2023 Three-Year Plan and this Annual Plan. This Plan includes multiple enhancements to reach and engage more customers, such as the simplified whole building pathway to capture more small and medium buildings in new construction,[15] and the addition of high payback measures in the Equipment and System Performance Optimization Initiative[16] to capture new customers and offer them more comprehensive approaches. The Commercial and Industrial market sector approach and the Residential and Income Eligible whole building delivery programs (Energy*Wise*, Multifamily, Income Eligible Services, and Income Eligible Multifamily) continue the evolution to deep comprehensive savings packages that emphasize whole building and whole system solutions, with **integration of gas and electric** energy efficiency to optimize and benefit from synergies between the two energy systems.

The program designs included in this Plan **build on prior plans** and **build on prior programs**. The detailed program descriptions provided in the Attachment 1 Residential & IES Programs and Attachment 2 C&I Programs offer snapshots and evidence of how programs are continuously evolving, building from one plan year to the next. They show how high-level strategies within the Three-Year and Annual Plans are translated into specific actions and activities that secure savings for customers and help to contextualize specific program innovations and enhancements described only briefly in Section 3.2 Residential and Income Eligible Programs and Section 0

[13] See Attachment 1 Residential & IES Programs, Section 2 Energy*Wise* Single Family.
[14] See Attachment 1 Residential & IES Programs, Section 11 Marketing and Attachment 2 C&I Programs, Section 10 Marketing.
[15] See Attachment 2 C&I Programs, Section 2 Large C&I New Construction Program.
[16] See Attachment 2 C&I Programs, Section 5.7 Equipment & System Performance Optimization.

Commercial and Industrial Programs. Attachments 1 and 2 provide detail on new measures, implementation strategies, measures specifically intended for demand or load management, and new programs.

Active demand response (or ConnectedSolutions) programming is a great example of how this Plan builds on prior plans and programs. Active demand response was first offered as a residential pilot in 2016 and a C&I pilot in 2017. In 2019, these pilots were converted to standard programs and continued in 2020. In this Plan, the Company proposes growing active demand response offerings and expanding them to new technologies.[17] The ConnectedSolutions programs in this Plan will deliver demand reductions that build upon prior success to grow participation and offerings for both commercial and residential customers in pursuit of the Active Demand Response Targets approved in Docket 5023.

Equity, as noted before, is a core strategic priority of the 2021-2023 Three-Year Plan and this Annual Plan. An equity lens has been applied to all planning and design updates. The Company is committed to ensuring that all customers have equal ability to access and benefit from energy efficiency programs, regardless of their geographic location, income, home ownership status, primary language, business size, or other relevant barriers; that jobs and economic development benefits of the programs reach all Rhode Island communities, with renewed emphasis on environmental justice communities; and that the energy efficiency services help the most vulnerable customers that may pay a higher proportion of their income in energy costs. Using an equity lens involves considering how programs are designed and evaluated with these goals in mind, as well as taking into account the systemic and institutional structures that may make it easier for some customers to access energy efficiency products and programs and more challenging for others. As discussed further below and in Section 8.1.2, the Company is taking several steps in 2021 in conjunction with the Office of Energy Resources (OER) and other stakeholders to further our empirical understanding of several facets of equity.

The Company believes that the first step toward addressing equity is to understand historic participation and the extent to which factors such as geography, income, homeownership status, and primary language differ between participants and non-participants. In addition, under the Prudency standard, the Company is required to "at minimum assess which groups have historically received disproportionately lower benefits from LCP investments." The Company will therefore undertake a non-participant study to understand the attributes of non-participants (i.e. addresses that have not participated in any Company energy efficiency programs over a defined period of time), assess barriers to participation, and identify engagement opportunities.[18] In addition, the Company will conduct a census of multifamily housing to understand multifamily participation and non-participation.[19] These studies will provide the data to build program enhancements and tracking systems that are driven

[17] See Attachment 1 Residential & IES Programs, Section 10 Residential ConnectedSolutions and Attachment 2 C&I Programs, Section 7 C&I ConnectedSolutions.
[18] See Attachment 3 Evaluation Measurement & Verification Plan, Section 3.2c.
[19] See Attachment 1 Residential & IES Programs, Section 3 Multifamily and Attachment 3 Evaluation Measurement & Verification Plan, Section 3.2b.

primarily by the needs of identified non- and low participation groups, and to support additional market that is tailored for multilingual customers.
The Company is committed to using the rigor of non-participant and multifamily census studies to ensure that designs are informed by data and limit existing prejudices and biases from being solidified into program designs. The Company is not, however, waiting for study results to begin acting where the Company has good data and clear opportunities to immediately achieve more equitable outcomes and support our more vulnerable customers. The Company has committed to the following actions and enhancements to our programs in 2021 to achieve greater equity and support small business, moderate-income customers, and low-income customers:

- The Company is committed to tracking and reporting renters and rental unit participation (see Section 13.2.1).

- The Company is increasing its emphasis on identifying and encouraging customers eligible for the discount rate to move to the discount rate.[20]

- As customers move to the discount rate, the Company proposes to create a welcome package to encourage participation in applicable efficiency programming, specifically Residential Income Eligible Services (IES).[21]

- The Residential Consumer Products and Income Eligible Multifamily programs have teamed up to offer improved coordinated cooling solutions for income-eligible customers living in multifamily properties.[22]

- In the Company's workforce development programs, National Grid will focus on recruiting, training, and retaining talent from frontline and environmental justice communities, intentionally bringing more women and people of color into the energy efficiency workforce. This will create greater equity of access to the jobs generated by the clean energy transition and will help transition the workforce to better reflect the communities served. The desired outcome is to improve customer access and experience as customers find they are increasingly working with professionals from their communities and for these new professionals to begin to identify and help the Company adjust delivery to overcome community access barriers. See Section 3.4.3 for more information.

- Our new codes and standards advancement support program primarily targets the nonparticipant portions of the markets we serve across all sectors. While the program is in its infancy, this approach overcomes traditional barriers of access by ensuring that efficiency levels

[20] See Attachment 1 Residential & IES Programs, Section 4 Income Eligible Services.
[21] See Attachment 1 Residential & IES Programs, Section 4 Income Eligible Services.
[22] See Attachment 1 Residential & IES Programs, Section 4 Income Eligible Services and Section 8 Residential Consumer Products.

are rising for all. See Section 3.4.2 Cross Cutting Programs, Work Force Development for more information.

- The Company proposes the creation of an equity working group composed of members of the EERMC and OER, with additional input from local experts in equity, such as statewide community-based organizations. See Section 8.1.2 Prudency, Equity for more information.

This Annual Plan has benefited from the **Market Potential Study** and the areas of opportunity it identified have been considered in the program planning process. The RI PUC approved Targets, which reflect the study's maximum **potential assessment** assumed barrier reductions beyond current levels of program design and further improved customer economics by assuming 100% incentives, resulting in significantly higher budget levels than recent plans. The Company has combined this with **additional assessments** and analysis of results from the Evaluation Measurement and Verification programs, program experience, and customer and vendor feedback loops. The design enhancements to increase comprehensive projects emphasize capturing the specific opportunities identified in the Market Potential Study. For example, the bundled incentive designs in Energy*Wise* connect deep weatherization (insulation and air sealing) with additional heating and hot water measures, the measures identified in the Market Potential Study with the highest potential.[23] The Commercial and Industrial programs too have systematically focused all programs on measures with high potential. One easy to see result is the continued focus on bundling control technologies with high potential building, HVAC, and lighting end uses.[24] This Plan includes significant investments to ensure workforce capacity to support customer adoption of high efficiency technologies, including advanced control systems and air source heat pumps (see Section 3.4.3 Cross Cutting Programs, Workforce Development).

All program designs are connected to financing options to help **unlock capital and effectively use funding sources.** This Plan consistently looks beyond direct financial incentives and traditional financing strategies to design capital and program access strategies that respond to specific customer barriers. For example, exploring new financing support for small and mid-size independent grocers through OBR (on-bill repayment) or through an interest buy-down mechanism in partnership with third party providers of debt capital.[25] We believe this access to capital will allow customers to commit to projects more quickly or increase the number of measures installed. The Company is also exploring expanded use of the Heat Loan to help multifamily property owners invest in more comprehensive upgrades, regardless of meter type.[26]

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[23] See Attachment 1 Residential & IES Programs, Section 4 Energy*Wise* Single Family.
[24] See Attachment 2 C&I Programs, sections 3.1 Performance Lighting Plus, 5.9 and 5.10 Customer and Company Owned Street Light Equipment, 5.16.1 Upstream Lighting, 5.16.2 Upstream HVAC, and 6. Small Business Direct Install.
[25] See Attachment 2 C&I Programs, Section 5.1 Grocery Initiative.
[26] See Attachment 1 Residential & IES Programs, Section 3 Multifamily.

The primary **strategies to achieve savings goals** are guided by our five strategic priorities: expand and deepen customer relationships; drive adoption of comprehensive measures; expand active demand response; achieve cost optimization and efficiency; and apply an equity lens across all planning and delivery. Detailed strategies that target specific segments by responding to and seeking to transform specific markets can be found in Attachment 1 Residential & IES Programs and Attachment 2 C&I Programs.

Efficacy, or ensuring quality delivery that is economical and efficient, like comprehensiveness, is a core strategy of the Three-Year and Annual Plan. As Rhode Island energy consumers face economic repercussions from COVID-19, the Company has looked for opportunities to balance the portfolio of energy savings measures and program approaches to maximize cost efficiency (i.e. the amount of energy savings per dollar invested) and minimize the impact on customer bills. The "efficacy" principle of program design specifically calls for "practical partnerships with existing educational and job training entities." We have extensively expanded our partnerships with community colleges, high schools, and middle schools, leveraging existing educational and job training infrastructure within the communities from which we seek to draw increased trainees and future workers. The Company will coordinate with the Department of Labor and Training's Real Jobs Rhode Island program and the Rhode Island Department of Education's PrepareRI initiative to help promote existing solutions to reduce or eliminate duplication of effort and expenditures. For more information see Section 3.4.3.

All program designs maintain **cost effectiveness.** The Company updates its cost effectiveness models during planning and as evaluation data and program implementation insights arrive. A detailed discussion of cost effectiveness is provided Section 8.4 Cost Effectiveness. The application of cost effectiveness as a design principle, however, involves a balancing of the drive for comprehensive projects with long-term measures, which tend to be complex and challenging for customers to adopt and therefore have higher savings acquisition cost, with opportunities for highly cost efficient savings provided through programming that requires less intensive customer support, such as upstream programming and work on codes and standards, as well as highly cost efficient programs such as the Strategic Energy Management Planning with very large customers.

3.2 Residential and Income Eligible Programs

2021 is a pivotal year for residential energy efficiency programming. It marks the completion of the transformation of the residential lighting market and the final year incentives will be offered for residential lighting at the retail level. This shift is the culmination of years of innovation and intentional program design resulting in the successful evolution of the residential lighting market. This first year of the 2021-2023 Three-Year Energy Efficiency Plan seeks to initiate a similar transformation in the way Rhode Island homes use energy for heating, cooling, and hot water. The vision is to support the creation of super-efficient homes that help customers maximize their use of efficiency and expand the range of clean energy options. This vision is for all homes to be effectively insulated, have safe and efficient heating, cooling and hot water systems, encourage customers to see their home as a comprehensive system, and transform the residential new construction industry to a Zero Net Energy market.

The Company has focused heavily across all residential and income eligible services programs to supercharge weatherization, efficient heating and hot water. The elevation of these three critical areas reflect stakeholder priorities and opportunities highlighted in the Market Potential Study. The innovations and enhancements also reflect many ideas and insights that have evolved from the close collaboration with the EERMC and the EERMC consulting team, OER, the Division, our vendors and customer feedback. There are new bundled incentive designs, enhancements that make participation in multiple programs easier or more attractive, and reduce barriers to adoption of comprehensive measures.

For each of the Residential and Income Eligible Services Programs listed in Table 3 below, an overview of 2021 programs is provided in Table 4 and Table 5. For more detailed program descriptions, please refer to Attachment 1 Residential & IES Programs. Rationales for 2021 program changes are included under "rationale" in the program description tables in Attachment 1.

Table 3. Residential and Income Eligible Programs

Energy*Wise* Single Family	**Income Eligible Single Family**
Multifamily	**Income Eligible Multifamily**
Residential New Construction	
Home Energy Reports	
ENERGY STAR® Lighting	
Residential Consumer Products	
Residential High Efficiency Heating and Hot Water (ENERGY STAR® HVAC)	
Residential Connected Solutions	

3.2.1 Residential Programs

In 2021, the Company will continue all residential programs offered in 2020, while examining the potential of new technologies for inclusion in future years.

Table 4. Overview of 2021 Residential Energy Efficiency Programs

Program Name	Program Description	Changes for 2021
Energy*Wise* Single Family (Funded by Electric and Gas)	Energy*Wise* is a direct-to-customer in-home program that educates residents on how their home can become more energy efficient. The program offers single-family customers (buildings with 1-4 dwelling units) home energy assessments, weatherization services, and information regarding their energy usage. The program addresses base load electric use and heating, cooling, and water heating energy loads in all residential buildings. Participants receive energy efficiency recommendations and technical assistance, as well as financial incentives to replace inefficient items such as lighting fixtures, appliances, thermostats, and insulation. Upgrades to efficient lighting, advanced power strips, and water saving devices are made if opportunities exist during the initial visit. At the completion of the assessment, the customer receives an Energy Action Plan that indicates additional energy savings opportunities delivered through National Grid's various programs, as	• Add a Smart Plug assessment to the suite of EnergyWise services to capture potential savings from customers who "always leave on" their appliances and to build customer engagement around more control over household products. • Continue to offer Virtual Home Energy Assessments, iterating the offering based on ongoing assessment of alignment of weatherization scopes and conditions, contractor needs, cost implications, and customer satisfaction. • Continue the 100% weatherization incentive for moderate income customers.27 • Increase marketing to encourage renter and landlord participation and continue the 100% weatherization incentive for landlords, expanding energy efficiency benefits to additional moderate income customers (i.e. renters).

[27] See Attachment 1 Residential & IES Programs, Section 2 Energy*Wise* Single Family for additional detail on plans to define moderate income customers.

Program Name	Program Description	Changes for 2021
	well as solar opportunities provided through statewide solar initiatives. The program will continue to deliver finance opportunities to customers, such as the Heat Loan.	• Design a bundled enhanced incentive that supports customers who commit to comprehensive savings by combining weatherization with another major energy system (e.g. heating and cooling, hot water heaters). • Energy specialists will facilitate connections to HVAC and/or electrical contractors if the customer does not have a preferred vendor to assist with pre-weatherization barriers. • Increase customer connections to other programs (e.g. verify presence of smart thermostat during in-home visit and refer to ConnectedSolutions). • Continue ongoing research to identify companies that use publicly available information to develop initial home energy efficiency scores to help inform 2022 program opportunities. • Research whether residential customers would be interested in an on-bill feature to spread out customer costs associated with energy efficiency upgrades. • Jointly sponsor research with other utilities through ESource and ICF to advance the evolution of incentive design through the Incentive Project, exploring the

Program Name	Program Description	Changes for 2021
		application of lessons from academic research.
Multifamily (Funded by Electric and Gas)	This program offers comprehensive energy services for market-rate multifamily customers (buildings with 5+ dwelling units), including energy assessments, incentives for heating and domestic hot water systems, cooling equipment, lighting, and appliances. All types of multifamily properties are eligible. A primary point-of-contact is designated to manage and coordinate services offered through the Company's existing portfolio. This program is offered in conjunction with the C&I Multifamily gas program where a site may have a commercial meter or office space, but should be virtually indistinguishable to the customer as the Company's single point of contact will handle all program overlap and offer a seamless customer experience.	• Examine a tiered incentive approach to encourage building owners and facility managers to include more residential unit owners in multifamily projects. • Provide greater customer choice to the condominium market by enabling customers to choose their own HVAC contractor and assess the impact on participation. • Implement recommendations from Multifamily Impact and Process Evaluations (e.g. health and safety barrier remediation, redesigning the customer energy report, identifying the long-term role of virtual energy assessments in multifamily buildings). • Leverage the Multifamily Census to implement targeted marketing to newly identified five to 20 unit small- and medium-sized multifamily owners not served to date. • Utilize customer research planned for 2021 to further explore the value of tax incentives for multi-family programs by including tax incentives in research to understand and identify potential drivers and

Program Name	Program Description	Changes for 2021
		motivations for increasing customer participation in multi-family programs in future years. • Explore whether enhancements to the HEAT Loan to finance larger improvements for deeper energy savings in multifamily buildings would be attractive to larger multi-family property owners and drive participation. • Revisit co-branded marketing with the multifamily vendor and consider more prominent Company placement for greater customer trust, ease, and ultimately participation. • Invest in professional development for multifamily energy auditors to improve sales acumen and deepen savings.
Residential New Construction and Building Energy Code Support (Funded by Electric and Gas)	The Residential New Construction (RNC) program promotes the construction of high-performing energy efficient single family, multifamily, and income eligible homes, as well as the education of builders, tradespeople, designers, and code officials.	• Integrate the 2020 Zero Energy Pilot components into primary delivery and incentive offerings. • Refresh program content related to codes and standards to reflect the State's expected code update.
Home Energy Reports (Funded by Electric and Gas)	The Home Energy Reports (HER) program encourages energy efficiency behavior through personalized print and email reports and a seamlessly integrated website. Each of the communication channels displays energy consumption patterns and contains a normative comparison to similarly sized and similarly heated homes, as well as to	• Adopt 2020 evaluation recommendations to optimize savings (e.g. remove mover cohorts with historically lower energy savings over several years, increase opportunities to collect email addresses for eHERs).

Program Name	Program Description	Changes for 2021
	an energy reduction goal for each customer. The Company will continue to deliver Home Energy Reports that offer enhanced feedback tools to inspire customers to take actions that reduce their energy consumption and increase their participation in other energy efficiency programs.	• Roll out HER 3.0 with several enhancements to encourage behavior modification and support solar-specific neighbor comparisons, enabling promotion of ConnectedSolutions to solar customers.
ENERGY STAR® Lighting (Funded by Electric Only)	This program is implemented jointly with other regional utilities. It provides discounts to customers for the purchase of ENERGY STAR® lighting through instant rebates, special promotions at retail stores, pop-up retailers, and social marketing campaigns. The program also provides retailer support with training of qualified products, in-store education events for customers, retailer verification of program signage, and online training of products and promotions.	• Offer the same lighting products offered in the past, with the exception of reflectors, which have been widely adopted according to recent evaluation studies. However, the incentives will be lower for select products including standard LED bulbs, specialty bulbs, reflectors, fixtures, and linear LEDs.
Residential Consumer Products (Funded by Electric Only)	This program is run in collaboration with other regional utilities to promote the purchase of high efficiency household appliances, including kitchen appliances and electronics carrying the ENERGY STAR® label. In combination with ENERGY STAR Lighting, this program trains retail sales staff about products. The program also offers refrigerator recycling.	• Assess the cost effectiveness of joining the ENERGY STAR Retail Products Platform (ESRPP) and join if cost effective. • Develop a baseline of renter information through customer mail-in or online rebates to inform future equity insights, as renters are a customer demographic that stakeholders have expressed an interest in prioritizing the assurance of equitable delivery of service to.

Program Name	Program Description	Changes for 2021
		• Coordinate with the Income Eligible Multifamily Program and Public Housing Authorities to provide no-cost, energy efficient cooling options for income eligible multifamily customers by streamlining ordering and processing rebate applications in bulk.
Residential High-Efficiency Heating, Cooling, and Hot Water (ENERGY STAR® HVAC) (Funded by Electric and Gas)	This program promotes the installation of high efficiency central air conditioners for electric customers and new energy efficient natural gas related equipment including boilers, furnaces, water heating equipment, thermostats, and boiler reset controls. Incentives for energy efficient air source heat pumps for space and water heating equipment are available for customers with electric resistance heating/hot water. Incentives are also available for air source heat pumps used as accessory heating and cooling devices in homes with a primary heating system that is natural gas, oil, or propane. The program provides training of contractors to increase accurate installation practices, testing of the high efficiency systems, tiered rebates for new ENERGY STAR® systems, and incentives for checking new and existing systems.	• Develop a lead generation process in conjunction with Energy*Wise* and work with HVAC contractors to educate them around how to further promote incentives to customers. • Develop HVAC equipment rebate bundles (e.g. boiler/furnace + WiFi thermostat). • Target relevant electric customers with messaging encouraging them to convert to heat pumps through enhanced marketing.
Residential ConnectedSolutions (Active Demand Response)	ConnectedSolutions is National Grid's demand reduction program that uses electric active demand reduction strategies to reduce peak	• Offer an electric vehicle-based demand response program to demonstrate cost-effective peak

Program Name	Program Description	Changes for 2021
(Funded by Electric)	electrical demand periods throughout the year. Consumers with eligible controllable equipment (e.g. Smart thermostats, batteries, lighting, water heaters, pool pumps, electric vehicles) can enroll to participate in active demand reduction. All consumers can participate in ConnectedSolutions.	load reduction from EVs; enroll 145 vehicles in the first year. • Develop new initiatives to increase enrollment in smart thermostat-based demand response (e.g. integrate the DR incentive into the National Grid marketplace, integrate enrollment in ConnectedSolutions into the setup process for qualifying thermostats).

3.2.2 Income Eligible Programs

The Company and the Parties want customers who have a high energy burden and/or difficulty paying their electric bills to participate in, and benefit from, the Company's energy efficiency programs. Therefore, this segment of the customer base is designated as a unique sector, and funding for this sector will be subsidized by both residential customers who do not qualify for income-eligible services and commercial and industrial customers using 16.0% of total implementation funding for the electric programs, and 27.2% for natural gas programs. Total implementation funding for income eligible electric programs increased 14% from 2020 levels from $16.4M to $18.7M, leading the overall proportion of funding going to the income eligible electric sector to increase from 15% in 2020 to 16% in 2021. Total implementation funding for income eligible gas programs increased 13% from 2020 levels from $8.7M to $10.0M, leading to the overall proportion of funding going the income eligible gas sector to remain at 27% in 2020 and 2021.

Table 5. Overview of 2021 Income Eligible Programs

Program Name	Program Description	Changes for 2021
Income Eligible Single Family (Funded by Electric and Gas)	Income Eligible Single (IES) Family Services are delivered by local Community Action Program (CAP) agencies with oversight provided by a Lead Industry Partner. Three levels of home energy assessments are offered: (1) lighting and appliance, (2) heating and weatherization, and (3) comprehensive. Customers who qualify for the A-60 rate or for the Low-Income Home Energy Assistance Program (LIHEAP) are eligible to receive all services and equipment upgrades at no cost.	• Ensure applicable customers are enrolled in the discount rate program, coordinating with National Grid's Consumer Advocacy Team to cross-promote IES offerings when customers enroll in the discount rates, including creation of a welcome package. • Implement a third-party support model to expand CAP capacity to serve customers through a third-party service provider and ensure greater equity across CAP territories. Possible formats will be tested in 2020 and lessons learned will inform an RFP for these services in 2021. • Implement recommended improvements from the 2019 Process Evaluation (e.g. rebuild/stabilize the number of qualified assessors, increase

Program Name	Program Description	Changes for 2021
		weatherization conversation rates, review effectiveness of non-standard work specification projects, engage with landlords). • Increase awareness of the IES Program through coordination and partnership with State and market-based organizations and determine the need and/or benefit of hosting a consortium on serving IES customers. • Work with CAPs on utilizing two-person energy assessment teams to streamline the assessment process. • Develop a protocol for offering smart thermostats to homes with central AC to improve efficiency and operability and align with ConnectedSolutions when possible. • Develop a new, holistic email marketing strategy that leverages personalization to promote IES.
Income Eligible Multifamily (Funded by Electric and Gas)	Comprehensive energy services for multifamily customers (buildings with 5+ dwelling units) that also meet the criteria for "income eligible" as defined in Attachment 1 Residential & IES Programs, Section 3. Multifamily. These services include energy assessments, incentives for heating and domestic hot water systems, Air Source Heat Pumps, cooling equipment, lighting, and appliances. There are no costs	• Coordinate with the Residential Consumer Products Program and Public Housing Authorities to provide no-cost, energy efficient cooling options for income eligible multifamily customers by streamlining ordering and processing rebate applications in bulk. • Leverage the Multifamily Census to implement targeted

Program Name	Program Description	Changes for 2021
	to the customer for these services as all income eligible upgrades are covered at 100%.	marketing to newly identified income eligible properties not served to date.

3.3 Commercial and Industrial Programs

The Commercial and Industrial (C&I) programs consistently offer highly cost-efficient savings. The Company is continuously evaluating and responding to customer needs and market dynamics to develop enhancements that secure deeper, more comprehensive savings while strategically evolving program designs to drive market transformation across multiple end uses.

The Company has focused on non-lighting opportunities and program enhancements that help drive progress toward deeper comprehensive measure adoption in every customer class. The specific priority measures vary by customer but are reflective of opportunities highlighted in the Market Potential Study. The innovations and enhancements also reflect many ideas and insights that have evolved from the close collaboration with the EERMC and the EERMC consultant team, OER, the Division, and our vendors, as well as customer feedback. Summarized in Table 7 below and described in more detail in Attachment 2 C&I Programs, there are new market segment designs under development to engage new customers with tailored approaches to comprehensive savings adoption (new Telecommunication initiative), enhancements that make participation easier or more attractive (see Equipment and Systems Performance Optimization, Small Business), and multiple enhancements that focus on reduction of barriers to comprehensive measure adoptions (Whole Building Streamlined pathway in New Construction).

For each of the Commercial and Industrial Programs listed in Table 6 below, an overview of 2021 programs is provided in Table 7. For more detailed program descriptions, please refer to Attachment 2 C&I Programs. Rationales for 2021 program changes are included under "rationale" in the program description tables in Attachment 2.

Table 6. Commercial and Industrial Programs

Large Commercial and Industrial New Construction
Large Commercial and Industrial Retrofit
Small Business Direct Install
Connected Solutions (Active Demand Response)
Commercial and Industrial Multifamily Program

Table 7. Overview of 2021 Commercial and Industrial Energy Efficiency Programs

Program Name	Program Description	Changes for 2021
Large Commercial and Industrial New Construction and Building Energy Code Support (Funded by Electric and Gas)	This program encourages energy efficiency in new construction, major renovations, planned replacement of aging equipment, and replacement of failed equipment through financial incentives and technical assistance to developers, manufacturers, vendors, customers, and design professionals. Commercial and industrial customers with annual electric consumption greater than 1,000,000 kWh per year are eligible. The program supports new construction projects with proactive technical assistance during design with energy modeling and analysis. Incentives are also offered to owner's design teams for their time and effort to meet program requirements. The program promotes and incentivizes the installation of high efficiency equipment in existing facilities during remodeling or equipment failure and replacement. A customer who does not install energy efficient equipment at the time of new construction or equipment replacement will likely never make the investment or will make the investment at a much greater cost at a later time. Operations Verification or quality assurance is also offered to ensure that the equipment and systems operate as intended.	• Offer two new pathways, Zero Net Energy Ready (ZNER) and Whole Building Energy Use Intensity, to drive deeper, more comprehensive savings using Energy Use Intensity (EUI) as a tool. For both pathways, the Company will offer technical assistance to building owners and design teams to set EUI goals and assist with modeling projects at various stages of design. The Company will set the EUI threshold for the new pathways based on the MA Accelerate Performance demonstration and MA Program Administrators' experience with Zero Net Energy Buildings. • Modify and rename the Integrated Design pathway the Whole Building Streamlined pathway and simplify the process with a streamlined spreadsheet methodology to calculate savings in order to increase participation by smaller buildings. • In January 2021, RI plans to adopt the 2018 IECC building code. RI program baselines, where applicable, will then be based on the 2018 IECC Building code and savings calculations will be based upon

Program Name	Program Description	Changes for 2021
	The program also promotes compliance with the building energy code and increased use of the Stretch Code to support the State's goals and objectives. In addition, it provides technical assistance in advancing the development and adoption of minimum efficiency standards for appliances and equipment. Finally, the program supports the States Zero Energy Building (ZEB) goals through engagement and development of ZEB programs in the future.	achievements over this new higher baseline. • Determine a pathway to incentivize architectural firms to participate in the American Institute of Architects (AIA) 2030 Challenge, which commits firms to tracking the EUI of their projects and portfolio annually and reducing their designed EUI to a carbon neutral level by 2030. • Revise the *Performance Lighting Plus* initiative incentive offerings and requirements in concert with Massachusetts colleagues to ensure greater ease of customer participation, remove inconsistencies, and account for changes in the lighting market. The Company will collaborate with the lighting sub-group of EERMC Consultants before the offering is finalized and published to customers.
Large Commercial and Industrial Retrofit (Funded by Electric and Gas)	This program incentivizes the replacement of existing equipment and systems with energy-efficient alternatives when the customer might otherwise not plan on making efficiency investments. This may include energy efficient equipment such as lighting, motors, and heating, ventilation and air conditioning (HVAC) systems, thermal envelope measures, and custom measures in existing	• Launch a new *Telecommunications Initiative* to serve mobile, fiber optic, and cable data companies and their associated infrastructure through technical assistance, project management, and incentives, delivering savings from non-lighting as highlighted in the Market Potential Study. • Pursue a custom fuel cell project that will enable the

Program Name	Program Description	Changes for 2021
	buildings. All commercial, industrial, and institutional customers are eligible to participate. The Company offers technical assistance to customers to help them identify cost-effective efficiency opportunities and pays incentives to assist in defraying part of the material and labor costs associated with the energy efficient measures. The Company also offers education and training, such as the building operator certification (BOC) training, to support the implementation and adoption of energy efficiency.	customer to generate on-site electricity and reclaim carbon dioxide for process related needs. • *Grocery Initiative:* Deploy new measures (e.g. hand dryers, anti-fog film) to support "click and collect" customers who purchase groceries online and pick them up in designated in-store locations. Provide financing for small- and medium-sized independent grocers through OBR or an interest buy down mechanism in partnership with third party providers of debt capital. • *Industrial:* Increase focus on customers in the 200-400 kW range to encourage greater participation by small- and medium-sized customers. Add a digital signature option to the application approval process to reduce administrative burden and expedite project sign-offs • *Strategic Energy Management Planning:* Ramp up efforts to engage more customers (e.g. colleges/universities, cities, industrial customers, and chain restaurants). Provide educational customers with access to an energy solutions provider specialized in campus energy infrastructure. • *Equipment & Systems Performance Optimization:*

Program Name	Program Description	Changes for 2021
		Include heat exchanger coil cleaning to the prescriptive low-cost tune-up measures. • *Lighting Designer Incentives:* Create a one-pager for new construction or major retrofit customers that articulates the benefits of hiring a lighting designer. • *Farm/Agriculture:* Explore simplifying the initiative for customers with multiple meter types in an attempt to address weak participation to date. • *Combined Heat & Power:* Provide an additional incentive tier to CHP systems that leverage biogas as a fuel source and offer an Optimal Operation and Maintenance Incentive for biogas CHP systems to reduce economic barriers associated with the installation, operation, and maintenance. • *Commercial Real Estate:* Due to market uncertainty associated with COVID-19, this initiative is on pause as the Company continues to monitor market conditions. • *Extended Care Facilities:* Customer feedback indicated a majority of facilities did not have or prioritize the resources to explore EE opportunities, even with a generous cost share. Therefore, the Company will work with the small business

Program Name	Program Description	Changes for 2021
		vendor and current salesperson to refine the initiative approach. • *Lodging/Laundry:* Research and document industry and EE technology barriers to inform development of future offerings and identify attributes of successful future vendors and associated scopes of work. • *Upstream Products:* Increase incentive support for Luminaire Level Lighting Controls (LLLCs) and marketing of all lighting products to small businesses. Note centrally ducted heat pumps will move to the downstream pathway to align with the MA Program Administrators.
Small Business Direct Install (Funded by Electric and Gas)	This is a retrofit program that provides turn-key solutions to customers that consume less than 1,000,000 kWh per year. As part of the program, customers receive a free on- site energy assessment and a customized report detailing recommended energy efficient improvements. National Grid then completes retrofit installations at the customer's convenience. The program serves small businesses of all types from restaurants to non-profits, to small offices. National Grid pays up to 70% of installation and equipment costs and customers can finance the remaining share of the project over as many as 60 months (typically 24) on their electric bill, interest free, using the Small Business Revolving Loan Fund, providing that funds are available.	• Increase focus on non-lighting opportunities (e.g. hood controls, other HVAC controls) and savings per the Market Potential Study. • Substantially increase the amount of gas weatherization provided to small businesses to bolster this segment's savings and benefits during a financial downturn. • Work to achieve 30% percent of installed luminaires and retrofit kits with integrated controls. • Run segmented marketing campaigns directed at very small business customers (under 25,000 kWh consumed

Program Name	Program Description	Changes for 2021
		per year) who may not need an energy audit to make energy improvements and local electricians to market Upstream products available at a discount.
Commercial ConnectedSolutions (Active Demand Response) (Funded by Electric)	The Commercial Connected Solutions or Active Demand Response program is focused on reducing peak electric demand and associated costs for large and small commercial customers. All customers, regardless of size can participate. The program is technology agnostic and provides a customer incentive for verifiable shedding of load in response to a signal or communication from the Company.	• At this time, no program changes are anticipated related to Targeted or Daily Dispatch for 2021. Ongoing evaluation of summer 2020 performance may generate opportunities to improve the program in 2021, however results are not expected until shortly after the filing of this Plan. The Company will share any proposed program changes resulting from the evaluation with stakeholders prior to implementing changes. • Coordinate with the Company's other new Energy Storage Initiatives, which test the ability of grid-connected systems to mitigate the load impact associated with EV charging, both behind-the-meter and front-of-the-meter, in order to identify applications that benefit customers and the grid as a whole and advance the storage market.
Commercial and Industrial Multifamily (Funded by Gas)	Comprehensive energy services for market-rate multifamily customers (buildings with five plus dwelling units) include energy assessments and incentives for heating and domestic hot water systems and	• Implement recommendations from Multifamily Impact and Process Evaluations (e.g. health and safety barrier remediation, redesigning the customer energy report, identifying the long-term

Program Name	Program Description	Changes for 2021
	weatherization. Coordinated services will be offered for all types of multifamily properties. An approach tailored for multifamily properties designates a primary point-of-contact to manage and coordinate services offered through the Company's existing portfolio, including EnergyWise, C&I Retrofit, Residential New Construction, Income Eligible, and the ENERGY STAR® HVAC programs.	role of virtual energy assessments in multifamily buildings). • Leverage the Multifamily Census to implement targeted marketing efforts to newly identified five to 20 unit small- and medium-sized multifamily owners, newly identified income eligible properties, and other newly identified properties that have not been served by the program to date. • Explore whether enhancements to the HEAT Loan to finance larger improvements for deeper energy savings in multifamily buildings would be attractive to larger multi-family property owners and drive participation. • Reevaluate co-branding with the Multifamily vendor to consider more prominent Company placement to facilitate greater customer trust, ease, and ultimately participation. • Invest in professional development for multifamily energy auditors to improve sales acumen and deepen savings.

3.4 Cross-Cutting Programs

3.4.1 Community-Based Initiative

The Rhode Island Community-Based Initiative is the Company's energy efficiency awareness campaign that drives program participation by deep municipal engagement with residents and small businesses through the advocacy of local officials. The Company provides goals to the municipality to drive end-customer adoption of efficiency measures and small business program projects. These municipalities, in

turn, work to achieve the goals with the help of volunteers and promotions at local events.[28] Small businesses are invited to workshops organized in conjunction with the local chamber of commerce or other local business organizations. These workshops will inform customers about the National Grid Small Business Direct Install Program, Commercial Property Assessed Clean Energy (C-PACE) financing, and active demand response.

Comprehensive marketing toolkits are provided to the municipality, along with trainings empowering employees to discuss energy efficiency with their residents and small businesses. Frequent check-in calls allow the communities to speak with the Company regarding progress and share tactics and ideas with other participating municipalities. Events are staffed by the Company, municipality, or volunteers throughout the campaign at various events and school functions. At the end of the year, municipalities earn grant monies based on achieving the agreed percentage increase in the identified goal. These funds are then utilized for energy saving projects on a municipal property, or on educational energy programs for community members.

In the first quarter of 2021, the Company will recruit Rhode Island municipalities based on opportunities for increases in residential and small business program participation as well as possible active demand response opportunities. As the Company has run this effort successfully since 2013, prior participating communities may again be invited to take part. The initiative will continue to coordinate with the System Reliability Procurement (SRP) team to determine whether the RI System Data Portal (Portal), which was developed in 2018, could be a valuable tool for the use of educating municipal leadership, as well as the Company in recruiting municipal participation.

A continued focus for 2021 will be the promotion of new technologies within the communities such as Wi-Fi Thermostats and active demand response offerings. The Company will target engagement with communities that have larger population of income eligible residential customers. The Company will also consider including locational program incentives to drive increased participation in a measure that may be underrepresented within that community. Examples could include special flash-sales for a measure such as a Wi-Fi thermostats, or a promotional increase in an incentive. Any increase in incentive would be determined by the Company considering budget and cost-effectiveness. The purpose of this may be for driving community participation, meeting energy efficiency goals, or creating equity. If such programs or efforts are part of an SRP initiative, then they would follow SRP considerations noted in Section 6.1 and be detailed in the System Reliability Plan.

Small Business project promotions were included in the prior year and an increased focus will be placed on recruiting small business participation in 2021. Specifically, the Company will utilize the “Main Street” approach through which the Company’s lead vendor for the Small Business program will go door to door

[28] Concerns around COVID-19 required changed approaches to in-person events in 2020 and will be revisited in 2021 as health and safety considerations warrant.

in the community's main business district to offer direct install measures on-site and propose larger energy saving opportunities upon a follow up visit.

One of the challenges faced by this initiative is the lack of resources at towns and cities to promote and implement energy efficiency within the communities. One of the ways in which the Company plans to address this is by coordinating efforts with OER's project, Advancing Energy Efficiency in Underserved Small, Medium and Rural Communities. This project, among its other goals, looks to increase resource capacity for small, medium, and rural communities to implement and manage energy investments with an on-site energy manager.

Building upon the community-based approach stated above, the Company plans to advance this approach by developing new partnerships with other types of organized communities under a new Community Solutions initiative. This will include geographic communities that encompass multiple towns (e.g. Aquidneck Island), industrial and technology parks, and other organized communities such as industry groupings with common end uses (e.g. indoor agriculture). Community Solutions will provide a single point of contact for a given community to access all available Company solutions, including energy efficiency, EVs, demand response and emerging technologies.

3.4.2 Codes and Standards Support

The Company will provide two distinct types of technical guidance – compliance support and advancement support – to both the residential and commercial markets. While the Company has delivered code compliance support since 2013, codes and standards advancement support will be ramped up after demonstrating its viability in 2019-2020. The Company is committed to collaborating with stakeholders on an updated incentive mechanism for codes and standards activities and proposes the activities in this section with the goal and expectation of filing this mechanism in the 2022 Annual Plan.

Codes and Standards Compliance Support

The energy code provides highly cost-effective and long-lasting energy savings, but studies of RI construction projects show that a material portion of these savings are lost due to noncompliance. The Code Compliance Enhancement Initiative (CCEI) includes robust stakeholder engagement and industry group outreach, classroom, virtual, and in-field trainings, project-specific technical assistance circuit riding, development and dissemination of documentation/compliance tools, and other services. CCEI will support compliance with the latest version of the state's building energy code, which is expected to be updated by early 2021. CCEI will also continue to promote market awareness and uptake of the R.I. Stretch Code, as well as high-level technical support for projects pursuing use of this voluntary standard.

CCEI addresses new construction for residential and commercial buildings, but also addresses additions and renovations. The primary target audiences for CCEI are code officials, construction professionals (builders and developers), and design professionals (architects and engineers), but the program has also historically reached several other stakeholder groups. CCEI plans to deliver roughly 40 trainings and

reach at least 500 participants in 2021, which aligns with the Initiative's achievement in 2018 (40 trainings and 532 participants) and 2019 (46 trainings and 823 participants).

Conditional to the adoption of any new state appliance standards before the end of 2021, the Company will begin monitoring compliance with these standards to gauge the market need for similar industry engagement activities.

Codes and Standards Advancement Support

Supporting the development and adoption of more efficient minimum energy efficiency requirements for buildings and the energy-using products within them is a significant untapped energy savings opportunity. Raising minimum standards across an entire market is typically more cost-effective than a conventional program targeting the same market because customer incentives are not needed. Presently, the state receives only 5.5 of the 11 points available for Codes & Standards in the ACEEE scoring,[29] which holds Rhode Island back from increasing its national ranking.

The Company will provide technical guidance during the State's upcoming 2021 IECC code adoption process to help increase the efficiency of the State's next energy code. Specifically, the Company will prepare energy code change proposals and backup analysis, engage relevant industry stakeholders to refine these proposals, and provide technical guidance to the State's Building Code Standards Committee throughout their review of the proposals. Furthermore, the Company will investigate opportunities to inform the 2024 IECC development process at the national level as national model codes form the basis from which Rhode Island adopts its state-wide energy code. Code advancement activities planned for 2021 and downwind evaluation implications for any successful interventions are summarized in the following table.

Table 8. 2021 Planned Code Advancement Activities

Topic	Activities and Scale	Future EM&V Needs (ETA)
Remove current RI weakening amendments	Develop code proposals for RI's 2021 IECC update cycle to remove any weakening amendments remaining in RI's 2018 IECC (expected fall 2020)	Assess gross savings (2022/2023)
Counter establishment of new RI weakening amendments	Develop proactive justification analysis for the "top 10" new provisions in 2021 IECC (weighted toward residential sector where	Assess gross savings (2022/2023)

[29] ACEEE. 2018 State Energy Efficiency Scorecard. https://database.aceee.org/state/rhode-island

	more resistance to these provisions is expected)	
Add RI strengthening amendments (above 2021 IECC)	Develop about 6 new code proposals (expected to focus primarily on existing buildings); revise any unsuccessful proposals from RI's 2018 IECC update cycle (expected fall 2020)	Assess gross savings (2022/2023)
Strengthen 2024 IECC national model code	Submit strengthening amendments, including strengthening proposals to RI's 2021 IECC, as code proposals for the 2024 IECC national code development process	Assess gross savings (2022/2023 upon completion of 2024 IECC; adjust in 2025/2026 upon RI adoption)

The Company will also provide technical guidance to update the State's appliance and equipment efficiency standards. Specifically, the Company will conduct analyses to complement the products researched by the Appliance Standard Awareness Project (ASAP), engage relevant industry stakeholders to refine these analyses, and coordinate with other states in the northeast region. Furthermore, the Company will investigate opportunities to support appliance and equipment standards at the federal level. Standards advancement activities planned for 2021 and downwind evaluation implications for any successful interventions are summarized in the following table.

Table 9. 2021 Planned Standards Advancement Activities

Topic	Activities and Scale	Future EM&V Needs (ETA)
Support most recent set of proposed RI standards	Develop justification analyses for contested products in the ~20 product ASAP package (e.g. computers and monitors)	Assess gross savings (2021/2022)
Research new products for RI standards	Identify opportunities for RI state standards not actively pursued by ASAP or other entities	Asses gross savings (~2026 upon RI adoption)
Support federal standards	Provide program data and related information to inform the federal standards review and development process (over 25 products are overdue for updates in addition to U.S. DOE's regular update cadence)	Assess gross savings (~2026 upon federal adoption)

There is typically a multi-year time lag between when new codes and standards are adopted, when they become effective, and when the resulting savings are realized. Due to this time lag, no savings are expected to come to maturity from this potential effort until 2022 based on code advancement support efforts undertaken in 2019-2020.

3.4.3 Workforce Development

The Company anticipates increasing its workforce development budget to roughly 1 percent of total portfolio expenditures to expand the size and skillset of the efficiency workforce. The Company will utilize a three-prong approach in 2021 in alignment with our Three-Year strategy.

1. *Improve Our Labor Market Intelligence*: The Company will refine efforts to quantify current workforce gaps launched in 2020, including updating analyses amidst economic volatility. Building upon these efforts, the Company will begin forecasting how these gaps are expected to change in future years, which will supplement its retrospective Workforce employment study. Stakeholders such as OER, DPUC, the TWG, and RI's Dept of Labor & Training will be included in this process.

2. *Upsize and Upskill Today's Workforce*: To help fill these gaps in the near-term, the Company will facilitate training and other professional development opportunities such as mentorship programs. These efforts will include both growing the size and skillset of the state's energy efficiency workforce using approaches tailored to match the need of the particular market. In 2021, the Company will weight these efforts toward upskilling activities targeting markets with high potential savings and high confidence of positive impact (see Table 10).

3. *Build a More Sustainable, Equitable Pipeline*: The Company will expand our work with Community colleges, high schools (including vocational and technical schools), and middle schools to steer more candidates toward careers in energy efficiency and leverage existing educational and job training infrastructure within the communities we serve to provide additional support to disadvantaged groups. The Company will support curriculum enhancements, career and technical education (CTE) opportunities, recruitment campaigns relevant to demographically diverse populations (particularly gender, race, ethnicity, language, and income), and other engagement opportunities within schools and communities to promote a steady, lasting, and more equitable pipeline of entrants to the energy efficiency industry. The Company will coordinate with state and local authorities, including the Department of Labor and Training's Real Jobs Rhode Island program and Rhode Island Department of Education's PrepareRI initiative, to guide the development and delivery of these efforts and help promote existing solutions to reduce or eliminate duplication of effort and expenditures.

Table 10. Investment Across Three-Pronged Workforce Development Approach

Prong	2021 Activities	2021 Budget
1. *Improve Our Labor Market Intelligence*	• Refine and update 2020 workforce gaps • Forecast future workforce gaps	$50k
2. *Upsize and Upskill Today's Workforce*	Residential and Income Eligible: • New Construction, Zero Energy Homes, and Code Compliance (builders, designers, code officials) • Advanced HVAC (contractors) • ASHP (installers, designers) • Others subject to market conditions	$400k
	Commercial & Industrial: • New Construction, Zero Energy Buildings, and Code Compliance (developers, designers, code officials) • HVAC Controls and RCx (controls programmers) • Advanced lighting controls (electrical contractors, lighting firms, manufacturer representatives, Cx agents) • Building Operator Certification (facility managers) • Others subject to market conditions	$500k
3. *Build a More Sustainable and Equitable Pipeline*	• School engagement, including promotion of EE opportunities within CTE structure • Industry engagement, including expanding internship, mentorship programs • Diverse recruitment campaigns	$100k
	Total:	**$1.05m**

Workforce Development efforts will complement programmatic activities aimed at increasing the adoption of advanced technologies. In the commercial and industrial sector, this includes training on advanced controls for HVAC and lighting and growing the commissioning workforce. To support the residential and income eligible sectors, the Company will build relationships with schools and communities to help grow the constrained pipeline of trades that enable energy efficiency projects like HVAC technicians (including heat pump installers), electricians, and plumbers.

These efforts vary in how they relate to energy savings claimed in this Plan. While some of these efforts, such as BOC training, contribute directly to energy savings per our TRM, other efforts are intended

purely to increase volume and/or depth of savings captured. In the former case these efforts will be evaluated as usual, while in the latter case they will not be evaluated for energy savings at this time.

Building Operator Certification Training (BOC)

BOC Levels I & II include HVAC, lighting, and building controls. Students gain knowledge of their own building by completing projects involving documentation of building equipment, systems and controls, benchmarking the building's performance by using ENERGY STAR® Portfolio Manager™, updating occupancy profiles, reviewing HVAC systems and operation, and mapping the facility's electrical distribution system. In addition, the course addresses maintenance of building systems, equipment troubleshooting, preventive maintenance, advanced electrical diagnostics, HVAC optimization, and information on National Grid's energy efficiency programs.

In 2021, the Company plans to support Building Operator Certification (BOC) training by holding one Level I BOC class in Rhode Island and one Level II BOC class in Massachusetts. The audience includes facility managers, operating engineers, building technicians, and maintenance mechanics, with the average class size usually ranging between 20 and 30 students. The Company will investigate opportunities to deliver these trainings online.

In addition to the classroom training, National Grid also sponsors BOC webinars for customers and staff. The webinars are on specific topics of interest to facility managers.

Advanced Workforce & Channel Development

Online Trade Ally Training on Advanced Lighting Systems

Online Trade Ally targeted training, for the Performance Lighting PLUS program, consolidates the best-of-class subject-matter expertise into one common platform with an electronic training program built to track the progress of participants. This online, on-demand learning platform complements face-to-face and webinar-based education and is a proven way to meet the time demands of all trade allies. This online learning platform will provide efficient and effective education on Advanced Lighting Systems including controls and design. This online training is developed to increase program participation and improve program process. This training will target trade allies (ESCOs contractors), internal sales teams, vendors, architects, designers, manufacturers' representatives, distributors and customers. The Online Trade Ally training platform was launched in 2019 and will continue in 2021. The platform is managed by a vendor, who will also track participation through the online training platform.

Table 11. Overview of Online Trade Ally Training Platform

Utility Benefits	Trade Ally Benefits
• Automates onboarding tasks	• Offers training access organization-wide
• Deploys program changes faster	• Educates all staff to increase project sales

• Pushes fresh content to engage allies	• Affords on-demand training when needed
• Provides metrics for ally tiering programs	• Offers accredited CEU and certifications
• Shares in industry-provided content	• Aligns real-time trainings with program changes
• Uses portal customized with utility branding	• Recognizes achievement with rewards
• Increased energy savings from knowledgeable trade allies	• Reports real-time metrics to track progress

3.5 Participation

Each program described in this Plan seeks to drive customer participation to deliver the benefits of energy efficiency to customers throughout Rhode Island. The Plan is designed to provide equitable access to savings and programs across sectors and market segments. For 2021, the Company will continue to plan and report participation in 'net' terms, which takes into account free-ridership and spillover, which are commonly referred to as net-to-gross factors. This method of accounting for participants aligns participation numbers with energy savings numbers, which are already recorded in net terms. This approach provides a more accurate connection between energy savings and the number of customers who benefit from efficiency programs. Planned participation estimates are included in Attachment 5 Electric EE Program Tables, Table E-7 and Attachment 6 Gas EE Program Tables, Table G-7.

The following table describes the definitions for how National Grid projects, tracks, and reports participation in the efficiency programs.

Table 12. Participation Definitions

Fuel	Sector	Program	Participation Unit
Gas	Commercial & Industrial	Large Commercial New Construction	Unique Billing Account
		Large Commercial Retrofit	Unique Billing Account
		Small Business Direct Install	Unique Billing Account
		C&I Multifamily	Housing Units
	Income Eligible Residential	Single Family – Income Eligible Services	Unique Billing Account
		Income Eligible Multifamily	Housing Units

	Residential	ENERGY STAR® HVAC	Unique Billing Account
		EnergyWise	Unique Billing Account
		Multifamily	Housing Units
		Home Energy Reports	Unique Billing Account
		Residential New Construction	Housing Units
Electric	Commercial & Industrial	Large Commercial New Construction	Unique Billing Account
		Large Commercial Retrofit	Unique Billing Account + Unique Customer names from Upstream Lighting
		Small Business Direct Install	Unique Billing Account
		Commercial ConnectedSolutions	Unique Billing Account
	Income Eligible Residential	Single Family – Income Eligible Services	Unique Billing Account
		Income Eligible Multifamily	Housing Units
	Residential	ENERGY STAR® HVAC	Unique Billing Account
		EnergyWise	Unique Billing Account
		Multifamily	Housing Units
		Home Energy Reports	Unique Billing Account
		Residential New Construction	Housing Units
		ENERGY STAR® Lighting	Estimated Housing Units

		Residential ConnectedSolutions (Direct Load Control)	Unique Billing Account
		ENERGY STAR® Products	Number of Rebates

The Company will estimate the number of unique participants for each program. For some programs such as ENERGY STAR® Lighting and ENERGY STAR® HVAC, one measure does not necessarily equal one participant. This is because a customer can purchase more than one measure. Therefore, the Company also considers the previous year's unique accounts to savings ratio in order to estimate the planned unique participants in 2021. This method allows for a better estimation of unique participants but can make it more difficult to compare planned numbers across years.

In 2021, the Company will continue to drive participation through two main pathways – targeted programs and broad-based programs. Targeted programs include the Company's retrofit, new construction, product rebate, and small business initiatives. These programs serve to drive deeper savings to targeted customer segments and offer a wide array of energy efficiency measures. The Company also reaches broad participation by promoting products upstream and through Home Energy Reports. These broader based programs provide value by reaching a wide and diverse set of customers, helping to provide more customers with access to energy savings, as well as acting as a gateway to drive participation in other Company energy efficiency programs.

The Company has made steady progress with reaching new participants each year. From 2012-2019 the Company served approximately 38% of its electric customers and 27% of its gas customers from its targeted programs at least once (this analysis has removed duplicate participation across programs and across years from 2012-2019). When Home Energy Reports and C&I upstream lighting participation are added to these counts, a total of 89% of electric customers and 82% of gas customers participated over this period. Home Energy Reports are included here because the program offers significant savings and benefits to customers as well as drives customers to participate in other energy efficiency programs. Planned 2020 and 2021 participants are also included in these totals for illustrative purposes. Importantly, planned participants in 2020 and 2021 may have participated in prior years. In the 2021 Year-End report, the Company will remove any participation overlap to report unique 2021 participants. See 2019 year-end report for further details on participation through 2019.

In 2021, the Company will continue its efforts to reach customers that have never participated in its energy efficiency programs. The Company will also continue its efforts to reach customers that have previously participated in its energy efficiency programs but who can still benefit from the installation of additional energy efficiency measures. Many unique participants are still eligible for additional programs. For example, a participant in the EnergyWise Single Family program may participate in the HVAC program. The Company will continue to deliver innovative strategies to increase customer participation and reach customer segments that are historically underrepresented. Also, the Company

will continue to track participation trends and will again provide a detailed analysis in its 2021 Year-End Report showing additive and cumulative portfolio participation.

4. Pilots, Demonstrations and Assessments

In accordance with Docket 4600-A PUC Guidance Document, this Plan includes a description of Commercial, Industrial, and Residential pilots, demonstrations and assessments in Attachment 8. Please refer to Attachment 8 Pilots, Demonstrations & Assessments for additional detail.

As defined in the Docket 4600-A Guidance Document, "A pilot is a small scale, targeted program that is limited in scope, time, and spending and is designed to test the feasibility of a future program or rate design. It is incumbent upon the proponent of a pilot to define these limits in a proposal for PUC review. Ideally, a pilot can provide net benefits and achieve goals, but the primary design and value of a pilot is to test rather than to achieve."[30] Pilots are designed to explore technologies and approaches to energy management not included in the core energy efficiency programs (Residential, Commercial and Industrial, and Multifamily) and that could potentially become a new, standalone program.

Pilots enable the Company to test technologies, new energy management strategies, customer adoption, workforce adoption, and cost effectiveness of emerging and new technologies. While pilots are designed to test standalone programs, pilot results may conclude that a standalone program is not recommended or that certain aspects of the pilot should be offered within existing programs. It is likely that pilots will require a long-term commitment and broader set of stakeholder input, given the scope of adding a new core program to the Company portfolio. Savings associated with Pilots will not contribute to shareholder incentives. Pilots may be evaluated with either an independent or a vendor evaluation.

For actions in this Plan that do not fall under Docket 4600-A PUC Guidance Document's definition of pilots, the Company includes demonstrations and assessments within the programs. A demonstration will test the feasibility of a new product or offering for inclusion in existing programs. It is generally expected that demonstrations will be less time and resource intensive than pilots, since generally there is greater certainty around a narrow, incremental idea added to a program rather than a totally new set of offerings. Savings associated with demonstration projects may contribute to shareholder incentives. Demonstrations may be evaluated with either an independent or a vendor evaluation. An assessment will be deployed for solutions that address a particular gap or program need, but have significant uncertainty around the effectiveness or potential of the solution to realize savings. Because of the uncertainty, assessments will not include field demonstrations or customer installations. Instead, assessments will focus on information gathering to equip Company staff to make a more informed decision of whether and how to proceed with the idea. It is possible that an assessment could recommend further demonstration of the idea or determine the solution should exit the review process.

[30] Docket 4600-A PUC Guidance Document, October 27, 2017. Section V. Pilots.

Savings associated with assessments may not contribute to shareholder incentives. Assessments may be evaluated with an independent evaluation, vendor evaluation, or internal review.

The Company will continue to seek out opportunities to identify, test, analyze, and deliver new creative and innovative solutions and services that are technically feasible, desirable by customers, and viable for inclusion in the portfolio. The Company plans to explore logical program extensions like new or substitute measures, adaptations to program or delivery approaches to drive incremental improvement, and completely new offers. The Company will use evaluation studies, customer and market research, the Market Potential Study, and stakeholder feedback to identify areas for potential exploration and will prioritize efforts based on likelihood of success, speed of development, and program need. Each customer segment and savings technology has unique barriers to adoption and will be assessed on a situational basis.

National Grid has established a team that works within New England jurisdictions to identify and develop potential new measures, approaches, and solutions to compliment or grow programmatic offerings in efficiency, demand reduction, or optimization. In addition to a reactive response to new product and technology ideas, the Company is also proactive, participating in regional and national groups, maintaining relationships with efficiency program administrators (PAs) in other jurisdictions, and following national research. National Grid will use our regional footprint to attract and explore as many of these diverse ideas for new products, efficiency measures, demand reduction approaches, or optimization opportunities as possible. The Company will coordinate efforts with internal and external stakeholders, such as Evaluation, Measurement, and Verification (EM&V), Customer Energy Management (CEM), OER, and EERMC, at various points in the development process to ensure appropriately rigorous evaluation and attention is given to each pilot, demonstration, and assessment. Updates will be provided to OER and the EERMC consultant team on a quarterly basis and will solicit input during the Company's collaborative annual planning process.

The Company will continue to systematically review opportunities to add to the portfolio through a consistent and transparent process. Please refer to Attachment 8 for details on evaluations for pilots, demonstrations and assessments.

5. Evaluation Measurement and Verification Plan

To verify the impacts of programs on energy savings, the Company hires independent third-party consulting firms to regularly conduct evaluation studies as part of its evaluation, measurement, and verification process. These evaluations incorporate industry standard methods such as engineering analysis, metering analysis, billing analysis, site visits, surveys, and market studies to realize the actual energy savings of a particular measure. The EERMC and OER provide direct oversight of each evaluation study conducted. Every year, the results of the studies are used to update the benefit-cost calculations during planning. Attachment 3 EM&V Plan lists the evaluations that have occurred since 2007 that are still being used and their influence on program planning. All completed evaluations are submitted

electronically to the PUC; final reports of evaluations completed in prior years are available in the dockets for previous years, on the EERMC website[31], or upon request.

Additionally, the EM&V Plan for 2021 is presented in Attachment 3 and includes brief descriptions of each of the proposed studies. The areas proposed for study in 2021 were chosen based on a number of factors: the relative amount of savings in that program or end use, the vintage of the most recent evaluation study, the relative precision of the recent evaluation study, recommendations from previously completed studies, and the available evaluation budget. In addition, some new program areas are designated for both impact and process evaluations. This list may be added to as the year progresses and different evaluation priorities are identified. In particular, the parties will consider the value of using evaluations from other jurisdictions as well as adding Rhode Island-specific impact or process evaluations, as appropriate, that will help inform the Company's efforts towards achieving the goals of least cost procurement.

6. Coordination with Other Energy Policies and Programs

6.1 System Reliability Procurement

The Company will submit its System Reliability Procurement (SRP) 2021-2023 Three-Year Plan for the PUC's review and consideration in a separate filing, to be filed in November 2020. The SRP Three-Year Plan describes the strategies, goals, and funding request for SRP. The purpose of SRP is to identify targeted alternative solutions, through customer-side and grid-side opportunities, for the electric and gas distribution systems that are cost-effective, reliable, prudent and environmentally responsible and chart a path to lower supply and delivery costs for customers in Rhode Island.

The SRP Plan and its Non-Wires Alternative (NWA) proposals are separate and unique from the Energy Efficiency Plan customer measures because NWA projects are targeted solutions for electric grid reliability, as compared to energy efficiency's goal of bulk energy savings from customers for the regional electric grid. These two main distinctions are illustrated by a difference in scope of area (i.e. feeder- or substation-level for SRP versus state or regional for energy efficiency), and in scope of intent (i.e. electric grid reliability for SRP via NWA projects versus energy savings via energy efficiency measures and programs). In addition, in the 2021-2023 SRP Three-Year Plan, the Company will introduce efforts to address Non-Pipeline Alternatives for the first time by performing further background research on NPAs, exploring how NPAs align with Company policy and the LCP Standards, and building out the NPA program over the three years.

The Company continues coordination between SRP and customer offerings in the Energy Efficiency Plan to ensure that efforts, projects, and programs are optimal and not duplicated. As is the practice now and going forward, energy efficiency and demand response are examined during National Grid's distribution planning process as part of the development of NWA opportunities. This assessment of energy efficiency

[31] https://rieermc.ri.gov/plans-reports/evaluation-studies/

and demand response for NWAs occurs before the Company goes out to market with requests for proposals (RFPs) for solution bids from third-party solution providers. Energy efficiency or demand response may be deployed as part of an NWA solution so long as the targeted energy efficiency or demand response programs are least-cost, cost-effective, reliable, and technically feasible for the electric system need. The Company ensures cost-competitive utilization of targeted active DR by evaluating market prices and comparing third-party active demand response proposals to the incremental costs of targeted active DR which would build upon National Grid's existing ConnectedSolutions program.

Additionally, the Company also coordinates communications between the SRP Technical Working Group and the Energy Efficiency Technical Working Group, with members of each team participating in counterpart TWGs. The Company will also work with these groups and the PUC on changes in filing schedules to better align the SRP filing with the Infrastructure, Safety and Reliability (ISR) filing.

Continuing to provide the best value to Rhode Island ratepayers necessitates that the Company coordinate with other parts of the energy system, rather than pursuing savings programs and strategies in isolation. This Annual Plan will be implemented in coordination with other Company filings and activities, described below. Efforts have also been taken to ensure the Annual Plan is aligned with relevant state policies and objectives, with specific coordination opportunities detailed below.

6.2 Heating Sector Transformation and National Grid's Northeast 80x50 Pathway

In an Executive Order issued on July 8, 2019, Governor Raimondo directed the Division of Public Utilities and Carriers (DPUC) and Office of Energy Resources (OER) to lead a Heating Sector Transformation (HST) with the goal of reducing emissions from the heating sector while ensuring Rhode Islanders have access to safe, reliable, and affordable heating. The HST recommendations were to be provided to the Governor by April 2020 and identify the energy, economic, and environmental opportunities and challenges posed by Rhode Island's heating sector in the face of a rapidly changing climate.[32]

The HST initiative resulted in an analysis conducted by the Brattle Group, on behalf of the DPUC and OER, outlining several solutions for decarbonizing the heating sector, described in the April 2020 report "Heating Sector Transformation in Rhode Island: Pathways to Decarbonization by 2050."[33] The report summarized opportunities in three broad categories relevant to the Company's efficiency planning: (1) reducing energy needs by improving building energy efficiency; (2) replacing current fossil heating fuels with carbon neutral renewable gas or oil; and (3) replacing current fossil-fueled boilers and furnaces with electric ground source or air source heat pumps powered by carbon-free electricity.

[32] Executive Order 19-06, https://governor.ri.gov/documents/orders/Executive%20Order%2019-06.pdf
[33] Heating Sector Transformation in Rhode Island, Pathways to Decarbonization by 2050. http://www.energy.ri.gov/documents/HST/RI%20HST%20Final%20Pathways%20Report%204-22-20.pdf

Additionally, in June 2018, the Company released the Northeast 80x50 Pathway[34] (Northeast Pathway) whitepaper that highlights National Grid's approach to reduce greenhouse gas emissions below 1990 levels while supporting economic growth, maintaining affordability, and providing customer choice. The Northeast Pathway and HST are aligned in several key areas related to energy efficiency, including the need to transform heating, in part, by increasing rates of efficiency retrofits and deep conversions of delivered-fuel heat to electric heat pumps.

Efforts in support of HST and the Northeast Pathway in this Annual Plan will include a continued focus on weatherization and building efficiency to prepare for efficient heating system replacement in the future. Going forward, the Company will continue to work with the state to analyze the steps needed to further the second two heating sector transformation objectives and the electrification transitions identified in the Company's Northeast Pathway analysis.

6.3 Heat Pump and Delivered Fuel Policy and Objectives

Per the PUC's ruling on the 2020 Annual Energy Efficiency Plan in Docket 4979, the Company may not offer incentives for electrification of heating for delivered fuel customers in 2020. The Company will not offer incentives for these measures in 2021 and will continue to pursue opportunities to engage, including supporting OER's efforts to advance the heat pump market and supporting weatherization for delivered fuel customers. The Company looks forward to working with stakeholders and policy makers to identify the appropriate role and funding mechanisms for an electric utility to play in this transition and then executing on an approved pathway. In addition, pending availability of Regional Greenhouse Gas Initiative (RGGI) funds, we plan to combine our delivery pathways and standard air source heat pump (ASHP) incentives with RGGI-fund supported enhanced incentives for delivered fuel displacement in the near term until a more permanent mechanism to support these offerings is possible.

6.3.1 Heat Pump Implementation and Education

The programs and strategies included in this Annual Plan will support the installation of heat pumps for heating and cooling for customers that utilize electric resistance heating. In an effort to further develop this market, the Company will continue to seek ways to educate consumers and installers on the associated cost savings from efficient heat pumps as compared to electric resistance heating. The Company will coordinate its efforts with state agencies to realize the opportunities related to heat pumps identified in the Heating Sector Transformation report and Company's Northeast Pathway study described in Section 6.2.

6.3.2 Delivered Fuels

The Company supports the state's objective to provide energy efficiency for delivered fuel customers and is working to serve these customers in multiple ways. Income-eligible customers in single-family and multifamily homes receive the same services as electric and gas customers, with no customer-incurred

[34] National Grid's Northeast 80x50 Pathway, https://www.nationalgridus.com/News/Assets/80x50-White-Paper-FINAL.pdf

costs. The Company plans to continue these services during 2021. For non-income eligible delivered fuel customers in single family (one- to four-unit) and multifamily (five-plus unit) homes, the Company will continue to support weatherization, with financing available via the HEAT Loan no-cost to the customer financing option.

The Company will not offer additional energy efficiency surcharge funded incentives for customers to convert from delivered fuels to heat pumps per the aforementioned PUC ruling in Docket 4979; however, National Grid will continue to seek ways to support the state, including OER, in providing opportunities for delivered fuel customers to utilize efficient heat pumps for their heating needs. For example, the Company will coordinate with OER to support use of RGGI funding to offer enhanced heat pump installations for customers using those systems to displace the use of delivered fuels.

6.4 Power Sector Transformation

Governor Raimondo tasked the PUC, OER, and DPUC with developing a new regulatory framework for the state's electric system, which resulted in the Rhode Island Power Sector Transformation (PST) initiative in Dockets 4770 and 4780.[35] This initiative consists of four parallel work streams: 1) utility business model, 2) distribution system planning, 3) grid connectivity functionality, and 4) strategic electrification of transportation and heating. The Company will continue to incorporate outcomes of this initiative into the subsequent Annual Plans. This includes the Company's active demand response program, which will begin educating customers on real-time management of energy consumption to prepare them for future tools that may be available through grid modernization. These efficiency programs are planned in coordination with the Company's advanced metering functionality (AMF) and grid modernization efforts, discussed subsequently.

6.4.1 Advanced Metering Functionality and Grid Modernization

In addition to its energy efficiency planning, the Company also has teams actively working on grid modernization plans (GMP) and AMF. These three teams work closely to ensure the Company has a comprehensive view of the benefits and impacts of the potential roll out of grid modernization and AMF. These programs will provide increased visibility into customer usage (from AMF) and insights into the operation of the local distribution system (from grid modernization investments, including AMF). This will allow for improved efficiency program marketing, more personalized savings offers, more targeted measure deployment, and optimization of demand side resources. The Market Potential Study included scenario analysis that explored the impact of AMF and time-of-use rates on energy efficiency programs, specifically demand response programs.

The Company is in the process of initiating a GMP and AMF proceeding in Fall 2020. The Energy Efficiency team will continue to coordinate with the GMP and AMF teams to ensure that the Company has a comprehensive view of the benefits and impacts of the potential roll out of grid modernization and AMF. Specifically, the Company is working to ensure that the benefits estimated in the GMP and AMF

[35] RI PUC Docket 4770: http://www.ripuc.ri.gov/eventsactions/docket/4770page.html
RI PUC Docket 4780: http://www.ripuc.ri.gov/eventsactions/docket/4780page.html

Benefit Cost Analyses (BCA) would constitute a new baseline of savings upon which future energy efficiency goals are based and to ensure energy savings are not double counted. In addition to the calculation of benefits, the Company will also examine any possible overlap of costs.

If AMF is launched, the Company still anticipates energy efficiency programs would continue to offer customer incentives for in-home/in-business technologies, such as Wi-Fi programmable thermostats and smart appliances to drive the achievement of additional incremental energy savings to meet annual energy savings targets. The Company recognizes that the future energy efficiency plans would include the total participant costs (i.e., ratepayer-funded rebates and customer contribution costs) associated with such measures in its BCA methodology.

While the Energy Efficiency, GMP, and AMF teams have been coordinating closely through the filing process, the need to bifurcate savings and costs associated with these plans would not arise unless grid modernization and AMF investments are approved, deployment begins, and data is collected and visualized for customers in later years. Therefore, the energy efficiency team anticipates that should the PUC approve AMF, the important overlap and distinction between GMP, AMF, and energy efficiency would most likely not arise until after the period covered by this Annual Plan. At that point the Company anticipates undertaking a more robust discussion of evaluation methodologies and other key considerations. In the interim, the Company will continue to work with the TWG to ensure all stakeholders are aware of any future transition.

6.5 Rate Cases

The energy efficiency program teams will continue to coordinate with the electric and gas businesses as they develop new rate cases during the term of the Annual Plan. For example, the Company currently earns a performance incentive for Annual MW Capacity Reduction from active electric demand response that was included in an electric rate case. In the future, the Company may revisit whether this PIM is more appropriate to include as part of annual energy efficiency programs rather than a rate case.

6.6 Integration with Renewables

As Rhode Island moves toward a clean energy future per Governor Raimondo and the General Assembly, National Grid will work to better integrate its energy solutions offerings. In addition to energy efficiency and demand response, this includes electric vehicles, renewable technologies, and battery storage. National Grid will work to create a seamless experience for the customer to select from these diverse solutions. As demonstration of these technologies and programs is necessary to determine effectiveness, benefits, and ease of use, this will require continued work to align Company funding for efficiency and the current renewables programs (net metering, and Renewable Energy Growth). Working with both internal and external stakeholders, the Company will identify new opportunities to enable the delivery of, and benefits from, integrated energy efficiency and renewable solutions.

6.7 Codes and Standards Program and Accounting for New Codes and Standards

Accelerating the state's adoption of, and compliance with, residential and commercial building energy codes helps ensure that energy efficiency is incorporated into buildings when it is least costly – at the

time of construction or alteration. The Company has operated a Code Compliance Enhancement Initiative (CCEI) since 2013, one of the country's only utility programs of its kind. From 2019-2020, the Company also provided technical support to the state's energy code update process for the first time. Both code compliance and development support activities will continue in the next three years, with the latter scaling up to build upon the 2019-2020 demonstration.

As Rhode Island adopts more stringent energy codes and transforms the new construction market, the Company will continue to support the state's aggressive energy policies in promoting the next-generation building sector. The Company will continue to work with state and local building departments and OER to update and implement the state's residential and commercial stretch codes. The CCEI initiative will offer trainings and assistance related to promoting compliance with the stretch code as well as preparing the market for the zero-energy building future. The initiative will also investigate opportunities to support increased use of the stretch code.

The Company will also continue to work with OER, the Appliance Standards Awareness Project (ASAP), and Northeast Energy Efficiency Partnerships (NEEP) to provide technical support for the adoption of state-level appliance standards and investigate providing analogous support of federal appliance standards.

7. Multi-Year Strategies

In the revised LCP Standards adopted by the PUC in Docket 5015, the PUC directed the Company to identify investment strategies for which implementation and budget requests (or revenue collection) are expected to span multiple years. In addition to the budgets and targets required for the rest of the portfolio, the PUC directed that the Company may separately provide budgets and goals for multi-year strategies. The requirement applies to both the Annual and Three-Year Energy Efficiency Plans. While the Company is not making specific requests for separate, multi-year budgets or targets within this Annual Plan, the Company does believe, as indicated in the concurrent 2021-23 Three-Year Plan filling, that there is value for stakeholders in identifying two specific programmatic areas, Combined Heat and Power and support for the Rhode Island Infrastructure Bank (RIIB), that warrant specific "multi-year strategy" discussion. This subsection identifies and expands upon these two areas of focus.

7.1 Combined Heat and Power

In the 2021 Commercial and Industrial Electric Energy Efficiency Program, the Company proposes to continue to offer incentives for the installation of Combined Heat and Power (CHP) projects. The CHP offering is a component of the Large Commercial and Industrial Retrofit program. CHP projects tend to have longer development periods than other energy efficiency offerings and are frequently individually large enough that changes to specific project timing can have a material impact on annual budgets and achievement of annual savings goals. As such, the Company believes these projects warrant specific discussion within the Multi-Year Strategies section of this Annual Plan filing.

For CHP projects, a maximum of 80% of the energy efficiency incentive payment and project savings are withheld until after the project has been interconnected and post-inspected. A minimum of 20% of the

energy efficiency incentive payment and project savings are withheld until the project has been commissioned. The energy efficiency incentive payments and project savings can span multiple years depending on the post-inspection date and project complexity. For these reasons the Company considers CHP projects to fit within multi-year strategies.

The following table includes the initial budget estimates and preliminary savings values for a 600 kW CHP project that is expected to span multiple years and anticipated for the 2021 and 2022 program years. The savings and associated costs for the CHP measure are included in the Large C&I Retrofit program in all tables and figures in this Plan. For additional information on combined heat and power, refer to Attachment 2 C&I Programs, Section 5.15.

Table 13. Multi-Year CHP Proposed in the 2021 Annual Plan

CHP Nameplate Capacity	2021			2022		
	Gross Annual Savings (kWh)	**Gross Lifetime Savings (kWh)**	**Incentive Payment**	**Gross Annual Savings (kWh)**	**Gross Lifetime Savings (kWh)**	**Incentive Payment**
600 kW	2,188,000	43,760,000	$513,000	548,000	10,960,000	$120,000

7.2 Rhode Island Infrastructure Bank (RIIB)

In 2021, as in prior years, the Company proposes to make a transfer to the Rhode Island Infrastructure Bank (RIIB) in order to continue to support the Efficient Buildings Fund (EBF) revolving loan fund.[36] As noted on the RIIB website:

> The Efficient Buildings Fund (EBF) provides attractive, long-term financing to municipalities and quasi-public agencies for the completion of energy efficiency and renewable energy projects. EBF seeks to finance energy retrofits in public buildings that will result in electric and heating savings greater than 20% across all properties receiving improvements. To date, the Infrastructure Bank has made ~$20.5 million in loans through the Efficient Buildings Fund.
>
> Eligible properties include municipal buildings, schools, publicly-owned utilities, such as wastewater or drinking water facilities, and quasi-state entities. Financing can be repaid over terms of up to 15 years and can be structured to provide annual cash-flow savings to the borrower. The Rhode Island Office of Energy Resources (OER) is the Bank's regulatory partner for the program. For a project to be eligible for financing, it must first

[36] Rhode Island Infrastructure Bank Efficient Buildings Fund: https://www.riib.org/ebf

be placed on OER's Project Priority List (PPL). OER ranks and scores project applications based on transparent scoring criteria, which results in the production of a PPL at least once annually.

For 2021, the Company has included estimates of savings in its binding savings and budget goals that are anticipated to be associated with projects that will both be financed through EBF and fully realized and claimable within the calendar year. If all projects in the current pipeline provided by RIIB with a 2021/2022 completion estimate were completed in 2021 (see Attachment 2 C&I Programs, Table 11 Forecasted 2021 Pipeline Loan Descriptions Savings) and were able to be claimed by National Grid within the term of this Annual Plan, it would result in 11,700 gross annual MWh savings in 2021. However, working with municipalities, state agencies, and quasi-state agencies can introduce approval and delivery timing challenges that are not frequently observed in other market segments, including long municipal approval times and resolving legal issues surrounding street lighting. Even financed projects are also subject to public entities receiving funding approval. In the case of municipalities, this often requires the residents of these communities to approve bonds. Due to these challenges, the Company believes that spreading out the estimated 11,700 gross MWh of savings (and associated incentives) across three years represents the most likely reflection of when associated savings will be claimable. This does not mean that these entities would not borrow from RIIB in 2021, or that RIIB would not require requested funding from the Company within 2021; rather, it means that the Company does not believe it is likely to be able to claim the bulk of these savings in 2021.

More details are available in the corresponding Multi-Year Strategies section of the Three-Year Plan. For reference, the anticipated gross savings in RIIB's pipeline were allocated as follows.

Table 14. Anticipated Gross Savings in RIIB Pipeline

Year	Gross MWh	Incentives
2021	1,000	$295,000
2022	8,025	$2,510,688
2023	2,675	$876,063
Total	11,700	$3,681,751
	Gross MMBtu	**Incentives**
2021	3,000	$59,773
2022	10,000	$224, 242
2023	6,000	$167,643
Total	19,000	$451,658

Table 15. Anticipated Savings from EBF-funded Projects in 2021 - Electric

Program	Measure	Annual Net Savings (kWh)	Lifetime Net Savings (kWh)	Incentive
Large C&I Retrofit	Street Lighting (Custom)	306,726	6,134,520	$105,000
C&I New Construction	HVAC (Custom)	136,071	2,041,061	$132,500
C&I New Construction	Lighting (Custom)	177,517	2,662,748	$57,500
Total		**620,314**	**10,838,329**	**$ 295,000**

Table 16. Anticipated Savings from EBF-funded Projects in 2021 – Gas

Program	Measure	Annual Net Savings (MMBtu)	Lifetime Net Savings (MMBtu)	Incentive
Large C&I Retrofit	Custom	2,340	18,718	$41,148
Large C&I Retrofit	Controls	544	8,160	$11,000
C&I New Construction	Custom	242	4,122	$7,625
Total		**3,126**	**31,000**	**$59,773**

CONSISTENCY WITH STANDARDS

8. Least Cost Procurement Law and Standards

This Annual Plan is submitted in accordance with the Least Cost Procurement Law, R.I. Gen. Laws § 39-1-27.7, the basis for which is the Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006, R.I. Gen. Laws § 39-2-1.2, and the Least Cost Procurement Standards as approved and adopted pursuant to Order No. 23890 in Docket No. 5015. The Standards guide how energy efficiency services are delivered – in a manner that is optimally cost-effective, reliable, prudent, and environmentally responsible. Least-Cost Procurement that is Energy Efficiency and Conservation Procurement shall also be lower than the cost of additional energy supply.

The Company has assessed each of these requirements in developing this Plan. Details on the Company's approach to considering each of these elements are included in this section. In addition, further detail on the cost-effectiveness screening of the proposed investments is in Attachment 4 RI Benefit Cost Test, with detail on rate and bill impacts in Attachment 7.

8.1 Prudency

Over the course of its history implementing energy efficiency programs in Rhode Island, the Company has considered and continues to consider several key components in the analysis of prudency. These components can be summarized as considerations of:

- How the investment supports the goals of the electric or natural gas system and the purposes of Least Cost Procurement and what the potential for synergy savings may be based on alternatives that address multiple needs.
- What groups of customers can the Company reach with program offerings? How can we ensure that all customers are served equitably and share in the cost of energy efficiency?
- What impacts to customer rates and bills will be required to deliver the efficiency goals, and how can those impacts be mitigated through alternative funding? What risks, if any, will customers and the Company see from the investments in energy efficiency and conservation procurements?
- What constraints, such as available workforce and prevailing economic conditions, exist in the marketplace that may impact the achievement of the goals as developed and proposed in the Plan?

For the proposed investments detailed in this Plan, the Company has assessed each of these elements and how they can be balanced to provide a comprehensive set of programs that will be achievable within known and anticipated constraints.

8.1.1 General Considerations of Prudency

One of the very first considerations of Prudency within the Standards is that the Company assess how an investment supports the goals of the electric or natural gas system and the purposes of Least Cost Procurement. This plan secures cost effective energy efficiency resources that drive the realization of benefits as enumerated in the Rhode Island Test including Electric Energy Benefits, Electric Generation Capacity Benefits, Electric Transmission Capacity and Distribution Capacity Benefits, Natural Gas Benefits, Fuel Benefits, Water and Sewer Benefits, Non-Energy impacts, Price Effects, Non-embedded Greenhouse Gas Reduction Benefits, Economic Development Benefits, Non-embedded NOx Reduction Benefits, and Value of Improved Reliability.
As an example of the way that the proposed investments in this plan address multiple needs, the electric demand response program continues to grow in magnitude of savings and in offerings while utilizing channels and technologies that drive not only energy savings but also reduced cost and deferred infrastructure benefits that flow from reducing peak demand.

In aggregate the portfolios included in this plan submission are robustly cost effective, as the benefits exceed the costs to acquire the efficiency resources and implement the programs. The electric portfolio achieves a BC Ratio of 4.31 and the gas portfolio achieves a BC Ratio of 3.00.

Furthermore, the cost of procuring 1,306,562 MWh lifetime electric energy efficiency savings through the Plan is $121,277,547 less than if that electric load was met by purchasing additional electric supply. The cost of procuring 4,206,444 MMBtu lifetime natural gas energy efficiency savings through the Plan is $14,186,986 less than if that natural gas load was met by purchasing additional natural gas supply.

Finally, in leveraging anticipated year-end 2020 fund balances resulting from recent COVID-19 related barriers to customer program participation, the Plan supports a continued commitment to aggressive savings goals and maintains momentum within the Rhode Island energy efficiency market, without requiring 2021 increases in the energy efficiency surcharges.

8.1.2 Equity

The Company defines equity in energy efficiency programs as ensuring that all customers have equal ability to access and benefit from its programs, regardless of their geographic location in Rhode Island, income, home ownership status, primary language, business size, or other attributes. This involves considering how programs are designed and evaluated with this definition of equity in mind, as well as taking into account the systemic and institutional structures that may make it easier for some customers to access energy efficiency products and programs more than others.

The portfolio of programs and offerings included in this 2021 Annual Plan represent a continuation of this approach, with a comprehensive set of offerings that provide pathways for all customers to take part in energy efficiency offerings and realize benefits. To further ensure that the programs and offerings are equitable in light of changed requirements in the LCP Standards and increased interest and focus from stakeholders, the Company proposes several steps to further quantify various metrics related to equity in order to establish baselines for measuring performance in the future.

Firstly, beginning in early 2021, the Company will work with OER to start an equity working group to further refine areas of focus. At this point, OER and National Grid envision the working group to be comprised of representatives from OER, other state agencies, National Grid, community-based organizations, advocacy organizations, and local subject matter experts in equity. The working group will be a key resource for the Company as it develops future annual plans and further studies equity through a number of evaluation efforts. A first task for the equity working group will be to interpret recently-completed Massachusetts non-participant studies[37] to gather lessons learned from similar programs.

Next, the Company will initiate several studies to better understand historic customer participation and the extent to which geography, income, homeownership status, and primary language may be different among participants and non-participants (i.e. addresses that have not participated in any Company energy efficiency programs over a defined period of time). The Company's first step towards doing so will be to undertake a residential non-participant study to understand the attributes of non-participants and why they are not participating.[38] The study will provide in-depth research on non-participants to characterize customers that have not participated in energy efficiency programs, assess barriers to participation, and identify engagement opportunities. The study will use multi-mode customer surveys and in-depth interviews designed to understand non-participants' attitudes, needs and perceptions. The study will be a foundational analysis to understand any potential underserved customer groups. However, the Company does not view the study as the only source of data to inform discussions of equity in programs, though the information will be used as a primary source. The non-participant study is to be commissioned in early 2021, with anticipated completion in mid-2022, and will build on lessons learned from recently-completed Massachusetts non-participant studies.

In addition to the non-participant study, the Company commits to undertake a census of multifamily housing to understand multifamily participation and non-participation.[39] National Grid will also track and report to stakeholders on renter participation in the in-home/unit assessment programs, and other programs as determined appropriate. The Company proposes to use data from the proposed evaluations to build program enhancements and tracking systems that are driven primarily by the needs of identified non- or low-participating groups, as well as additional marketing efforts better tailored to multilingual customers. However, the Company will explore options to prioritize the collection of data, not only from opportunities identified in these evaluations, but also based on input from the equity working group.

In addition, the Company acknowledges the critical role that income plays in access to energy efficiency programs. It proposes to take further action in 2021 to enhance income eligible customer participation:

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[37] Residential Non-Participant Market Characterization and Barriers Study http://ma-eeac.org/wordpress/wp-content/uploads/MA19R04-A-NP-Nonpart-MarketBarriersStudy_Final.pdf

[38] See Attachment 3 EM&V, Section 3.2c.

[39] See Attachment 1 Residential & IES Programs, Section 3 Multifamily and Attachment 3 Evaluation Measurement & Verification Plan, Section 3.2b.

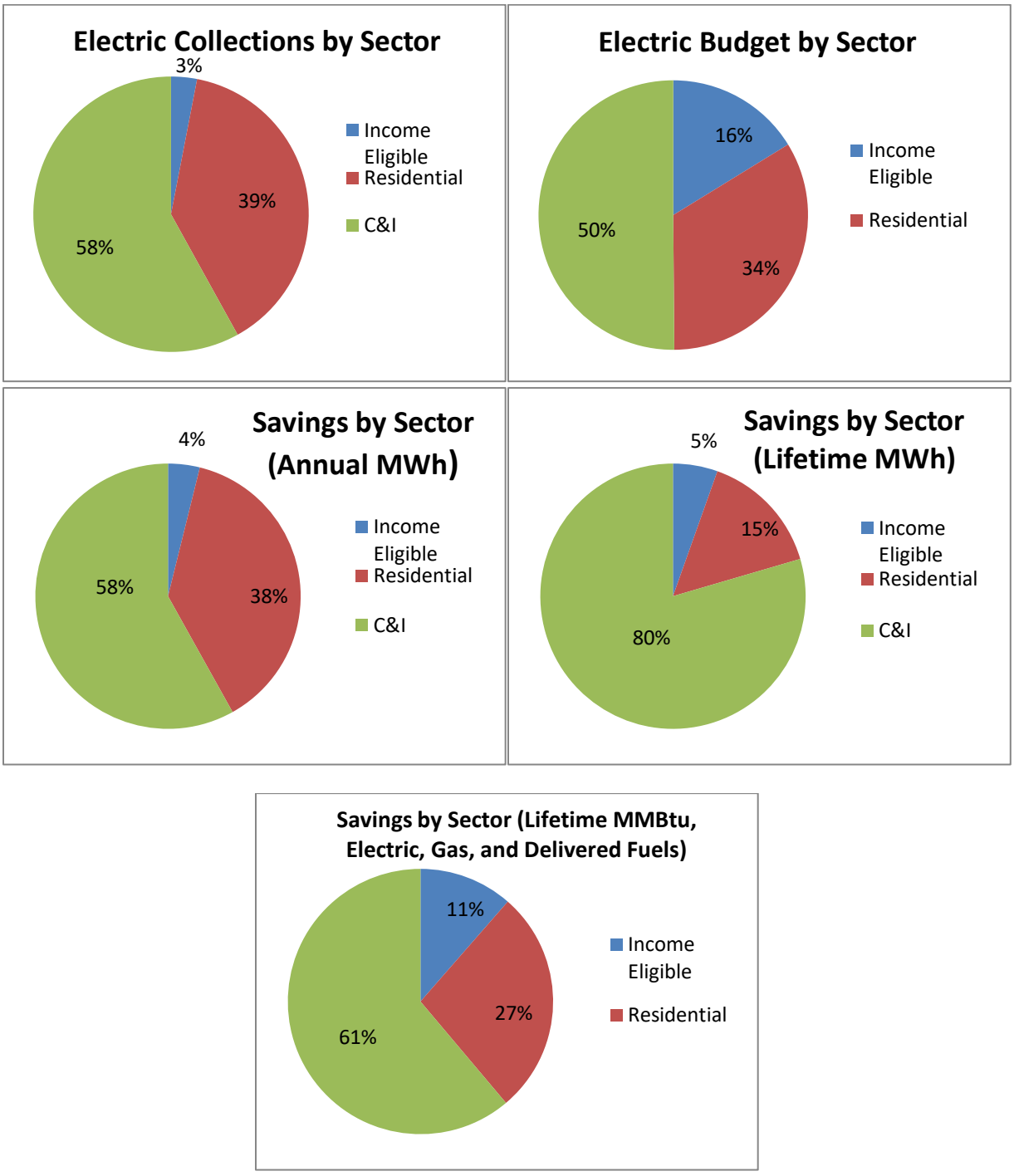
- The Company will increase its efforts and emphasis on identifying and encouraging customers eligible for the discount rate to move to the discount rate.
- As customers are brought into the discount rate, the Company proposes creating a welcome package to encourage participation in applicable efficiency programming, specifically Residential Income Eligible Services (IES).
- The Residential Consumer Products and Energy*Wise* Income Eligible Multifamily programs have partnered to streamline cooling solutions for income eligible customers living in multifamily properties.
- In the Company's workforce development programs, National Grid will work with stakeholders to identify communities from which it should focus on recruiting, training, and retaining talent, intentionally bringing more women and people of color into the energy efficiency workforce. This will create greater equity of access to the jobs generated by the clean energy transition and will help transition the workforce to better reflect the communities served. The desired outcome is to improve customer access and experience as customers find they are increasingly working with professionals from their communities and for these new professionals begin to identify and help the Company adjust delivery to overcome community access barriers.

The Company's new Codes & Standards advancement support program primarily targets the non-participant portions of the markets we serve across all sectors. While the program is in its infancy, this approach overcomes traditional barriers of access by ensuring efficiency levels are rising for all equipment and appliances.

8.1.3 Parity Among Sectors

In considering the prudency of the set of proposed investments contained in this Plan, the Company has also assessed the parity among sectors along dimensions of collections, budgets, and savings. As shown in Figure 4, there is approximate parity between the collections by a customer class and its resulting budget and savings in the electric portfolio. The only exception is the income-eligible sector where there is an established agreement amongst the Parties that the residential and C&I customer classes use part of their collections to help cover the income eligible sector funding needs. The income-eligible budget is higher compared to its savings due to several factors: incentives are 100% of the cost, the programs are more expensive because they are delivered in-home (compared to at retail sites or via rebates) which requires more labor and management, and the programs have fewer economies of scale (compared to C&I). $28.7million is budgeted for the delivery of the gas and electric income eligible sector programs, 27% and 16% of the total funding for each fuel portfolio respectively in 2021. Taken together, these investments represent 19.0% of the overall electric and gas portfolio budgets compared to 18.3% of planned expenditures in the 2020 Annual EE Plan Budget. More information on the services offered through the income eligible sector programs can be found in Attachment 1 Residential & IES Programs, sections 3 and 4.

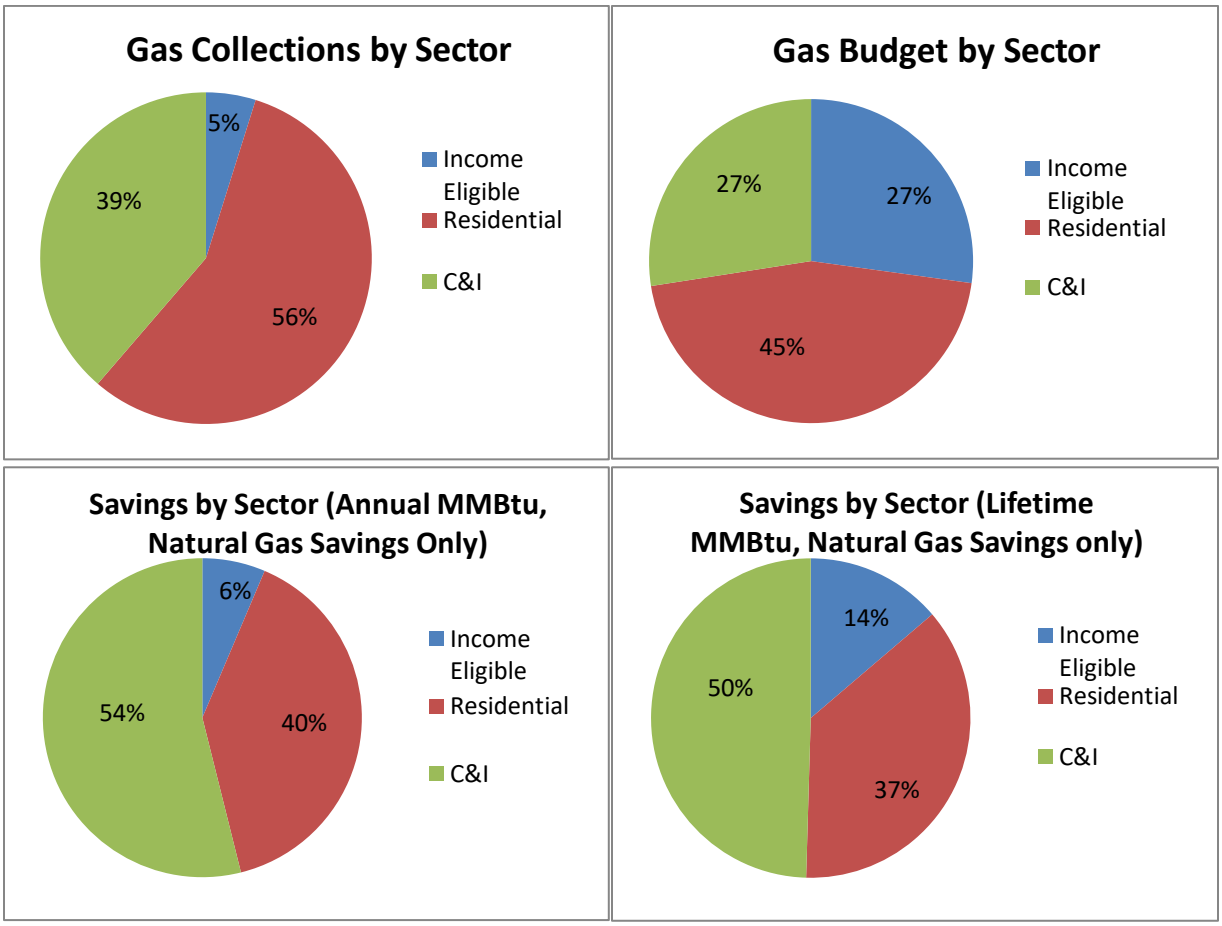
Figure 4. 2021 Graphical representation of Attachment 5 Table E-1 and total Electric Savings by Sector, Cumulative



For the gas portfolio, there is also parity between the collections by a customer class and the resulting savings. There is less parity between budgets and savings. This is due to several factors. First, the energy efficiency program charge varies by customer segment, which changes collections. Second, C&I projects

tend to create more savings per dollar. This is due to larger economies of scale, larger projects, different delivery channels that require less labor or management and are more cost-effective, evaluation factors such as free-ridership and spillover, and different customer opportunities.

Figure 5. 2021 Graphical representation of Attachment 6 Table G-1 and total Gas Savings by Sector, Cumulative



8.1.4 Rate and Bill Impacts

In addition to the cost-effectiveness of Rhode Island's investment in energy efficiency, National Grid has analyzed electric and natural gas rate and bill impacts from the proposed energy efficiency investments for the 2021 program year pursuant to the Standards. For several years, National Grid has analyzed the rate and bill impacts of the electric portfolio using a model that assesses the long term impacts to rates due to the presence of the annual energy efficiency portfolio in contrast to a counterfactual where the energy efficiency programs, and their corresponding upfront costs and savings over the duration of the measures' lives did not exist. In 2020, National Grid, in collaboration and consultation with the EERMC, OER, and the DPUC, undertook an effort to revise the rate and bill impact analysis for the gas portfolio to more closely align the modeling approach between the electric and gas portfolios. Synapse Energy Economics, who originally developed the electric bill and rate impacts model, was retained to develop

the natural gas rate and bill impact model that is first applied in this Annual Plan and the concurrently filed Three-Year Plan. The new gas rate and bill impact model is closely aligned with the existing electric model in that it shows the change in long term rates and bills due to the presence of the energy efficiency programs in contrast to a counterfactual where the energy efficiency programs were not in place. While the methods are largely aligned between the electric and natural gas portfolios, there are key differences between the analyses, including the presence of avoided costs for transmission and distribution in the electric models. Additional detail on the methods and results from both models are provided in Attachment 7, Rate & Bill Impacts.

The rate and bill impacts conducted for this Plan provide one quantitative data point in determining the merits of the investment in energy efficiency overall. The rate and bill impact estimates are considered in conjunction with the robust benefit cost analysis conducted on measures, programs, and portfolios included in this Plan and the analysis of the cost of alternative supply compared to the proposed energy efficiency investments. Summary results for the rate and bill impacts are included in the tables below, while additional detail is also available in Attachment 7 to this Plan.

Table 16 and Natural gas programs are projected to generate slight upward movement on long term rates between 0.3% and 0.7%. For the income eligible customer participants, the Small C&I participants, and Large C&I participants, modeling shows a reduction in bills between 1.16% and 7.12%.

With respect to the residential sector, the Company used three distinct model instances to explore the rate and bill impacts for this customer sector. The three residential model instances explored 1) the Home Energy Report (HER) program in isolation, 2) the EnergyWise, EnergyStar HVAC, EnergyWise Multi-family, Residential New Construction together (excluding HER program), and 3) All five programs together. It is important to note that each of these three parts of the residential sector analysis has been developed using a separate instance of the gas rate and bill impacts model. Attachment 7 provides additional detail on the modeling approach for this sector.

Relative to the other four residential programs, The HER program has a short measure life (1 year), while reaching the significant majority of residential customers. The period of time covered by the analysis is determined by the average measure life of the longest included program. Consequently, the model instance analyzing the HER program in isolation covers a much shorter period of time than the other two model instances, which means that the three instances are not directly comparable, and the first two model instances do not additively result in the third instance.

When the HER program is considered in isolation (Residential Model 1), average participants see a reduction in bills of on average 0.01%. When all other residential programs are considered together (Residential Model 2), the model shows average participants see a 5.29% reduction in average bills. Lastly, when all residential programs are considered together (Residential Model 3), the modeling shows the long-term average change in bills is very slightly positive (0.03%). As discussed in more detail in Section 4.3 of Attachment 7, this result is largely a byproduct of the modeling approach that combines the short-lived HER program with other longer-lived measures.

Table 17 summarize the results of the electric and natural gas rate and bill analyses for the 2021 proposed programs, respectively. All electric sectors except large C&I see a slight increase in long term rates due to the 2021 programs, while all participating electric customers see a reduction in average long term bills due to their participation. Average electric customers also see a reduction in long term bills.

Table 16. Rate and Bill Impact Results for the Electric Portfolio

Sector	Average change in long term rates due to 2021 Programs	Long Term Average Change in Bills		
		Non-Participants	Average Customer	Average Participant
Residential	0.41%	0.41%	-0.42%	-0.42%
Income eligible	1.23%	1.23%	-2.46%	-2.54%
Small C&I	0.37%	0.37%	-0.81%	-8.88%
Medium C&I	0.03%	0.03%	-1.66%	-9.02%
Large C&I	-0.16%	-0.16%	-2.72%	-4.44%

Natural gas programs are projected to generate slight upward movement on long term rates between 0.3% and 0.7%. For the income eligible customer participants, the Small C&I participants, and Large C&I participants, modeling shows a reduction in bills between 1.16% and 7.12%.

With respect to the residential sector, the Company used three distinct model instances to explore the rate and bill impacts for this customer sector. The three residential model instances explored 1) the Home Energy Report (HER) program in isolation, 2) the EnergyWise, EnergyStar HVAC, EnergyWise Multi-family, Residential New Construction together (excluding HER program), and 3) All five programs together. It is important to note that each of these three parts of the residential sector analysis has been developed using a separate instance of the gas rate and bill impacts model. Attachment 7 provides additional detail on the modeling approach for this sector.

Relative to the other four residential programs, The HER program has a short measure life (1 year), while reaching the significant majority of residential customers. The period of time covered by the analysis is determined by the average measure life of the longest included program. Consequently, the model instance analyzing the HER program in isolation covers a much shorter period of time than the other two model instances, which means that the three instances are not directly comparable, and the first two model instances do not additively result in the third instance.

When the HER program is considered in isolation (Residential Model 1), average participants see a reduction in bills of on average 0.01%. When all other residential programs are considered together (Residential Model 2), the model shows average participants see a 5.29% reduction in average bills.

Lastly, when all residential programs are considered together (Residential Model 3), the modeling shows the long-term average change in bills is very slightly positive (0.03%). As discussed in more detail in Section 4.3 of Attachment 7, this result is largely a byproduct of the modeling approach that combines the short-lived HER program with other longer-lived measures.

Table 17. Rate and Bill Impact Results for the Natural Gas Portfolio

Sector	Levelized net change in rates due to 2021 Programs	Long Term Average Change in Bills		
		Non-Participants	Average Customer	Average Participant
Residential (Model 1: HERs only)	0.0%	0.02%	0.00%	-0.01%
Residential (Model 2: All Programs Except HERs)	0.4%	0.41%	0.15%	-5.29%
Residential (Model 3: All Programs)	0.4%	0.43%	0.15%	0.03%
Income eligible	0.7%	0.75%	-0.16%	-4.48%
Small C&I	0.3%	0.25%	0.19%	-7.12%
Large C&I	0.4%	0.41%	0.00%	-1.16%

8.2 Reliability

The programs developed under this Annual Plan will continue the Company's extensive history of offering best-in-class energy efficiency programs to customers, while introducing new implementation approaches and expanding the Company's existing programs to serve more customers. Existing programs that have significant experience and traction in the market will be extended and refined to deploy low-risk cost-effective energy efficiency to the marketplace. The Company continues to collaborate with a diverse set of stakeholders including the EERMC, OER, Division, and community and advocacy organizations to continually analyze the programs and identify opportunities for improvement.

In building this Annual Plan, the Company's Customer Energy Management team worked closely with industry experts, vendors, and program implementation professionals to assess the current state of existing programs, the potential for program scalability, the economic environment, and the ability to deliver reliable energy savings as a result. By speaking with on-the-ground implementers and engaging in discussions on regional and national best practices in the face of the COVID-19 pandemic, the Company positions the programs for success in what is a generally uncertain time.

Supporting the Company's efforts to deploy energy efficiency to Rhode Island customers is a robust and long-standing evaluation, measurement, and verification (EM&V) apparatus. As noted in Section 5, the Company hires independent third-party consulting firms to regularly conduct evaluation studies as part of its EM&V process. A distinct group of personnel within National Grid that includes analysts with specialized skills in engineering, statistics, and economics are tasked with the EM&V function and

coordinate all elements of the EM&V process internally and externally. Evaluations incorporate industry standard methods to assess the actual energy and demand savings of measures incented by the programs. All elements of the EM&V process are closely monitored by the EERMC, their Consultants, and OER. The EM&V process is continual, and every year results from EM&V studies are used to update the savings in the benefit cost calculation of the measure, programs, and portfolios. In addition, process evaluations and market studies conducted in the EM&V process provide an independent perspective on the performance of the programs and provide insight into the state of the market and ways that the Company can address new opportunities with its programs.

In total, these EM&V processes provide a transparent, externally vetted approach to ensuring that claimed savings provide an accurate picture as possible of the impact of the Company's energy efficiency programs, accounting for spillover, free ridership, and other industry standard adjustment factors

The EM&V process also supports the Company's participation in the ISO-NE Forward Capacity Market (FCM). Passive demand savings achieved via electric energy efficiency and Combined Heat and Power projects, and verified by the EM&V process, continue to participate in the FCM as Passive On-Peak Demand Resources. As detailed further in Section 11.1, the Company bids the passive demand savings attributed to energy efficiency measures and Combined Heat and Power facilities in the FCM and manages the associated capacity resources to maximize the resulting FCM revenue. The EM&V process provides the necessary verification of claimed savings in order to participate in the FCM.

Additionally, the Company anticipates that the 2021 Annual Plan will be the last year in which a residential efficiency lighting program will be offered. Due to the Company's successful efforts to transform the lighting market through its efficiency programs, the opportunities for cost-effective claimable lighting savings are anticipated to be exhausted by the end of 2021. In this time of transition, the Company will continually evaluate ways that other existing programs can be enhanced to generate savings that in the past were accomplished through relatively simple lighting measures. Increased complexity of measures will require new approaches to maintain the same levels of reliability of goals and savings in future plans.

8.3 Environmentally Responsible

The energy efficiency programs and portfolios described in the Annual Plan are environmentally responsible. They provide significant emissions reductions benefits, reduce the potential environmental costs and footprint of avoided infrastructure investments, support the ongoing growth and development of a sustainable, green job ecosystem in Rhode Island, and contribute to the realization of state environmental policy goals and initiatives.

8.3.1 Emissions Reductions

Both electric and natural gas efficiency portfolios will make a meaningful contribution to reduction in emissions by driving reductions in customer energy usage in both the short and long term. The electric and natural gas portfolios, considered together, will reduce lifetime emissions of 873,292 tons of Carbon

Dioxide. The non-embedded values of CO_2 and NO_x benefits generated by the 2021 annual plan over the lifetime of the measures are $53,440,738 and $4,192,909, respectively.

8.3.2 Support for an Environmentally Responsible Local Jobs Infrastructure

In 2019, the Company's Energy Efficiency programs directly supported 877 FTEs. In providing for these jobs and demonstrating the availability and attractiveness of local, green jobs to Rhode Island's existing and emerging workforce, the Company's energy efficiency programs help to ensure that the local workforce will exist to support the state's environmental policy goals.

8.3.3 Raised customer awareness of environmental issues and the impacts of their choices

Educating and engaging residential and business customers on the potential environmental impacts and benefits of the implementation of energy efficiency measures is a foundational element of the Company's energy efficiency go-to-market strategy. Whether in the form of conveying potential environmental benefits of customer recommendations through Home Energy Reports, Energy*Wise* home energy assessments, or retail marketing initiatives, or by connecting SMB audits or large C&I customer sales efforts to business customer sustainability initiatives, the Company's energy efficiency program presence will continue to help to support the prominence of environmental issues in customers' minds. Additionally, through the Community-Based Initiative, the Company partners with municipalities and works through local energy and environmental sustainability committees to connect individual customers' energy efficiency decisions and actions to broader municipal sustainability goals and messages. In doing so, the Company's programs continue to link energy savings and efficiency to real and visible benefits for the communities in which their residents and small business reside.

8.4 Cost Effectiveness

The Company has analyzed the cost-effectiveness for the proposed 2021 portfolio and programs using the RI Test as required by Docket 4600[40] and the LCP Standards. The RI Test requires that the total lifetime savings from the efficiency measures exceed the total costs of the measures (i.e., program and customers' costs). In the revised LCP Standards, the PUC directed that portfolios and programs must be cost-effective. In the prior iteration of the LCP Standards, only portfolios were required to be cost-effective.[41]

The RI Test has been developed to incorporate benefit and cost. As provided for under the LCP Standards, benefits include primary fuel energy savings (electricity and natural gas), the value of other resource (fuel and water) benefits, price effects, non-embedded greenhouse gas reduction benefits, economic development benefits, non-embedded NO_x reduction benefits, the value of improved reliability, and non-energy impacts (NEIs). Costs include all projects costs, program planning and

[40] RI PUC Docket 4600, http://www.ripuc.ri.gov/eventsactions/docket/4600page.html

[41] Note that in past annual plans the Company had reported out on the cost effectiveness of its programs in addition to the portfolios.

administration, sales, technical assistance and training, evaluation, and the performance incentive. To illustrate the detailed components of the RI Test as well as the sources of the values, the Company has provided Attachment 4 RI Benefit Cost Test.

Attachment 5 Electric EE Program Tables, Table E-5 and Attachment 6 Gas EE Program Tables, Table G-5 provide the calculations of 2021 program year cost-effectiveness. Attachment 5, Table E-6 and Attachment 6, Table G-6 show the energy savings goals based on the proposed budgets. Attachment 5, Table E-7 and Attachment 6, Table G-7 show a comparison of the goals with the approved program goals from 2020. Attachment 5, Table E-5 shows that the proposed portfolio of electric programs, including active demand response, is expected to have a benefit/cost ratio of 4.31, which means that approximately $4.41 in benefits is expected to be created for each $1 spent on the portfolio. Attachment 6, Table G-5 shows that the proposed portfolio of gas programs is expected to have a benefit/cost ratio of 3.00, which means that $3.00 in benefits is expected to be created for each $1 spent on the portfolio. This increase in efficiency investment continues the progress of acquiring all energy efficiency resources that are cost-effective and lower cost than supply.

Table 18. Electric Benefit Cost Ratios at Program and Portfolio Level

Electric Benefit Cost Ratios	
Large Commercial & Industrial Programs	
Commercial New Construction	6.24
Commercial Retrofit	7.52
Direct Install	3.35
Commercial ConnectedSolutions	9.85
C&I Subtotal	6.05
Income Eligible Programs	
Low Income Single Family	2.65
Low Income Multi Family	1.76
Income Eligible Subtotal	2.27
Residential Programs	
Residential New Construction	2.69
EnergyStar HVAC	2.77
EnergyWise	1.89
EnergyWise Multi Family	2.44

Behavior Feedback	3.23
EnergyStar Lighting	3.29
EnergyStar Appliances	2.84
Residential ConnectedSolutions	6.13
Non-Income Eligible Residential Subtotal	**2.44**
Portfolio	**4.31**

Table 18. Natural Gas Benefit Cost Ratios at Program and Portfolio Level

Natural Gas Benefit Cost Ratios	
Large Commercial & Industrial Programs	
Large Commercial New Construction	4.86
Large Commercial Retrofit	5.27
Small Business Direct Install	3.83
Commercial & Industrial Multifamily	4.75
Commercial & Industrial Subtotal	**4.69**
Income Eligible Programs	
Single Family - Income Eligible Services	2.94
Income Eligible Multifamily	4.21
Income Eligible Residential Subtotal	3.20
Residential Programs	
Energy Star® HVAC	1.66
EnergyWise	2.01
EnergyWise Multifamily	4.70
Home Energy Reports	4.05
Residential New Construction	1.02
Non-Income Eligible Residential Subtotal	**2.01**
Portfolio	**3.00**

8.5 Cost of Annual Plan Compared to the Cost of Energy Supply

In accordance with the LCP Standards, the Company assessed the cost of energy supply and the cost of energy efficiency using all applicable costs enumerated in the Rhode Island Benefit Cost Framework (Framework) approved by the PUC in Docket 4600-A and the Rhode Island Test as described in Attachment 4 RI Benefit Cost Test. This method is substantially the same as that used in the 2020 Plan.

Based on the Company's calculation, the total cost of energy efficiency for the electric portfolio is $140.7 million and the total cost of electric supply is $262.0 million. This is a total savings of $121.2 million over the life of the installed energy efficiency measures from investing in energy efficiency instead of electric supply. The total cost of energy efficiency for the natural gas portfolio is $48.3 million and the total cost of natural gas supply is $62.5 million. This is a total savings of $14.2 million over the life of the installed energy efficiency measures from investing in energy efficiency instead of natural gas supply. The methodology for calculating Cost of Supply is detailed below.

The RI Test is an appropriate mechanism to determine which costs to include in this assessment. The RI Test, as detailed in Attachment 4, captures the aspects of the Framework that pertain to energy efficiency programs. The source for many of these values is the "Avoided Energy Supply Components in New England: 2018 Report" prepared by Synapse Energy Economics for the AESC 2018 Study Group, October 31, 2018. The benefits in the RI Test are associated with the cost savings to Rhode Island from investing in energy efficiency instead of investing in additional energy supply. For the purpose of the RI Test, these values are described as a benefit of energy efficiency in the form of avoided costs. The avoided cost values can also be applied as the costs of procuring additional energy supply for the purpose of this assessment. The RI Test also details what is considered a cost of energy efficiency. These are costs incurred by the utility to implement the Plan and the expense borne by the customer for its share of the energy efficiency measure cost.

The Company proposes to use the costs described in Table 18 to compare the cost of energy efficiency to the cost of energy supply. The categories listed in this table are all used in the RI Test, as proposed in Attachment 4 of the Plan. As directed by the LCP Standards, the Company provides an explanation for why cost categories are either appropriate or not appropriate for inclusion in the assessment of the cost of energy supply compared to the cost of energy efficiency.

Table 18. List of the Costs of Energy Efficiency and Costs of Energy Supply

Costs of Energy Efficiency		
Cost	**Included (Y/N)**	**Explanation**
Utility Costs	Yes	These costs are incurred to achieve implementation of energy efficiency measures and programs. Includes all costs in Tables E-2 and G-2.

Participant Costs	Yes	Customer contribution to the installation cost of the efficient measure. Customer costs included in Tables E-5 and G-5.

Costs of Energy Supply		
Cost	**Included (Y/N)**	**Explanation**
Electric Energy Costs	Yes	Represents the cost of purchasing electric energy supply.
Electric Generation Costs	Yes	Represents cost of generation capacity in ISO-NE.
Electric Transmission Capacity Costs	Yes	Represents Pool Transmission Facilities (PTF) cost.
Electric Distribution Capacity Costs	Yes	Represents the cost of distribution capacity related to increased load.
Natural Gas Costs	Yes	Represents the cost of purchasing natural gas supply.
Fuel Costs	Yes	Non-regulated delivered fuels are an energy supply cost to customers that utilize these fuels for heating. The fuel costs in this category are separate from those embedded in the cost of the electric market. While not a direct cost of electric energy supply, National Grid includes incentives for delivered fuel energy efficiency measures in its electric portfolio. Therefore, to achieve symmetry with costs associated with electric energy efficiency, delivered fuels costs should be included in this comparison.
Water and Sewer Costs	No	While avoided water and sewer costs are a benefit of installing certain energy efficiency measures, they are not a direct cost of energy supply.
Non-Energy Impact Costs	No*	*Unless listed below. While non-energy impacts are a benefit of installing certain energy efficiency measures, they are not a direct cost of energy supply.
Income Eligible Rate Discount	Yes	Costs associated with energy being sold at the income eligible rate.
Arrearages	Yes	Costs associated with arrearage carrying costs as a result of customers not being able to pay their energy bills.
Price Effects	Yes	Represents costs associated with the impact of demand reduction on ISO-NE energy and capacity markets.
Non-embedded Greenhouse Gas Reduction Costs	Yes	Represents the social cost of carbon. The social cost of carbon is the cost associated with meeting the goals of the Resilient Rhode Island Act. Carbon emissions come from the production of energy and should be considered a cost of supplying that energy.

Economic Development	No	While economic development is a benefit of investment in energy efficiency measures it is not a direct cost of energy supply.
Non-embedded Nitrous Oxide (NOx) Costs	Yes	NOx emissions come from the production of energy and therefore the health impacts of NOx emissions should be considered part of the cost of supplying that energy.
Reliability Costs	Yes	Increased energy demand can lead to declining reserve margins and decrease reliability so should be associated with the cost of energy.

For the assessment, the Company applies the above costs of supply to the lifetime energy, lifetime MMBtu of delivered fuels, demand, and natural gas savings for each measure included in the Plan in present value terms. The costs of the 2021 Plan occur only in 2021 and are therefore not discounted.

FUNDING PLAN, BUDGET AND GOALS

9. Savings Goals

In 2021, the Company will primarily measure performance based on lifetime energy savings. This is a change from prior years where the primary units of performance measurement were in annual units. The electric portfolio will measure energy savings in units of lifetime MWh and the gas portfolio will measure energy savings in units of lifetime MMBtu. For comparability with past plans, the Company will continue to track and report on annual energy savings as has been done for the duration of the programs. Electric demand savings, from passive energy efficiency savings and active demand response, will continue to be measured and reported in annual units of kW. The Company recognizes the long-term value of developing and achieving lifetime energy savings goals because of the focus on longer term customer savings and benefits. The change to lifetime energy savings goals aligns with the energy savings Targets as set by the EERMC, and approved by the PUC, in Docket 5023.[42]

9.1 Electric Portfolio Savings Goals

Continuing from 2020, the Company will also track net annual and lifetime all-fuel MMBtu (electric, gas, oil, and propane) savings as a test metric for the electric portfolio. The electric energy efficiency program tables included in Attachment 5 reflect this additional metric, and further detail on Test Metrics is included in Section 13.

Tracking net annual and lifetime all-fuel savings (MMBtu) more fully captures the net effect of all-fuel savings efforts (electric, oil, and propane). The tracking effort will provide useful information and benchmarking for state efforts to support decarbonization of the thermal energy sector and better support State and Company greenhouse gas reduction goals now and in the future.

To first convert electric energy savings from MWh to MMBtu, the Company proposes to multiply MWh by an industry standard conversion factor of 3.412 MMBtu per MWh.[43] This conversion applies only to electric energy savings. Savings from natural gas and delivered fuel are tracked in MMBtu. In this Plan, the electric savings converted to MMBtu are shown in Table E-6A in Attachment 5 Electric EE Program Tables. Equation 1 shows the calculation of electric MWh savings to MMBtu.

Equation 1. Conversion of MWh to MMBtu Calculation

$$MMBtu_{Electric} = MWh_{Electric} \times 3.412\ MMBtu/MWh$$

[42] RI PUC Docket 5023, http://www.ripuc.ri.gov/eventsactions/docket/5023page.html

[43] The conversion factor of 3.412 MMBtu/MWh is a constant value. Energy Information Agency, EIA: https://www.eia.gov/totalenergy/data/monthly/pdf/sec13_7.pdf

To calculate net all-fuel MMBtu as reported in Table E-6A in Attachment 5, the Company will sum electric savings (converted to MMBtu), natural gas savings, and delivered fuel (oil and propane) savings. This summation captures savings impacts for all fuels attributable to an electric measure.

Equation 2. Calculation of Net All-Fuel MMBtu Calculation for Electric Savings Measures

$$MMBtu_{All\ Fuel} = MMBtu_{Electric} + MMBtu_{Natural\ Gas} + MMBtu_{Delivered\ Fuels}$$

9.2 Natural Gas Portfolio Savings Goals

For the natural gas portfolio, the Company proposes to primarily measure energy savings in units of net lifetime MMBtu, while continuing to track net annual MMBtu for comparability with past plans.

10. Annual Plan Compared to the Three-Year Plan

In the LCP Standards approved in Docket 5015,[44] the PUC afforded the Company the opportunity to combine the 2021 Annual and 2021-2023 Three-Year Plan filings if notification was made to the EERMC by July 1, 2020. The Company chose to exercise that option and for the first time will combine the filing of the annual and three-year energy efficiency plans. This 2021 Annual Plan is filed concurrently with the 2021-2023 Three-Year Plan.

Consequently, the savings goals and budgets put forward in the first year of the 2021-2023 Three-Year Plan will match the values in this 2021 Annual Plan, as the supporting planning processes were conducted concurrently. The Company expects that in the 2022 and 2023 Annual Plans there will be differences between the Three-Year Plan filed in 2020 and each subsequent Annual Plan. In those years, causes of differences between the plans will be documented and reported in this section of each plan.

11. Funding Plan and Budgets

Funding, budgets, goals, and cost-effectiveness information is provided in Attachment 5 Electric EE Program Tables for the proposed electric energy efficiency programs and in Attachment 6 Gas EE Program Tables for the proposed natural gas energy efficiency programs.

In developing the savings goals, associated budgets, and funding plans for this 2021 Annual Plan, the Company took into account the traditional factors (anticipated 2020 year-end fund balances and anticipated 2021 sales volumes) that always impact the relationship between requested implementation budgets and the required customer surcharges necessary to fund the proposed plan. In addition, the Company recognizes the COVID-19 related uncertainties facing the Rhode Island economy and has

[44] RI PUC Docket 5015, Least Cost Procurement Standards
http://www.ripuc.ri.gov/eventsactions/docket/5015_LCP_Standards_05_28_2020_8.21.2020%20Clean%20Copy%20FINAL.pdf

committed to maintaining flat energy efficiency surcharges in the proposed 2021 Annual Plan compared to the approved 2020 Annual Plan energy efficiency surcharges.

2020 Year-End Fund Balances

- Given the fixed nature of the 2020 electric and gas energy efficiency surcharges, year-end fund balances will be a function of both remaining Company collections results as well as volumetric sales through year-end. Consistent with recent practice, a final update to the projected year-end fund balance to be provided to the Commission on December 1st, 2020.
- The 2020 year-end fund balance will also be a function of actual implementation expenses and Company earned performance incentive through year-end 2020. For the October 15th submission to the PUC, the Company has included 2020 year end fund balance forecasts (electric and gas) on line 2 of the E-1 and G-1 tables in Attachment 5 and Attachment 6, respectively. The fund balance forecasts include estimated implementation expenses and estimated earned performance incentives. Consistent with recent practice, on December 1, 2020 the Company will provide updated year-end fund balance forecasts, reflecting updated sales, collection, and program expenditure forecasts through year-end. Typically, these forecasts are used to adjust EE surcharges for the following year, with a goal of forecasting a zero fund balance at the end of the following year. For purposes of this year's December 1 updated fund balance forecasts submission, in the event that either of the year end fund balance forecasts increase, this will result in a lowering of the corresponding proposed 2021 energy efficiency surcharges. In the event that the year end fund balance forecasts decrease, the Company will propose 2021 surcharges that are the same as those included in the October 15, 2020 EE Annual Plan filing in order to honor the commitment to maintain flat surcharges between 2020 and 2021. If the actual year-end 2020 fund balance as filed in the Year-End Report on May 1, 2021 is higher or lower than that amount projected in the December 1, 2020 revised Tables E-1 and G-1, any deviation will be fully reconciled in the next program year in accordance with the requirements of R.I. Gen. Laws § 39-1-27.7.

Anticipated 2021 Sales

- The proposed 2021 surcharges are a function of both energy efficiency plan funding requirements as well as forecasted volumetric sales in 2021. As in past years, this filing incorporates the most current electric and gas forecasts as of the creation and distribution of this report. Annual Plan Funding Sources

The sources of funding and the amounts of the funding proposed for the cost-effective 2021 EE Programs are shown in Table E-1 for electric programs and Table G-1 for natural gas programs.

The sources of funding for the 2021 electric programs are shown in Attachment 5 Electric EE Program Tables, Table E-1. To collect these funding sources for the 2021 cost-effective programs, the Company proposes: (1) one line on the customers' bill labeled "Energy Efficiency Charge" at $0.01323 per kWh, as calculated in Attachment 5, Table E-1 (composed of the existing energy efficiency program charge of

$0.1323 per kWh plus a fully reconciling funding mechanism charge of $0.00000 per kWh in accordance with the requirements of R.I. Gen. Laws § 39-1-27.7); (2) projected Large C&I commitments from 2021, if any; (3) projected carryover of the year-end 2020 fund balance, as applicable, including interest at the rate in effect for customer deposits; (4) forecast revenue generated by ISO-NE's Forward Capacity Market (FCM); and (5) other potential outside revenue sources, including but not limited to those generated through RGGI permit auctions. Funding sources do not include revolving loan funds.

Navy CHP Settlement Agreement Funding Source

Pursuant to the PUC Open Meeting on September 1, 2020 in relation to Docket No. 4755 Navy CHP Settlement Agreement, the Company has taken the following step:

1. Included a credit in the electric energy efficiency fund in the amount of $472,181.83. This includes:

    a. $226,880 that represents a refund to customers of the costs incurred by the Company in connection with the 7 MW Combined Heat and Power (CHP) system for installation at Naval Station Newport and the Company's time spent in connection with seeking approval in Docket No. 4755 relating to the Notification[45] during calendar years 2016, 2017, 2018, and 2019, that were charged to the Electric EE Fund.
    b. $226,880 that is a Company shareholder-funded matching contribution to the Electric EE Fund.
    c. $18,421.83 in estimated interest for the 4-year period.

The above amount of $472,181.83 was added to the Electric EE Fund and is included on line 4 of table E-1, "Electric DSM Funding Source in 2021 by Sector $(000)" in Attachment 5 of the 2021 Annual Plan.

The sources of funding for the 2021 natural gas programs are shown in Attachment 6 Gas EE Program Tables, Table G-1. The Company proposes that the 2021 budget should be funded from the following sources: (1) one line on the customers' bill labeled "Energy Efficiency Charge" at $1.011 per dekatherm for residential customers and $0.704 per dekatherm for non-residential customers as calculated in Attachment 6, Table G-1 (composed of the existing energy efficiency program charge of $1.011 per dekatherm plus a fully reconciling funding mechanism of $0.000 per dekatherm for residential customers and the existing energy efficiency program charge of $0.704 per dekatherm plus a fully reconciling funding mechanism of $0.000 for non-residential customers in accordance with the requirements of R.I. Gen. Laws § 39-1-27.7); (2) projected carryovers or under-recoveries of the year-end 2020 fund balance, including interest at the rate in effect for customer deposits; and (3) low income weatherization funding in base rates. Funding sources do not include revolving loan funds.

[45] On May 31, 2018, the Company filed a Notification of an Energy Efficiency Incentive Greater Than $3,000,000 (the Notification) related to the $7,242,000 incentive for a 7 MW Combined Heat and Power (CHP) system for installation at Naval Station Newport, in Newport, Rhode Island.

The 2021 budgets for cost-effective electric and natural gas efficiency investments are dependent on a number of projections that inform the amount of funding, including projections of electricity and natural gas sales, year-end 2020 large C&I program commitments, capacity payments received from ISO-NE (electric only), and year-end 2020 spending. The Company estimates that the electric projected fund balance at year-end 2020 will be positive $19.96 million, as shown in Line 3, Attachment 5, Table E-1; the gas fund balance at year-end 2020 is estimated to be positive $5.82 million, as shown in Line 2 Attachment 6, Table G-1.

It is likely that the actual year-end 2020 fund balance will be higher or lower than the dollar amounts projected in this Plan. To ensure that the 2021 Energy Efficiency Charge reflects the most current fund balance projections possible, the Company proposes to submit revised Tables E-1 and G-1 on December 1, 2020 to include several additional months of actual expenses and revenues in the calculation of the Charge. The Company proposes to submit revised tables on December 1, 2020 and not at the end of the year to provide the PUC with time to review the Company's proposed charges in advance of the Annual Plan hearing. This would allow the charges, if approved, to have an effective date of January 1, 2021. This will allow the Company to begin collecting the most accurate charge possible at the start of the program year and avoid any market confusion surrounding the status and implementation of the 2021 energy efficiency programs. If the actual year-end 2020 fund balance as filed in the Year-End Report on May 1, 2021 is higher or lower than that amount projected in the December1, 2020 revised Tables E-1 and G-1, any deviation will be fully reconciled in the next program year in accordance with the requirements of R.I. Gen. Laws § 39-1-27.7.

Other considerations regarding funding sources are described in the subsequent sections.

11.1 ISO-NE Capacity Market Revenue

Consistent with the LCP Standards, Annual Plan, and PUC decisions regarding annual plans since 2008, the Company and the Parties agree that kW-demand savings achieved via the electric energy efficiency and Combined Heat and Power programs continue to participate in the FCM as Passive On-Peak Demand Resources. The Company will manage and direct the revenues by bidding the demand savings attributed to energy efficiency measures and Combined Heat and Power facilities in the FCM and managing the associated capacity resources to maximize the resulting FCM revenue. The revenues from measures installed through this Plan, as well as all previous Plans, will continue to be reinvested in energy savings for the life of the measure.

The Parties fully agree that the Company should recover all prudently incurred FCM expenses from ISO-NE capacity-payment revenue generated by the demand savings from efficiency programs represented by the Company. The Company expects that capacity payments received from the ISO-NE will exceed its administrative and Evaluation, Measurement and Verification (EM&V) compliance costs of participation in the FCM and will result in additional funds being made available to fund efficiency programs for customers. If these participation costs exceed the capacity payments, the Parties agree that the Company may recover its prudently incurred costs from the energy efficiency program fund. The Parties

reserve the right to examine the actions and expenses of the Company to ensure that only prudently incurred expenses are deducted from ISO-NE capacity payments or the energy efficiency program fund.

In addition, as part of the FCM, all qualified auction participants are required to post Financial Assurance to provide security that the promised resource will deliver the promised MW at the promised time. If, as a result of circumstances beyond the Company's control,[46] the Company is unable to provide all or a portion of the megawatts of capacity proposed in its qualification packages and capacity auction bids, some or all of the financial assurance monies would be forfeited.

11.2 Exceptions to the Natural Gas Energy Efficiency Program Charge

All natural gas used for distributed generation projects approved since 2014 will be subject to the natural gas energy efficiency surcharge.[47]

The 2006 Act allows the PUC to exempt natural gas used for manufacturing processes from the energy efficiency surcharge where the customer has established a self-directed program to invest in and achieve best effective energy efficiency in accordance with a plan approved by the PUC and subject to periodic review and approval by the PUC. Consistent with prior PUC decisions, the Parties have developed recommendations for a process under which a manufacturer may submit its self-directed program and the required annual reports for approval. The Parties recognize that this process may need to be reviewed and modified after the PUC has accumulated sufficient experience with these programs. Any customer that receives this exemption from the natural gas energy efficiency program charge will not be eligible to receive natural gas energy efficiency program services.

11.3 Budgets

The Parties agree that the portfolio of energy efficiency programs and services for 2021 will have an overall budget of approximately $122.3 million for electric programs and $38.6 million for natural gas programs. The Parties agree to segment the budget into three sectors: residential income eligible, residential non-income eligible, and commercial and industrial. Proposed sector and program budgets are provided in Attachment 5 Electric EE Program Tables, Table E-2 and Attachment 6 Gas EE Program Tables, Table G-2. The derivations of the spending budget and implementation expenses are illustrated in Attachment 5, Table E-3 and Attachment 6, Table G-3. A comparison of these proposed budgets to the 2019 budget is provided in Attachment 5, Table E-4 and Attachment 6, Table G-4.

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[46] Such circumstances may include legislative action to alter the EE Program Charge or discontinue the Company's authority to implement the energy efficiency programs underlying the Qualifications Package or a PUC decision limiting the Company's role in bidding the demand savings acquired through program efforts into the FCM.

[47] Natural gas used for distributed generation (excluding natural gas used by emergency generators) for distributed generation projects approved under the energy efficiency programs in 2013 and prior years - independent of the date those facilities become commercially operable – are not subject to the energy efficiency surcharge when natural gas used for that purpose can be clearly identified through uniquely metered use and when so requested in writing by the customer.

The Parties agree to review the status of budgets regularly to assess whether they are likely to be fully utilized. If not being utilized, the Parties agree to review the advisability of transferring funds to other programs where the money could be more effectively used. Fund transfer guidelines are presented in Section 11.4 below.

The Company will continue the practice of funding commitments established in the 2014 Plan, Docket 4451. Specifically, the Company will continue to make funding commitments for projects with a projected incentive in excess of $3 million. For all other projects, except those with incentives greater than $3 million, there would be no commitment budget.

11.4 Transferring Funds

The Parties will regularly review the amount of funds needed and available for each program (as well as any changes to the overall fund balance discussed above) and will transfer monies as needed. Transfers during the program year may occur as follows:

- Transfers within a Sector. For transfers of less than 20% of the originating program's budget, the Company can transfer funds from one program to another program or pilot in the same sector. For transfers of 20% or more of the originating program or pilot's budget, the Company can transfer funds from one program to another program in the same sector with the Division's prior approval. Upon seeking the Division's approval, the Company shall simultaneously notify the EERMC and OER. For all transfers in a sector, the Company will reflect changes in the quarterly report(s) following the transfer and the year-end report.

- Transfers between Sectors. The Company can transfer funds from one sector to another sector with the Division's prior approval. Upon seeking the Division's approval, the Company shall simultaneously notify the EERMC and OER. If a transfer reduces the originating sector's budget by more than 20% in aggregate over the course of the program year, the transfer will also require PUC approval. For all transfers between sectors, the Company will reflect changes in the quarterly report(s) following the transfer and the year-end report.

- Transfers among residential retrofit programs. The Company can transfer among Energy*Wise*, Multifamily, Income Eligible Multifamily, and C&I Multifamily (which are in different sectors) programs in order to achieve the overall savings goals of all programs. Although these are listed as separate lines in the program tables, they are essentially one program from an implementation standpoint. For all transfers between residential retrofit programs, the Company will reflect changes in the quarterly report(s) following the transfer and the year-end report.

- For transfers requiring Division and/or EERMC, but not PUC approval, the Parties will inform the PUC of the transfers, both between sectors and within sectors, in a timely fashion.

- The Company will not be permitted to adjust its goals or incentive target calculations as a result of any transfers between sector budgets. However, after any budget transfers between sectors are made, the sector spending budgets will be recalculated for the purposes of the performance incentive calculation. Any changes will be communicated and reported consistent with transfers between sectors, described above.

11.5 Budget Management

Deviations from the planned budget for 2021 are possible during the program year. The Parties contemplate three scenarios, and have agreed to address them as follows:

- The Company's expenditures for 2021 may exceed the total budget by up to 10% so long as written notification is provided to the EERMC, OER, PUC, and DPUC for any deviation. The Company will track expected expenditures relative to planned budgets and will report to stakeholders through inclusion in the quarterly reports, or earlier, if the Company believes such overage is likely to occur. Any such notification will occur as soon as possible, and no later than the distribution of the Company's Third Quarter Report in mid-November 2021 and must explain the need for a higher budget and must justify how the expenditures are reasonably consistent with the original annual plan and in accordance with Least Cost Procurement.

- The Company agrees that, during 2021, if the Company anticipates that continued operation of its programs is likely to result in actual expenditures exceeding the total budget by more than 10%, the Company will seek a vote of approval from the EERMC. OER commits to making all reasonable efforts to schedule such vote as soon as feasible following notification, but no later than thirty days from receipt of notification. Following EERMC action, the Company will be required to obtain approval from the PUC for expenditures in excess of 15% higher than the total budget, which would be collected through reconciliation in the next year's energy efficiency program charge.

- During a program year, if the Company did not anticipate and notify parties identified above that its actual expenditures would exceed the total budget by more than 10%, but actual expenditures do exceed such threshold, such expenditures above 110% of approved budget will be at the Company's risk, and in order to secure cost recovery, the Company will bear the burden of demonstrating the reasonableness of its actions to the PUC, including an explanation of why the over-spending occurred and how the expenditures are reasonably consistent with the original plan and in accordance with Least Cost Procurement. Such demonstration would be required to be part of the 2021 Year-End Report, if not sooner.

In each of these three instances, the PUC retains its traditional ratemaking authority to review the prudency and reasonableness of the Company's actions.

11.6 Notification of large customer incentives

The Company shall inform the PUC, DPUC, OER, and EERMC in writing of any energy efficiency incentive annual offer in excess of $3 million per a measure. The Company shall inform the DPUC, OER, and EERMC in writing of any CHP project with a net output of 1 MW or greater (where net is the nameplate MW output minus CHP auxiliary kW). The process for notification of CHP projects is described in Attachment 2 C&I Programs.

To prevent customer delays and to facilitate the Company's ability to meet customer expectation and annual energy savings goals, the OER, EERMC and Division agree to ask questions and provide comments on any non-CHP energy efficiency incentive annual offer in excess of $3 million within thirty days. The Company, through its own discretion, may proceed with an incentive offer. The incentive, and any other related proposals will be authorized to proceed after thirty days from the date on which the Company notified the PUC, OER, Division, and EERMC of the incentive unless the PUC suspends the filing and/or issues an order within such 30-day period to extend the time for purposes of further review.

12. Performance Incentive Plan

12.1 Background

Pursuant to R.I. Gen. Laws § 39-1-27.7(e) and § 39-1-27.7.1 and the revised LCP Standards as approved in Docket 5015, the Company has an opportunity to earn a shareholder incentive (also called performance incentive) that is dependent on its performance in implementing Least-Cost Procurement. The revised LCP Standards indicate that the structure of a performance incentive will only be proposed in the Three-Year Energy Efficiency Plan.

12.2 Performance Incentive Structure

The structure of the proposed performance incentive mechanism is detailed in the Company's 2021-23 Three-Year Energy Efficiency and Conservation Procurement Plan. The proposed specific application of that mechanism to the 2021 Annual Plan is outlined below.

12.2.1 Total Performance Incentive Pool

The Company's design level incentive pool (i.e. the performance incentive that the Company will earn for delivering 100% of planned net benefits) will be established at $7.2 million. $5.5 million of this pool will be allocated to the electric portfolio, and $1.7 million to the gas portfolio.

12.2.2 Sector Allocations

The respective electric and gas performance incentive pools will be allocated among sectors on the basis of the following percentages:

Table 19. Allocations of Performance Incentive Earning Opportunity

Sector	Electric Portfolio Allocation of Overall Performance Incentive Pool by Sector in 2021	Gas Portfolio Allocation of Overall Performance Incentive Pool by Sector in 2021
Residential	35%	35%
Income Eligible	20%	25%
Commercial and Industrial	45%	40%
Equity metric	0%	0%

These allocations have been set on the basis of stakeholder negotiations, and are intended to roughly align with share of implementation budget levels assigned to each sector, adjusted to reflect areas of stakeholder desired emphasis in Company program delivery.

As noted in the Three-Year Plan, while incentive pool allocations to the equity metric are anticipated in the 2022 and 2023 Annual Plans, the Company has not proposed any allocation for 2021 while necessary data tracking processes and baseline data continue to be developed through the remainder of 2020 and 2021.

12.2.3 Sector Thresholds and Caps

Given the unusual degree of delivery risk associated with the COVID-19 pandemic and resulting economic uncertainty, the lower bound of the Company's earning threshold within each sector will begin at 65% achievement of planned net benefits (as opposed to the standard 75% defined within the Three Year Plan).

Company sector level earnings will remain capped at 125% of design level earnings at Company achievement of 125% or greater planned net benefits within each sector.

12.2.4 Performance Incentive Earning Rates

Performance incentive earnings rates are to be set on the basis of sector specific planned net benefits (e.g. macroeconomic benefits) and the absolute dollar value of the share of the incentive pool allocated to each sector.

Table 20. PI Earning Rates by Sector – Electric Portfolio

Sector	Planned Net Benefits (ex-Macroeconomic Multiplier)	Design level Incentive Pool Allocation	Performance Incentive Payout Rate
Residential	$53,889,918	$1,925,000	11.132%
Income Eligible	$27,422,570	$1,100,000	12.617%
Commercial and Industrial	$197,427,750	$2,475,000	1.735%

Table 21. PI Earning Rates by Sector – Gas Portfolio

Sector	Planned Net Benefits (ex-Macroeconomic Multiplier)	Design level Incentive Pool Allocation	Performance Incentive Payout Rate
Residential	$14,459,738	$425,000	2.939%
Income Eligible	$11,763,446	$595,000	5.058%
Commercial and Industrial	$35,393,410	$765,000	2.161%

Specific performance incentive earnings within each sector will be determined on the basis of multiplying achieved net benefits (ex the macroeconomic multiplier) within each sector by the portfolio and sector specific payout rate for that sector, subject to the earnings threshold and cap rules outlined above in Section 12.2.3.

13. Future Performance Metrics

13.1 Testing Performance Metrics

In 2021, the Company proposes to continue tracking and reporting performance related to certain metrics in order to test progress towards several key objectives. In 2019, the Company began testing and reporting annual and lifetime carbon reductions resulting from investments in the electrification of heating and delivered fuels measures, lifetime MWh and MMBtu savings, program costs per energy savings, and a customer satisfaction metric. The Company proposes to continue tracking these metrics and work towards tracking greenhouse gas equivalent savings (in carbon dioxide equivalents) resulting from all electric and natural gas measures. These efforts were originally intended to inform consideration of new performance metrics for future annual plans that better align with Rhode Island's goals for Power Sector Transformation and greenhouse gas emissions reductions. In this Annual Plan, the Company anticipates proposing a new performance incentive mechanism that does not directly rely on these metrics, but will accomplish many of the same goals of the metrics as originally envisioned.

For any new performance incentive, the Company will work with the Division, OER, EERMC Consultants, and the EE TWG in the development of future baselines and financial rewards for any new annual goals resulting from these test metrics.

13.1.1 Carbon and Carbon Dioxide Equivalent (CO2e) Reductions

The Company proposes to continue tracking annual and lifetime carbon reductions resulting from investments in energy efficiency measures that save delivered fuels. While the Company does not currently include electrification of delivered fuel heating in its programs, this approach mirrors what was proposed in the Company's Power Sector Transformation Vision and Implementation Plan, as detailed in the Docket Nos. 4770/4780 Settlement Agreement. Carbon reductions will be calculated using emission rates from the 2018 AESC Study shown in Table 18. below, multiplied by the resulting annual and lifetime avoided oil or propane from measures that save these delivered fuels. In addition, the Company will use emissions rates from the 2018 AESC Study to quantify natural gas and electricity carbon emissions.

Table 18. 2018 AESC Study Emission Rates

Fuel	Emissions Rate	Unit
#2 Fuel Oil	0.081	CO2 (tons/MMBtu)
Propane	0.070	CO2 (tons/MMBtu)
Natural Gas	0.059	CO2 (tons/MMBtu)
Electricity	0.470	CO2 (tons/MWh)

The carbon metric will provide additional visibility into this suite of measures that do not significantly contribute to existing electric and demand savings goals but contribute to Rhode Island's greenhouse gas reduction goals.[48] The Company notes that the non-embedded value of carbon and nitrogen oxides is included as a calculated benefit in the RI Test.

In 2021, the Company proposes to continue testing a performance metric for carbon. The Company believes it is prudent to track this metric to help inform the development of an annual goal and potentially an appropriate performance incentive level in the future.

In addition to tracking carbon reductions for the purpose of this metric, the Company will develop a methodology for tracking and reporting CO2 equivalents (CO2e) during Q1 and Q2 of 2021, and test the incorporation of this tracking during program year 2021 for full incorporation and reporting out during program year 2022. The Company will coordinate with stakeholders including OER as methodologies are assessed and will determine an appropriate and transparent approach. While further research is needed, a possible approach is to calculate avoided emissions from energy efficiency based on marginal

[48] Rhode Island Greenhouse Gas Emissions Reduction Plan, December 2016.

emission rates from ISO-NE for SOx, NOx, and CO2, as reported in annual ISO New England Electric Generator Air Emissions Reports.[49] Total avoided emissions from each of these categories could then be converted to common CO2e units using a greenhouse gas equivalency calculator such as that available from US EPA.[50]

13.1.2 Lifetime and Annual All-Fuels MMBtu Savings

Beginning in this 2021 Annual Energy Efficiency Plan, the Company set its primary energy savings goals in lifetime units. The Energy Efficiency Targets as filed and approved in Docket 5023 were denominated in lifetime units, therefore the Company set its goals in the same units. Lifetime savings are calculated for each efficiency measure as the product of annual savings multiplied by the effective useful life of the measure. National Grid has reported lifetime energy savings units for several years and will continue to track annual energy savings alongside lifetime units. As in the 2020 Annual Plan, the Company will track and report all-fuels annual and lifetime MMBtu savings in 2021. For the electric savings measures, all-fuels MMBtu savings can contain savings from electricity, oil, or propane depending on the measure.

13.1.3 Program Costs Per Energy Savings

The Company currently includes the projected costs of lifetime electric and gas savings in its annual plans. In 2019, the Company began including the actual costs of lifetime savings compared to planned values in its quarterly reports. In 2021, the Company will continue this reporting in its quarterly reports and will continue to include this metric in its Year-End Report.

The Company will also continue to report on the cost of saved peak demand for the residential and C&I active demand response programs. This metric will be important to track as active demand response offerings mature and scale.

13.1.4 Customer Satisfaction

The Company proposes to continue to track a Customer Satisfaction metric in 2021. The metric will continue to apply to whole house programs such as Energy*Wise* Single Family and Income Eligible Single Family, with the potential to expand to other residential programs over time.

The Company proposes to utilize a third-party vendor to conduct the customer survey. The metric would be based on customer responses to the following questions:

- How likely are you to recommend this program to a friend or colleague? (0-10 point scale)
- How can we improve your experience? (Open ended question)

[49] See, for example, the 2018 ISO New England Electric Generator Air Emissions Report, Table 1-2: https://www.iso-ne.com/static-assets/documents/2020/05/2018_air_emissions_report.pdf
[50] https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

The Company will track customer responses and report out on the average satisfaction across tracked programs. The Company will detail progress on the above proposed metrics in its quarterly reports as well as a detailed summary of the results, lessons learned, and any needed improvements in its 2021 Year-End Report to the PUC.

13.1.5 Peak Hour Gas Demand Savings

In 2020, the Company began tracking an estimate of peak-hour gas demand savings based on existing heuristics that assume fixed, but distinct, relationships between annual and peak day and peak hour gas consumption for heating and non-heating based customer usage of natural gas. The Company will be clear in all reporting that National Grid considers this to be a rough approximation of peak-hour gas demand impacts. During 2020 and continuing in 2021, the Company has committed to working towards quantifying peak gas demand savings resulting from gas energy efficiency measures for application in future years and for potential inclusion in future performance incentive mechanisms. In order to quantify these savings, the Company joined an existing residential study in Massachusetts in 2020 and expanded the study scope to Rhode Island homes in order to measure peak gas demand savings resulting from residential sector energy efficiency measures. More information is included in Attachment 3 EM&V Plan. Further, the Company is initiating a commercial and industrial study of peak gas demand in 2020 to continue into 2021.

13.2 Forward Looking Performance Metrics

13.2.1 Renter and Rental Unit Tracking

The Company proposed a new performance incentive mechanism in the 2021-2023 Three-Year Energy Efficiency Plan and in this 2021 Annual Plan, as discussed in Section 12. The Company commits to revisiting this performance incentive structure in 2022 and beyond and negotiating in good faith with stakeholders around the allocation of a portion of the Company's performance incentive opportunity to achievement of specific equity related performance objectives. Consistent with the belief that measures of program participation by renters or rental units may be included in this mechanism, The Company is currently undertaking an analysis of the data it possesses on participants that are renters, along with rental units, and looks to expand the collection of this information across more programs, where appropriate. The Company has committed to tracking renters that participate in energy efficiency programs beginning in 2020 and will ensure the data is of sufficient breadth and quality to serve as the basis for linking a portion of the Company's performance incentive metric to program participation by rental units, should the Company and stakeholders agree to inclusion of this metric in future performance incentive mechanisms.

14. Advancing Docket 4600 Principles and Goals

Along with the quantitative benefits detailed in the Plan, as measured by the RI Test, the energy efficiency investments and innovation planned for 2021 also advance the Docket 4600 principles and goals.[51]

The Docket 4600-A Guidance Document directed that "the proposing party must provide accompanying evidence that addresses how the proposal advances, detracts from, or is neutral to each of the stated goals of the electric system."[52]

To meet this directive, the Company describes how the Plan either advances, detracts, or remains neutral on achieving the Docket 4600 goals for the electric system in Table 22.

Table 22. Docket 4600 Goals for the Electric System

4600 Goals for Electric System	Advances/Detracts/Neutral
Provide reliable, safe, clean, and affordable energy to Rhode Island customers over the long term.	Advances: The Plan gives customers tools to reduce their energy consumption. The safest, most reliable, most affordable energy is energy that is never used. Lowering energy consumption avoids investments in the installation, upgrade, or replacement of transmission and distribution infrastructure, and reduces strain on the system.
Strengthen the Rhode Island economy, support economic competitiveness, retain and create jobs by optimizing the benefits of a modern grid and attaining appropriate rate design structures.	Advances: The Plan will create significant economic benefits in Rhode Island. The Company expects that investments made in energy efficiency under this Plan will add $341.8 million to Rhode Island's Gross State Product (GSP).
Address the challenge of climate change and other forms of pollution.	Advances: The Plan will avoid 873,292 tons of carbon over the lifetime of the installed measures as well as reduce other pollutants associated with the generation and

[51] PUC Report and Order No. 22851 accepting the Stakeholder Report. Written Order issued July 31, 2017.
[52] Approved final clean version of Guidance Document 10/27/17.

	combustion of electricity, natural gas, and delivered fuels.
Prioritize and facilitate increasing customer investment in their facilities (efficiency, distributed generation, storage, responsive demand, and the electrification of vehicles and heating) where that investment provides recognizable net benefits.	Advances: The Plan provides incentives for customers to invest in cost-effective energy efficiency measures in their facilities and participate in demand response programs.
Appropriately compensate distributed energy resources for the value they provide to the electricity system, customers, and society.	Neutral
Appropriately charge customers for the cost they impose on the grid.	Neutral
Appropriately compensate the distribution utility for the services it provides.	Advances: The performance incentive contained in this Plan compensates the Company for achieving the energy savings goals through delivering cost-effective energy efficiency programs to customers while aligning with the PUC's PIM principles.
Align distribution utility, customer, and policy objectives and interests through the regulatory framework, including rate design, cost recovery, and incentive.	Advances: The Plan aligns Company, customer, and policy objectives and interests by incentivizing energy savings measures that enable customers to manage and reduce their energy consumption, which in turn contributes to the greenhouse gas reduction goals of the Resilient Rhode Island Act of 2014, Power Sector Transformation goals, Heating Sector Transformation goals, and the 100% Renewable Electricity goal while allowing the Company to earn a performance incentive.

CONCLUSION

15. Miscellaneous Provisions

- Other than as expressly stated herein, this Plan establishes no principles and shall not be deemed to foreclose any party from making any contention in any future proceeding or investigation before the PUC.
- Other than as expressly stated herein, the approval of this Plan by the PUC shall not in any way constitute a determination as to the merits of any issue in any other PUC proceeding.
- The Parties agree that National Grid shall convene the Energy Efficiency Technical Working Group no less than six times in 2021 to review the status and performance of the Company's 2021 energy efficiency programs and advise the Company on potential energy efficiency programs for 2022.

16. Reporting Requirements

- In 2021, the Company will provide quarterly reports to the EERMC, the Division, OER, the EE TWG, and the PUC on the most currently available program performance for both natural gas and electric efficiency programs. These reports will include a comparison of budgets and goals by program to actual expenses and savings on a year-to-date basis, and a status report on revolving loan funds. The Company will also coordinate reporting of loan funds with the Rhode Island Infrastructure Bank. The reports will also include a brief summary of program progress and will highlight issues by sector for EERMC, Division, OER, and Technical Working Group attention. Within the C&I sector, there will be separate highlighting of large and small customer program progress and issues. Beginning in the second quarter, the quarterly reports also include a forecast of expected results.
- In the 2019 Year End Report, the Company provided detailed costs schedules that were developed in collaboration with the Rhode Island Division of Public Utilities and Carriers. The Company proposes to submit detailed cost schedules in the 2021 Year End Report. In addition, the Company also proposes to submit confidential vendor schedules to the PUC, with a motion for protective treatment. These confidential vendor schedules detail costs to individual vendors and other external entities.
- In 2021 for months during which quarterly reports are not produced, the Company will provide to the EERMC, the Division, and the EE TWG monthly summaries of year-to-date spending and savings and results by sector.
- The Company will provide to the Parties, the EE TWG, and file with the PUC its 2021 Year-End Report no later than May 1, 2022. This report will include achieved natural gas and electric energy savings in 2021 and earned incentives for 2021.
- The Company will provide the Parties and the EE TWG with a summary of evaluation results that have been incorporated into the Annual Plan within the annual plan. including a description of the impact of those results in planning the Company's 2021 programs, in the Plan to be filed by October 15, 2020.

17. Requested Rulings

The Company respectfully requests that the PUC approve the 2021 Annual Energy Efficiency Plan as presented in this document and the supporting attachments in its entirety. The plan has been developed with careful consideration of the linkages between all parts. The specific components of this plan for which the Company requests approval include:

- The savings goals, programs, measures, budgets, and associated customer collections required to fund the energy efficiency programs in 2021.
- The pilots, demonstrations, and assessments the Company proposes for program year 2021 and the associated budgets and customer collections required to fund those efforts.
- The performance incentive mechanism and associated earning opportunity as included in the three-year plan and included in this Annual Plan.

ATTACHMENTS

Annual Plan Attachment 1. Residential and Income Eligible Energy Efficiency Solutions and Programs

Annual Plan Attachment 2. Commercial and Industrial Energy Efficiency Solutions and Programs

Annual Plan Attachment 3. Evaluation, Measurement & Verification Plan

Annual Plan Attachment 4. Rhode Island Benefit Cost Test Description

Annual Plan Attachment 5. Electric Energy Efficiency Program Tables

Annual Plan Attachment 6. Gas Energy Efficiency Program Tables

Annual Plan Attachment 7. Rate and Bill Impacts

Annual Plan Attachment 8. Pilots, Demonstrations & Assessments

Annual Plan Attachment 9. Cross-Program Summary