2024 Energy Efficiency Plan
Draft Narrative
August 3, 2024

Dear Energy Efficiency Technical Working Group Members and EERMC Council members,

This draft of the 2024 Energy Efficiency Plan highlights key programmatic elements and policy enhancements that will shape the discussion with stakeholders during the remainder of the planning process. This Draft includes preliminary 2024 savings, benefits, and budgets. Further, when reviewing this Draft, please note the following:

a. This draft should not be considered as a complete list of topics that will be addressed in the subsequent drafts of the Plan and is not binding. Subject to further discussions with stakeholders and analysis during the planning process, content included here may be modified.
b. The structure of this draft is based on the 2023 Annual Plan. This draft has been modified to account for anticipated adjustments to the Plan content and format. The Company may refine and consolidate the text to make a more readable and accessible final document.

With these stated understandings, the Company hopes this document is helpful in highlighting the areas of feedback proposed by stakeholders through the Energy Efficiency Technical Working Group (EETWG) process and makes clear where stakeholders may expect to see program enhancements addressed in the first draft.

The Company requests that reviewers provide any written input on the contents by August 24, 2023, with an expectation that discussion of the draft will continue at the Energy Efficiency Resource Management Council (EERMC) and Energy Efficiency Technical Working Group EETWG meetings.

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Pre-Filed Testimony

Consistent with the revised Least Cost Procurement Standards ("LCP Standards" or "Standards") approved by the RI PUC in Docket 5015[1], the Company will include pre-filed testimony with the Plan that the Plan is compliant with the Standards.

1. Introduction

1.1 Executive Summary

Pursuant to Rhode Island General Statue § 39-1-27.7 (Comprehensive Energy Conservation, Efficiency and Affordability Act of 2006),[2] the Narragansett Electric Company d/b/a Rhode Island Energy (RI Energy or Company) hereby submits its 2024 Annual Energy Efficiency and Conservation Procurement Plan (Annual Plan or 2024 Plan). This is the first annual plan submitted within the sixth triennial plan, the 2024-2026 Three-Year Energy Efficiency and Conservation Procurement Plan[3] (2024-2026 Plan).

Energy efficiency is the most cost-effective approach to lower energy costs, increase grid reliability, and protect the environment through the reduction of carbon and other air pollutant emissions. Customers who directly participate in the Company's Energy Efficiency Programs save energy and lower their energy bills. Non-program participants also benefit as energy efficiency reduces peak demand and lowers long-term base load, reducing the need for investments in distribution, generation, and transmission infrastructure.

The Company's energy efficiency programs are a cost-effective method of mitigating climate change and meeting state and federal mandates. The programs reduce carbon dioxide and other greenhouse gas emissions, such as nitrous oxides, sulfur oxides and chlorofluorocarbons (from refrigerants). On April 14, 2021, Governor Dan McKee signed into law the 2021 Act on Climate[4], legislation which set forth enforceable statewide, economy-wide greenhouse gas emission reduction mandates. The legislation requires Rhode Island to reduce greenhouse gas emissions by 45 percent below 1990 levels by 2030, 80 percent by 2040, and achieve net-zero emissions by 2050. Energy efficiency in buildings is a key strategy to achieving the legislation's mandates of reducing greenhouse gas emissions in the state and the

[1] RI PUC Docket 5015. http://www.ripuc.ri.gov/eventsactions/docket/5015page.html

[2] Rhode Island General Law, *Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006*, RIGL § 39-1-27.7.

[3] 2024-2026 Three-Year Energy Efficiency and Conservation Procurement Plan, Oct. 15, 2023.

[4] Rhode Island General Law, *2021 Act on Climate*, RIGL §42-6.2.

Company plans to pursue a number of strategies to decarbonize the building sector including weatherization and the installation of efficient heating, cooling and hot water systems.[5]

To develop the Annual Plan and its associated binding savings goals and budgets, the Company worked closely with the Energy Efficiency & Resource Management Council (EERMC) and its consulting team, the Office of Energy Resources (OER), the Division of Public Utilities and Carriers (the Division), Energy Efficiency Technical Working Group stakeholders, the Company's vendors, as well as soliciting customer feedback. Additionally, the Energy Efficiency Equity Working Group's (EWG) report recommendations and ongoing work to increase outreach and participation equitably in the state influenced the design and implementation of the 2024 Plan.

The 2024 Plan is a $131.6 million investment in helping Rhode Island customers save energy and money.[6] This investment is expected to save 7,415,270 net lifetime MMBtu (one million British thermal units) and 730,509 net annual MMBtu across all fuels, while reducing carbon dioxide emissions by 72,976 short tons.[7] By calculating the combined energy and non-energy benefits (e.g., other system, societal, environmental, etc.), the state's efficiency investment is expected to generate $601.3M in total net benefits.

Rhode Island's efficiency programs support a robust workforce of local and regional vendors, contractors, and suppliers, further driving local economic activity. Highly skilled and trained professionals are the key to engaging more customers, driving participation in programs, and increasing energy savings across the Company's Energy Efficiency Programs. Therefore, the Company will increase workforce training to support zero-net energy projects, building operator certification, codes and standards compliance training, heat pump technologies, and weatherization. In 2024, the Company expects that federal funding through the Inflation Reduction Act[8] (IRA) will start to increase the demand for energy efficiency. Meeting this demand will require expansion of the current efficiency workforce and supply chain, as well as leveraging the knowledge and training opportunities available through trade allies.

The Company is focused on developing an equity-driven framework for its energy efficiency programs. For all market sectors, the Company plans to allocate program budgets to increase marketing to hard-to-reach populations. A small community-based organization pilot is also under consideration. If implemented, the Company would work with the EWG to design this pilot.

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[5] The Company is waiting on clarification from related *2021 Act on Climate* and EC4 strategy proceedings to determine if there are program changes needed for the 2024-2026 term.

[6] This number includes performance incentives relevant to electric and natural gas energy efficiency programs.

[7] The electric, gas, and delivered fuel energy efficiency measures proposed in the 2024 Plan will avoid over 72,976 short tons of carbon dioxide in 2024, which contributes toward Rhode Island's Act on Climate greenhouse gas emission reduction requirements of (45% below 1990 levels by 2030).

[8] H.R.5376, Inflation Reduction Act of 2022, Aug.16, 2022.

As federal funding for energy efficiency projects flows to state energy offices, it is critical that the Company's programs equitably serve all customers and align with the Justice40 Initiative.[9] This federal initiative mandates that a minimum of 40 percent of the overall benefits of federal investments must flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. This will ensure disadvantaged and historically marginalized Rhode Island communities are able to access and benefit from federal funding and the Company's programs.

Economic uncertainty, higher interest rates and inflation impact utility customers' financial decisions, and perhaps their willingness, to implement efficiency initiatives. The Company remains focused on delivering cost-effective programs and strategies that provide sustainable energy solutions. RI Energy continuously evaluates customer needs and market dynamics to determine if program enhancements and adjustments are warranted and to drive market transformation across multiple end uses, building types and market sectors. This requires flexibility in program planning so the Company can develop and evolve program design and efficacy as needed.

RI Energy is focused on making energy affordable by responsibly and equitably delivering energy savings and other benefits to customers across the state. The Company remains committed to delivering the most benefits for the least on-bill costs for customers. In 2024, the Company will look to leverage federal funding through IRA to support and complement existing efficiency efforts. This additional funding will allow RI Energy to serve more customers, address weatherization and other participation barriers, and help incentivize the decarbonization of buildings' heating, cooling and hot water systems. To encourage more investment in energy efficiency, the Company is looking at simplifying some of its financing offerings to make them more accessible to customers.

The remainder of this introductory section describes the 2024 Plan's associated energy savings and benefits, program planning process, and stakeholder engagement. This section provides an overview of the Company's proposed programs for the Residential, Income Eligible and C&I sectors, program costs and a funding plan. Section One also describes how the 2024 Plan is responsive to legal mandates and regulatory requirements and delineates the regulatory rulings requested. For further details regarding the Company's 2024 Plan and the Residential, Income Eligible and C&I programs, please see the applicable Attachment.

1.2 Plan Summary

1.2.1 Savings

The primary goal of the Plan is to create energy and economic cost savings for Rhode Island consumers through energy efficiency. The electric portfolio will save 797,771 lifetime MWh over the lifetime of the installed energy efficiency measures, 102,859 net annual MWhs, and 29,883 net annual kW from passive

[9] The Justice40 Initiative was established by President Joseph Biden's Executive Order 14008 issued Jan 27, 2021.

energy efficiency. The natural gas portfolio will save 3,727,336 lifetime MMBtu over the lifetime of installed natural gas measures and 339,004 annual MMBtu. For all fuels combined (electric, gas, oil, propane), the Plan will save 7,415,270 net lifetime MMBtu and 730,509 net annual MMBtu. Energy savings are measured and verified by third-party evaluation firms.

1.2.2 Benefits

The Plan will create significant benefits for Rhode Island's residential, commercial, industrial, and income eligible energy customers. In total, the Plan is expected to create $299 M in total benefits over the life of the installed electric, demand response, and natural gas energy efficiency measures.[10] Of these total benefits, $216 M come from electric efficiency, passive demand reductions, and active demand response. $82.6 M in benefits derive from natural gas efficiency.

Error! Reference source not found. includes a high-level summary of the electric-funded and natural gas-funded portions of the Plan.

Each $1 spent on the electric energy efficiency portfolio will create $1.78 in benefits over the lifetime of the investment, and every $1 spent on the natural gas portfolio will create $1.79 in benefits over the lifetime of the investments. A detailed summary of the benefits and costs included in the Rhode Island Test are included in Attachment 4 Rhode Island (RI) Benefit Cost Test.

1.2.3 Economic Impacts

The Company expects that investments made in energy efficiency under this Plan will add $232.7 M to Rhode Island's Gross State Product (GSP), the equivalent of 2,361 job years.[11] 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 Rhode Island Energy's 2021 energy efficiency programs found that 59% of companies that deliver services on behalf of the Company's energy efficiency programs are either headquartered or have a presence in Rhode Island.[12] Investments in energy efficiency contribute to Rhode Island's economy overall and benefit business owners and their employees who deliver these programs and services.

As described in Attachment 4, the calculation of RI Test benefits excludes any monetized value of economic impacts because of concerns over double counting of benefits with other categories.

[10] Total benefits do not include quantified economic impacts.
[11] Macroeconomic multipliers for the economic growth and job creation benefits of investing in cost-effective energy efficiency from "Economic Multipliers Update" filed in Docket 5189 on January 6, 2022. This is a correction to the multipliers in "Review of RI Test and Proposed Methodology" prepared for National Grid by the Brattle Group, January 31, 2019. These macroeconomic multipliers reflect the total impact to the Rhode Island economy and do not remove benefits counted elsewhere in the RI Test, so are shown as a separate economic impact analysis estimate.
[12] Guidehouse, "Rhode Island 2021 Energy Efficiency Workforce Analysis Report," June 1, 2022 (filed as part of National Grid's 2021 Year-End Report).

1.2.4 Environmental Benefits

The electric, gas, and delivered fuel energy efficiency measures proposed in this Plan will avoid over 72,976 short tons of carbon in 2024,[13] which contributes toward Rhode Island's Act on Climate greenhouse gas emission reduction requirement of 45% below 1990 levels by 2030, and toward Rhode Island's Act on Climate greenhouse gas emission requirement of net-zero by 2050.[14] The Company believes that robust, ambitious energy efficiency programs should be a foundational element of achieving greenhouse gas emission reduction targets. The Company also supports the various efforts that holistically evaluate the least cost pathways to realizing economy wide emissions.

1.2.5 Budgets and Funding

This Plan includes an investment of $95.2 M in the cost-effective electric energy efficiency portfolio in 2024.[15] If approved, this will be funded by $10.4 M in proceeds from the ISO New England (ISO-NE) Forward Capacity Market (FCM), revenues from the existing energy efficiency program charge of $0.0096 per kWh, and accounting for a fully reconciling mechanism of $0.00374 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 2024.[16,17]

This Plan also includes an investment of $36.4 M in the cost-effective natural gas energy efficiency portfolio in 2024.[18] If approved, this investment will be funded by revenues from the existing energy efficiency program charge of $1.136 per dekatherm for residential customers and $0.620 per dekatherm for non-residential customers, and accounting for a fully reconciling mechanism of $0.143 per dekatherm for residential customers and $0.473 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 2024.[19]

The cost of procuring 797,771 net lifetime MWh electric energy efficiency savings through the Plan is $62.8 M less than if that electric load was met by purchasing additional electric supply. The cost of procuring 3,727,336 MMBtu lifetime natural gas energy efficiency savings through the Plan is $6.9 M less than if that natural gas load was met by purchasing additional natural gas supply.[20]

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[13] While all energy savings seen in the plan are net, these emissions are calculated based on gross energy savings from EE measures. The marginal carbon emission rates are from "Avoided Energy Supply Components in New England: 2021 Report," Appendix G, based on U.S. Energy Information Agency data.
[14] http://webserver.rilin.state.ri.us/Statutes/TITLE42/42-6.2/42-6.2-2.HTM
[15] This number includes performance incentives relevant to electric programs.
[16] See Attachment 5 Electric EE Program Tables, Table E-1 for list of funding sources and calculation of the charge.
[17] No new RGGI funds will be available for efficiency programming in 2024. RIE will identify residual funds.
[18] This number includes performance incentives relevant to gas programs.
[19] See Attachment 6 Gas EE Program Tables, Table G-1 for list of funding sources and calculation of the charge.
[20] For more information on how this was calculated, see Section **Error! Reference source not found.** of the Main Text, "Cost of Annual Plan Compared to the Cost of Energy Supply"

Table 1. 2024 Energy Efficiency Program Plan Summary

Electric Programs by Sector	Implementation Budget ($000) [3]	Performance Incentive ($000)	Customer Contribution ($000)	Annual Savings (MWh)	Lifetime Savings (MWh)	¢/ Lifetime kWh [4]	Summer Annual Demand Savings (kW) [5]	Active Demand Response (kW)	Total Benefits ($000) [6]	RI Test B/C Ratio [6]	Participants [7]
Non-Income Eligible Residential	$27,096	$1,339.7	$9,291	36,566	197,120	¢18.5	4,580	0	$68,759	1.82	324,977
Income Eligible Residential [1]	$15,107	$0	$0	3,243	51,312	¢29.4	340	0	$23,102	1.53	5,976
Commercial and Industrial	$40,965	$4,299.8	$16,965	63,050	549,338	¢10.5	8,993	0	$124,612	2.00	2,559
Regulatory [2]	$6,352										
Electric Subtotal	**$89,518**	**$5,639.5**	**$26,256**	**102,859**	**797,771**	**¢14.5**	**14,633**	**0**	**$216,472**	**1.78**	**333,513**

Gas Programs by Sector	Implementation Budget ($000) [3]	Performance Incentive ($000)	Customer Contribution ($000)	Annual Savings (MMBtu)	Lifetime Savings (MMBtu)	$/ Lifetime MMBtu [4]	Total Benefits ($000) [6]	RI Test B/C Ratio [6]	Participants [7]
Non-Income Eligible Residential	$15,782	$0	$5,591	144,193	1,222,491	$17.48	$25,374	1.19	140,993
Income Eligible Residential [1]	$7,655	$0	$0	16,367	283,293	$27.02	$23,027	2.14	3,587
Commercial and Industrial	$9,441	$1,044	$4,143	178,444	2,221,552	$6.11	$62,012	2.79	765
Regulatory [2]	$2,507								
Gas Subtotal	**$35,384**	**$1,044**	**$9,734**	**339,004**	**3,727,336**	**$12.10**	**$132,825**	**1.79**	**145,345**
TOTAL Plan	**$124,902**	**$6,684**	**$25,990**				**$349,297**	**1.91**	**478,858**

(1) In addition to Income Eligible Residential programs, Income Eligible customers can participate in all Non-Income Eligible Residential programs.
(2) Regulatory Includes contributions to the Office of Energy Resources, EERMC and the Rhode Island Infrastructure Bank.
(3) The Program Implementation Budgets come from Tables E-3 and G-3 of Attachment 5 and 6, respectively.
(4) Performance Incentive excluded from denominator, consistent with the Attachment 5 and 6.
(5) The Summer Annual Demand Response (kW) measures passive demand savings.
(6) "Total Benefits" and the "RI Test B/C Ratio" continue to exclude economic benefits from the RI Test as in the 2022 Plan.
(7) The unit measure for participation varies by program. See Attachment 5, Table E-7 and Attachment 6, G-7 for participation goals by program.
(8) Electric Programs are funded by the Electric Energy Efficiency Charge but also include Delivered Fuels energy savings.

1.3 The Planning Process

This Plan benefited from the process undertaken in the 2023 calendar year that resulted in the 2024 – 2026 Three-Year Plan. This Annual Plan reflects a refinement of the planning that was undertaken for the first year of the Three-Year Plan, including incorporating the latest Evaluation, Measurement, and Verification (EM&V) studies and Avoided Cost study. The Three-Year Plan was informed by the areas of opportunity identified in the Rhode Island Energy Efficiency Market Potential Study Refresh (Market

Potential Study Refresh) commissioned by the EERMC and completed by Dunsky Energy Consulting in early 2023. This Annual Plan has also been guided by the LCP Standards in RI PUC Docket 23-07-EE. The Standards include an extensive set of "principles of program design" referenced in Section 2.2 0.

The Company has engaged the TWG and the EERMC and its consulting team throughout the planning process to leverage their expertise and seek their feedback. The Company is grateful for the substantive critiques and ideas that have come through this process of continued engagement. In particular, the discussions of equity 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.

1.4 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 Goals, Budget, and Funding Plan. The **Strategies and Approaches to Planning** section provides discussion of the Company's approach to implementing the principles of program design outlined in the LCP Standards and provides summary program descriptions, along with the major enhancements and innovations planned for 2024. 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 complies with the requirements for Cost-effectiveness, Reliability, Prudency (including a detailed discussion of equity and rate and bill impacts), Environmentally Responsible, and comparison to alternative cost of supply requirements, as set forth in the LCP Standards. **The Goals, Budget, and Funding Plan** detail these elements and discusses the performance incentive plan and performance metrics.

The eleven 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, 2024 changes with accompanying rationale, and proposed evaluations for each program. **Attachment 3 Evaluation, Measurement, and Verification Plan** reviews evaluation studies completed in 2022, details studies planned for 2024, and provides a recap of historical studies. **Attachment 4 RI Benefit Cost Test** presents the framework for assessing 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 bill impacts resulting from this Plan. **Attachment 8** details, for each sector, **2024 Pilots, Demonstrations, and Assessments**. **Attachment 9 Cross-Program Summary** documents how the programs described in this Plan relate to other specific Rhode Island Energy programs. **Attachment 10 Definitions** provides definitions of energy efficiency terms used throughout the annual plan. **Attachment 11 Equity Working Group Report** provides a summary of actions taken through the working group.

2. Strategies and Approaches to Planning

2.1 Strategic Overview

This Annual Plan is the first year of the 2024-2026 Three-Year Energy Efficiency Plan. This plan supports continued innovation and accelerates the efficiency of Rhode Island homes and businesses. This plan achieves savings by implementing the following key strategic priorities set out in the Three-Year Plan, modified for 2024:

- Increased customer outreach to expand participation.
- Targeted, comprehensive efficiency upgrades to ensure customers take full advantage of suite of program offerings.
- Enhanced financing options to enable customer investments in efficiency.
- Programs delivered equitably, with the input and guidance of the Rhode Island Equity Working Group (EWG).
- Increased workforce capacity to serve customers.

2.2 Principles of Program Design

This Annual Plan has been guided by the LCP Standards as updated in RI PUC Docket 23-07-EE, which provides a set of principles of program design. The bullets below summarize the principles and, if appropriate, in what Sections of this Plan they are addressed.

- Integration with other programs and policies – Section4, Coordination with Other Energy Policies and Programs, provides details on the Plan's connection to specific state policies. Program descriptions in Attachments 1 and 2 also describe the dissemination of information on energy programs beyond those run directly by the Company.
- Innovation – Innovative strategies are outlined in Attachment 8, Demonstrations, Pilots, and Assessments.
- Comprehensiveness – Examples of strategies to achieve deep comprehensive savings packages that emphasize whole building and whole system solutions are found in the Commercial and Industrial market sector approach and the Residential and Income Eligible whole building delivery program descriptions, in Attachments 2 and 1, respectively.
- Equity - Using an equity lens involves consideration of how to modify systemic and institutional structures that have made it easier for some customers to access the energy efficiency programs than others. Sections 2.5.1 and 2.6 describes the Company's approach to equity in 2024.
- Build on Prior Plans – The experience and lessons of prior planning and regulatory approval processes informs the current program design.
- Build on Prior Programs – Programs are continuously evolving, building from one plan year to the next. Each program description in Attachments 1 and 2 has a section addressing program design changes for 2024.

- Planned Based on Potential Assessments - This Annual Plan is informed by the 2023 Market Potential Study Refresh, and the areas of opportunity identified within it – as well as the cost implications of achieving higher levels of potential savings.
- Unlocks Capital and Effectively Uses 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, such as grants for overcoming pre-weatherization barriers, expanded HEAT loan, or third-party financing.
- Integration of Gas and Electric Energy Efficiency Programs – All programs are integrated across fuels where possible to optimize and benefit from synergies between the two energy systems.
- Strategies to Achieve Targets – As noted above, the overarching strategies highlighted in the Three-Year Plan permeate this Annual Plan.
- Investments on Behalf of All Customers – All customers contribute to energy efficiency program funding, and, in return, programs are designed so that all customers have the opportunity to participate. This element of equity is discussed further in Section 2.6.
- Efficacy - The Company has incorporated opportunities to balance the portfolio of energy savings measures and program approaches to drive higher cost efficiencies (i.e., the amount of energy savings per dollar invested) and minimize the impact on customer bills. Efficacy also incorporates Workforce Development, which is described further in Section 2.5.2.
- Parity Among Sectors – The Plan examines the amount collected from the different sectors by the SBC, as compared to the program budgets by sectors, to ensure that sectors are generally receiving the benefits paid for. This is further described in Section 6.3.2.
- Cost-Effectiveness – Programs are cost-effective as required and shown in Attachments 5 and 6. The application of cost-effectiveness as a design principle at a program level involves a balancing of comprehensive, costly projects with long-term measures, with programming that requires less intensive customer support, such as upstream programming and Strategic Energy Management Planning with very large customers.

Further details on the Company's application of the Standards are found in Section 6.

As with any Plan, this Plan was developed using the best information available at the time. Should circumstances change as the year develops, the Company will act in its capacity as Program Administrator to adapt as needed and inform stakeholders of the inability to execute a proposed strategy or commitment or the need to revise them.

2.3 Residential Programs

2.3.1 Overview of Residential and Income Eligible Energy Efficiency Programs

In 2024, the Company will continue all Residential and Income Eligible energy efficiency programs offered in 2023. All Residential and Income Eligible programs are funded by electric and natural gas customers. The Company offers the programs detailed below to provide comprehensive services to two regulatorily defined sectors, market rate and income eligible.

Residential Consumer Products

The Residential Consumer Products Program promotes the purchase of high efficiency household appliances carrying the ENERGY STAR® label including advanced power strips, dehumidifiers, pool pumps, room air cleaners, room air conditioners and most efficient refrigerators, freezers, clothes washers, and dryers. Consumers can participate by purchasing these products at retail stores or through the Company's online marketplace. This program trains retail sales staff about the ENERGY STAR label and how to promote the certification's energy and environmental benefits to consumers. The most efficient appliances are incentivized at the retailer level to encourage sales of these ENERGY STAR most efficient appliances. Additionally, the program offers refrigerator, freezer and dehumidifier recycling.

Home Energy Reports

The Home Energy Reports Program is a behavioral-based offering designed to make customers aware of their energy consumption through personalized print and email reports and a seamlessly integrated website. Each of the communication channels displays a customer's energy consumption patterns, sets an energy reduction goal for each customer, and contains a normative comparison to similarly sized and heated homes. The goal of the program is to inspire customers to take actions that reduce their energy consumption and increase their participation in other energy efficiency programs.

Residential High-Efficiency Heating, Cooling, and Hot Water (HVAC)

The Heating, Cooling and Ventilation HVAC Program promotes the installation of high efficiency central air conditioners and eligible heat pumps for electric customers and new energy-efficient natural gas related equipment including boilers, furnaces, windows, water heating equipment, thermostats, and water-saving devices. The program offers incentives for high efficiency air source heat pumps to customers with electric resistance heating as well as customers whose primary heating system is fuel by natural gas, oil or propane.

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 supports contractor training to increase accurate installation practices, testing of the high efficiency systems, tiered rebates for new high efficiency systems, and incentives for checking new and existing systems.

Residential New Construction

The Residential New Construction program offers financial incentives and no-cost education, training and technical support to builders and homeowners to promote the construction of high performing energy-efficient single family, multifamily and income eligible homes. The program helps residential new construction and major renovation projects meet high energy performance standards and provides education and training support to builders, designers, tradespeople, and code officials.

EnergyWise Single Family

The EnergyWise Program offers single-family customers (homes with 1-4 dwelling units) in-home energy assessments, weatherization services and information regarding their energy usage and energy-saving opportunities. The program is designed as a direct-to-customer offering that educates residential customers on how they can make their home more energy efficient. Energy specialists address base load electric use, and heating, cooling and water heating loads in single-family residential buildings through immediate installations of advanced power strips and water-saving devices.

Once the assessment and energy saving installations are completed, participants receive energy efficiency recommendations and technical assistance, as well as financial incentives to upgrade to high efficiency heating, ventilation, and air conditioning (HVAC) equipment, water heating systems, insulation, and smart thermostats. Customers also receive an Energy Action Plan detailing the additional energy savings opportunities they have through participation in other energy efficiency programs. Qualified customers can receive zero percent financing to install these high efficiency upgrades through the Company's financing programs, including the HEAT Loan.

Market-Rate Multifamily

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, and weatherization. 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 Commercial and Industrial (C&I) Multifamily gas program where a site may have a commercial meter or office space but also has individual dwelling units. The delivery of the Market-Rate Multifamily Program's services should be virtually indistinguishable to the customer as the Company's single point of contact will handle all program overlap (between Residential and C&I programs) and offer a seamless customer experience.

Income Eligible Programs

The Company wants customers who meet the income eligibility requirements and may have a high energy burden and/or difficulty paying their electric or gas bills to participate in, and benefit from, the Company's energy efficiency programs. Therefore, the income eligible sector is designated as a unique sector and funding for this sector is subsidized by both non-income-eligible residential customers and commercial and industrial customers so a larger proportion of income eligible customers can be served.

The Income Eligible Services (IES) Program offers home energy assessments, weatherization services, appliance, and heating system replacements with no customer cost to qualified single-family customers. 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. The IES Program's services are delivered by local Community Action Program (CAP) agencies who coordinate with outside

contractors that perform heating system and appliance replacements and weatherization installations with oversight provided by a Lead Vendor.

The Income Eligible Multifamily Program offers comprehensive energy services for multifamily customers that also meet the criteria for "income eligible" as defined in Attachment 1 Residential and IES Programs, Section 4. Multifamily. These services include energy assessments, incentives for heating and domestic hot water systems, air source heat pumps, cooling equipment, water savings installations and thermostats. Typically, there are no costs to the customer for these services as most income eligible upgrades are covered at 100 percent.

2.3.2 Major Residential and Income Eligible Program Changes

In 2024, the Company will continue to offer the full suite of Residential and Income Eligible energy efficiency programs listed above. These programs will be delivered in an equitable manner to make Rhode Island homes energy efficient through advanced building standards, weatherization, high efficiency HVAC and hot water systems, efficient appliances, behavioral strategies, smart thermostats, and more. In acknowledgement of the broad adoption of energy efficient lighting in the residential market, lighting will no longer be offered as a measure across residential programs beginning in 2024.

A top priority for the Company is to develop an equity-driven approach to the design, implementation, and marketing of Residential and Income Eligible programs. In 2024, the Company is committed to working with the Equity Working Group and other stakeholders to make sustained progress on equity initiatives. The Company plans to allocate Residential and Income Eligible program budgets to increase marketing to hard-to-reach populations. Another idea being explored is for the Company to partner with community-based organizations that have the experience and established relationships with neighborhoods and municipalities to promote the benefits of energy efficiency. If implemented, the Company would work with the Equity Working Group to design this pilot.

Due to pre-weatherization barriers (including but not limited to asbestos, knob-and-tube wiring and vermiculite) some customers are prevented from receiving the valuable weatherization services offered through the EnergyWise, Multifamily and IES Programs. During the 2024 program year, the Company will continue to collaborate with stakeholders and other groups to assess best practices and new strategies to address these pre-weatherization barriers. The Company will expand on and refine recent initiatives regarding data tracking of deferrals and pre-weatherization barriers across all Residential and Income Eligible programs.

The Company plans to coordinate with OER to leverage additional funding opportunities for energy efficiency measures and projects funded through the American Rescue Plan Act (ARPA) and the Inflation Reduction Act (IRA), such as Clean Heat Rhode Island. This program is administered by OER and received $25 million in ARPA funds to provide financial incentives to residential and C&I customers for the purchase and installation of high efficiency electric heat pumps. The Company is also considering establishing a pilot program to provide a new option for multifamily financing.

The Company is actively implementing its Income Eligible focused Heat Pump Plan to encourage electric resistance heating customers to upgrade to air source heat pumps systems. These high efficiency systems reduce annual energy expenditures and decrease reliance on fossil fuels. As part of the Company's Heat Pump Plan, the Company was directed by the Public Utilities Commission to develop a Heat Pump Plan to achieve 750 conversions annually by 2025 with 25 percent of those customers served classified as income eligible. In 2024, the Company will make a concerted effort to upgrade income-eligible customers.

2.4 Commercial and Industrial Programs

2.4.1 Overview of Commercial and Industrial Energy Efficiency Programs

The Commercial and Industrial programs offer incentives, rebates, technical assistance, and financing to customers that look to reduce energy consumption, cut greenhouse gas emission, or meet corporate sustainability goals. To reach our customers, the Company utilizes a Market Sector Approach, whereby specific energy efficiency initiatives are developed to meet the needs of different market segments (e.g., the Grocery program, Chain Restaurants, and the Industrial Initiative). In addition to the Market Sector Approach, the Company also provides Prescriptive and Custom offerings. The Prescriptive offerings are available for a wide variety of standardized energy efficient products with "deemed" savings values, such as lighting equipment, air compressors, variable speed drives, and stream traps. While the Custom offerings are available for any energy conservation measure that is not covered under alternative pathways.

In planning the Commercial and Industrial programs, the Company evaluates customer needs, market dynamics, and State policy objectives to determine how program offerings can be enhanced or adjusted to drive market transformation across multiple end-uses. Another central component to the planning process is the development of strategies that advance more equitable services, particularly within the Small Business and Multi-Family offerings.

The Commercial and Industrial (C&I) programs are listed below. For more details regarding program details and upcoming changes, please see Attachment 2 C&I Programs.

Large Commercial and Industrial New Construction and Building Energy Code Support

This program offers financial incentives and technical assistance to customers, design professionals, developers, and vendors to encourage energy efficiency in new construction, major renovation, planned replacement of aging equipment, and replacement of failed equipment projects. C&I customers with an annual electric consumption greater than 1.5 million kWh per year are eligible.

Through the program, design professionals are eligible to receive technical assistance to conduct energy modeling and analysis for new construction projects. Owner's design teams are offered incentives 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 projects or for equipment failure and replacement. Since customers are more likely to install energy-efficient equipment at the time of construction or equipment replacement, the program offers incentives to ensure customers make the investment immediately rather than doing so at a greater cost later. The

program also offers operations verification or quality assurance services to ensure that installed equipment and systems operate as intended.

The program supports the State's Zero Energy Building goals through engagement and in developing future offerings. The program promotes compliance with the building energy code to support the State's goals and objectives. Technical assistance is provided for advancing the development and adoption of minimum efficiency standards for appliances and equipment.

Large Commercial and Industrial Retrofit

All commercial, industrial, and institutional customers are eligible to participate in the Retrofit Program. The program incentivizes the replacement of existing equipment and systems with high efficiency alternatives when the customer might otherwise not plan on making efficiency investments. Incentivized measures include lighting, HVAC systems, motors, thermal envelope measures and custom measures in existing buildings. Technical assistance is offered to customers to help them identify energy-saving opportunities.

The program's incentives help C&I customers in defraying part of the material and labor costs associated with the installation of energy efficiency measures. In addition, the Company offers education and training, such as the Builder Operator Certification training, to support the adoption of energy-efficient equipment and practices.

Small Business Direct Install

This program is a retrofit offering that provides turn-key efficiency solutions to customers who use less than 1.0 million kWh per year. Through the program, a free on-site energy assessment is performed, and customers receive a customized report detailing recommended energy-efficient improvements.

From local pizzerias to small convenience stores, the Small Business Program serves small businesses of all customer types, buildings, and sizes. The program pays up to 70 percent of installation and equipment costs. Provided funds are available, customers can finance the remaining costs of the project for up to 60 months (typically 24) interest free on their electric bill using the Small Business Revolving Loan Fund.

Commercial and Industrial Multifamily

The C&I Multifamily Program provides comprehensive efficiency services for market-rate multifamily customers who reside in residential buildings with 5+ dwelling units. These coordinated services include energy assessments and incentives for weatherization and the replacement of heating and domestic hot water equipment and systems. The program's services are offered for all types of multifamily properties.

To streamline the delivery of program services, the Company designates a primary point of contact for the multifamily property who will manage and coordinate the services offered. The measures and services are offered through the Company's existing Energy Efficiency Portfolio of C&I programs (C&I Retrofit) and Residential programs (EnergyWise, Income Eligible, Residential New Construction and ENERGY STAR® HVAC).

2.4.2 Major Commercial and Industrial Program Changes for 2024

The Company plans to make a number of modifications and enhancements to the C&I programs during the 2024 program year. Some of these changes will affect how the Company engages customers in energy efficiency while other modifications focus on providing more innovative efficiency measures and services to C&I customers to capture all energy-saving opportunities. Intertwined, all the modifications and enhancements are designed to engage C&I customers and drive energy efficiency across Rhode Island. In 2024, the Company plans to implement the following strategies for its C&I programs:

- Deploy a data-driven approach to increasing customer participation in the C&I sector.
- Analyze customer consumption data (e.g., kilowatt-hours, peak load and therms) and past energy efficiency participation to better target customers, especially nonparticipants.
- Expand the reach of the Strategic Energy Management Planning Initiative to support the increasing number of customers with climate and sustainability goals.
- Support more advanced system controls, energy management systems and building analytics through retro-commissioning, monitoring-based commissioning, equipment right sizing and the Upstream Initiatives.
- Develop a host of prescriptive and custom offerings to promote commercial weatherization and greenhouse gas emission reductions through the installation of energy recovery ventilators, upstream heat pumps, and measures to prevent gas and refrigerant leak reductions.
- Work with the OER to better understand electrification efforts funded through federal and state programs.
- Promote the Main Streets Initiative in Environmental Justice Focus Areas.[21]
- Enhance continuing education for building managers and facilities operators.

2.5 Cross Cutting Programs

2.5.1 Equity

Equity is a key priority for the 2024 Plan. The Company is committed to ensuring customers across Rhode Island have equitable access to energy efficiency, regardless of their income, geographic location, primary language, business size, home ownership status, or other relevant barriers. The Company planned and developed its 2024 Energy Efficiency Programs with a conscious effort to serve all customer including low-and-moderate income and small business, gender, racially and ethnically diverse, and non-native English-speaking customers.

[21] The Rhode Island Department of Environmental Management defines an Environmental Justice Focus Area" as a census tract that meets one or more of the following criteria: (1) annual median household income is not more than sixty-five percent (65%) of the statewide annual median household income, (2) minority population is equal to or greater than forty percent (40%) of the population, (3) twenty-five percent (25%) or more of the households lack English language proficiency, or (4) minorities comprise twenty-five percent (25%) or more of the population and the annual median household income of the municipality in which the proposed area does not exceed one hundred fifty percent (150%) of the statewide annual median household income.

Throughout the 2021-2023 term, RI Energy and OER have co-hosted a series of Equity Working Group (EWG) meetings that were facilitated by the Green & Healthy Homes Initiative. The purpose of these meetings is to provide the Company with written recommendations to advance equity in the planning, design, and delivery of its Energy Efficiency Programs. The EWG has released two reports, in 2022[22] and 2023,[23] making recommendations for strategies and specific measurable actions for the Company to take to increase equity in energy efficiency. For the planning process for the 2024 Plan, RI Energy has worked with the EWG to develop the Company's 2024 Equity Commitments. For more information regarding the Company's 2024 Equity Commitments, please see Section 2.7.

2.5.2 Workforce Development

Clean energy and energy efficiency programs are drivers of job creation in Rhode Island. The Company's Energy Efficiency Programs support a large clean energy workforce of local and regional vendors, contractors, distributors, and suppliers. It is important that the jobs and economic benefits created from energy efficiency energy efficiency jobs reach all Rhode Island communities, especially environmental justice communities.

The success of Rhode Island's energy efficiency programs depends on having a highly skilled workforce. In 2024, the Company will collaborate with the Rhode Island Department of Labor & Training, the Governor's Workforce Board, and other stakeholders to identify the needs of the current and future energy efficiency workforce and to pursue federal funding in coordination with existing clean energy programs. Increasing workforce capacity creates additional opportunities for the Company to pursue equity-driven strategies by supporting and recruiting new workers from marginalized communities.

During the 2024-2026 term, the Company's workforce development efforts will be based on the recommendations from the recently released Rhode Island Workforce Needs Assessment Study.[24] The study made four recommendations for Rhode Island Energy, for which responses are provided here:

1) **Encourage workforce ecosystem coordination and leadership by advocating for increased emphasis on energy efficiency and workforce development within relevant state-wide entities and supporting emerging leadership efforts in the state around energy efficiency workforce development.**

   The study identified many entities and organizations currently offering training, certification and continuing education credits that support workforce development within energy efficiency. Some groups also provide funding and grants, as well as financial support for surround-care to help people with transportation or childcare challenges.

[22] 2021 Rhode Island Energy Efficiency Equity Working Group Report, prepared by Green & Healthy Homes Initiative, rel. Sep. 2021.
[23] 2022 Rhode Island Energy Efficiency Equity Working Group Report, prepared by Green & Healthy Homes Initiative, rel. Sep. 2022.
[24] Rhode Island Workforce Needs Assessment Study, rel. July 2023

Given the rich ecosystem of resources that already exists within the state, an effective next step would be to create an entity (i.e., group/web location) where these resources can be centralized and made available. This would greatly facilitate access to resources, easy to promote and bring more awareness about opportunities for residents.

The Governor's Workforce Board is the state's long-standing primary workforce training and investment entity, helping state entities design, fund and build training programs. They have just begun to form a new subcommittee, the Green Energy Workforce Advisory Committee, which would be perfectly positioned to lead the drive for energy efficiency workforce development. The Company can support the efforts of this Board and Committee to help develop a central resource for the state.

2) Support marketing efforts and pipeline building by further leveraging RI Energy's marketing and communications capacity with credible information resources and campaigns and by partnering with groups, especially those serving underserved communities, to raise awareness about the value and opportunities of energy efficiency jobs.

The Company is well known in Rhode Island and has a wide reach to customers/residents across the state. RI Energy's marketing and communications teams promote availability of energy efficiency programs through a variety of mediums on a regular basis. The Company can leverage these existing efforts to promote opportunities for energy efficiency training and careers, and partner with groups to reach underserved communities.

3) **Champion energy efficiency-related programs at all levels of education by increasing support for specific programs in high schools and vocational-technical schools, including curriculum development, instructor recruitment, internships, and equipment needs**.

High schools, vocational technical schools and adult training programs are an opportunity for bringing new workforce to energy efficiency, particularly when it comes to the trades. The Company will work with and support RIBA and RCWP to enhance and improve their existing educational programming.

4) Partner with contractors to expand worker recruitment by communicating the benefits of energy efficiency careers, funding career navigators and wraparound supports, and educating contractors about the opportunities in energy efficiency.

RI Energy and its energy efficiency Vendors are connected to a large network of contractors in the state, including insulation, HVAC, energy auditors and specialists, builders, contractors, and engineers. The Company can partner with contractors to identify their needs and connect them with resources (including wraparound services and career navigators).

In 2024, the Company will proactively prepare for an expansion of energy efficiency due to IRA federal funding for Residential, Income Eligible, and C&I projects. With increased funding from IRA and the greenhouse gas emission reduction goals mandated by the 2021 Act on Climate, the need for highly

skilled professionals in Rhode Island's energy efficiency workforce is only growing. The Company will increase its continuing education and training opportunities for existing and future members of the energy efficiency to build capacity and meet demand.

Meeting the increased demand for energy efficiency will require significant expansion of the current efficiency workforce and supply chain, as well as leveraging the knowledge and training opportunities available through trade allies. RI Energy plans to increase workforce trainings to support zero-net energy projects, building operator certification, HVAC system optimization and controls, heat pump technologies, weatherization, and general energy efficiency skills, such as auditing and the Association of Energy Engineers' Certified Energy Manager (CEM) certification. The Company will also enhance its continuing education opportunities for building managers and facilities operators. The Company will increase its efforts to recruit technical and vocational students and educate them about the career opportunities they have in energy efficiency.

The Company will coordinate workforce development efforts with the appropriate state and local authorities, to reduce or eliminate duplication of effort and expenditures.

2.5.3 Multifamily Landlords

The Company plans to heavily promote heat pump upgrades and other applicable energy efficiency measures to building owners and landlords. RI Energy recognizes gaps in current financing offerings, such as a lack of options for landlords in the Multifamily Program, and the Company plans to work to find effective ways to address these gaps. In 2024, the Company plans to establish a pilot program to provide a new multifamily financing option.

2.5.4 Enhance Financing and Funding Options

The Company currently offers several financing vehicles to customers including the On-Bill Refinancing Loan, Third-Party C&I Financing Loan, HEAT Loan, and financing through the Efficient Buildings Fund. In 2024, the Company will investigate ways in which these offerings can be expanded to serve more customers, including increasing loan limits for comprehensive projects. To make financing more useful in moving projects across the finish line, the Company will provide additional training on available financing mechanisms and how to position them effectively to internal sales staff and trade allies.

In addition to financing, the Company will collaborate with OER to integrate program incentives with state and federal funding. OER will administer $64 million in funding from the federal IRA in addition to $25 million from the American Rescue Plan Act (ARPA) for its High-Efficiency Heat Pump Program. The IRA also offers several enhanced tax credits to encourage homeowners to pursue efficiency and electrification measures. Rhode Island Infrastructure Bank, in addition to their $5 million annual allocation of program dollars, received an additional $5 million from a 2022 state bond issue to support a small business energy efficiency fund. The Company intends to leverage these outside dollars to encourage greater program participation.

2.5.5 HVAC Equipment

The Company plans to coordinate with OER to leverage additional funding opportunities for energy efficiency measures and projects funded through the American Rescue Plan Act (ARPA) and the Inflation Reduction Act (IRA), such as Clean Heat Rhode Island. This program is administered by OER and received $25 million in ARPA funds to provide financial incentives to residential and C&I customers for the purchase and installation of high efficiency electric heat pumps.

The Company will target electric heat resistance heat pump upgrades as outlined in the Company's *Electric Resistance Heating to Air Source Heat Pumps: Implementation Plan for the Income Eligible Sector*. The Company was directed by the Public Utilities Commission to develop the Heat Pump Plan to achieve 750 conversions annually by 2025 with 25 percent of those customers served classified as income eligible. In 2024, the Company will make a concerted effort to upgrade income-eligible customers.

In 2024, the Company will investigate right-sizing incentives for fossil fuel equipment and options for optimizing electric versus gas in with expanded AMF capabilities.

2.6 Participation and Outreach

In 2024, 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.

In 2024, the Company will continue its efforts to reach customers that have never participated in its energy efficiency programs. A comprehensive marketing campaign will be deployed in English and Spanish that will educate customers on the availability of the programs. The Company will continue its focus with Central Falls, East Providence, Pawtucket, Providence, and Woonsocket, communities with lower participation rates (some towns have participation rates at fewer than 5% of accounts, while other communities have participation rates upward of 30%) and will conduct additional outreach and engagement in those communities. Some of the communities may be further tailored to align with Federal Justice 40 communities. 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 2023 Year-End Report showing additive and cumulative portfolio participation. The Year-End Report also captures energy efficiency spending by zip code where additional spending on programs can be tracked.

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 2024, 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.

Table 2 describes the definitions for how Rhode Island Energy projects, tracks, and reports participation in the efficiency programs.

Table 2. 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
		Energy*Wise*	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
		Single Family – Income Eligible Services	Unique Billing Account
	Income Eligible Residential	Income Eligible Multifamily	Housing Units
		ENERGY STAR® HVAC	Unique Billing Account
	Residential	Energy*Wise*	Unique Billing Account
		Multifamily	Housing Units

		Home Energy Reports	Unique Billing Account
		Residential New Construction	Housing Units
		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® 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 2024. This method allows for a better estimation of unique participants but can make it more difficult to compare planned numbers across years.

The Company plans to introduce a new marketing campaign in 2024, with different visuals and messaging. The concept will be tested with customers before introducing it to the market.

2.7 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. Based on the Participation and Multifamily Census Study, there is an understanding that participation in Energy Efficiency has not been equally subscribed to across RI. The Company began a deeper dive into Equity in 2021 with participant and non-participant research to quantify gaps in participation. In 2022, the first year of the Equity Working Group was initiated jointly with the Office of Energy Resources so the Company could listen to the voices of advocates serving disadvantages communities. As a result of the EWG, metrics were developed and have been refined. The Company is committed to continuing its equity outreach and engagement and building upon efforts that began in 2022 and continued and expanded in 2023.

It is only through consistent and ongoing action that the disparity can be addressed. The energy efficiency non-participants have a much lower awareness of energy efficiency than participants, and it is a challenge to gain the attention of non-participants given the numerous stresses and pressures in their lives. By continuing engagement with community organizations that have the trust of non-participants, working to remove barriers to participation, and collaborating with other equity efforts, the Company strives to make continuous progress.

2022 metrics that will be reported in 2024 include:

- Spending by zip code reported in Energy Efficiency Year-End Report
- Assessment and Weatherization participation by town reported Q2 and Q4
    - Single family participation in EnergyWise and Income Eligible Services programs by town

  - EnergyWise and Income Eligible Services single family owner versus renter information
- Energy Efficiency outreach and education with other community organizations

2023 metrics that will continue in 2024 include:

- Continue cross training of Customer Advocates, CAP agencies, other home-visiting programs to better understand available programs and services for both energy efficiency and health/well-being.
- Hosting "office hours" or tabling events to answer questions and make connections with customers.
- Focus on non-participant, equity communities of Central Falls, East Providence, Pawtucket, Providence, and Woonsocket

The Energy Efficiency Equity work is also focused on ensuring qualified customers are moved to the discount rate. Even with community organizations that provide space to educate their customers about energy efficiency, the priority of these organizations is to assist customers with billing questions and payment plan opportunities. Not surprisingly, the immediate bill relief from the discount rate removes some financial pressure and concern from an energy burdened population. Direct face-to-face contact with Customer Advocates also builds customer trust. Once that trust is established, it is easier to move the attention of customers to energy efficiency.

In 2023 the Company began to engage with the Rhode Island Department of Health (DOH) Health Equity Zone (HEZ) initiative.[25] The HEZ initiative supports place-based approaches to promote healthy communities and improve the socioeconomic and environmental conditions in neighborhoods across Rhode Island. There are fifteen Health Equity Zone collaboratives across the state and each zone is overseen by a "backbone agency." The Company has previously engaged many of these agencies through the weatherization program and the HEZ initiative provides an additional opportunity to work with agencies that serve residents that have not historically participated in energy efficiency programs. In 2024 the Company will continue to participate in HEZ events and collaborate with backbone agencies to increase awareness of efficiency offerings.

2024 Equity efforts will focus on four areas:

1. Demonstration with non-profit organizations with outreach – An Equity demonstration will be developed to engage non-profit organizations in providing direct outreach to landlords in one or more of the five equity communities. The Equity Working Group has apprised us of increasing demands placed on non-profit organizations from stakeholders frequently requesting additional outreach with no additional funding. The Energy Efficiency Equity Demonstration would work

[25] https://health.ri.gov/programs/detail.php?pgm_id=1108

with a handful of stakeholders to provide direct outreach and education to landlords within the five equity communities. The Company will work with EWG stakeholders to develop how to engage with non-profits and the funding structure for participation.

2. Justice40 Initiative focus – The Company will continue with reporting on existing equity metrics while working with the EWG and OER to fine tune and align reporting metrics to be aligned with Justice40 reporting by OER. Justice40 is a federal investment in climate and clean energy benefits to disadvantaged communities. The Federal government is seeking to provide at least 40% of overall benefits to the defined communities. Reporting on the Justice40 communities allows the programs to highlight the Rhode Island benefits in the overall national efforts. Residents in these communities will hopefully also experience an additive impact in benefits with multiple clean energy and energy efficiency efforts focused on these communities.

3. Awareness education on Latina radio – In 2024 there will be a new energy efficiency marketing campaign in Rhode Island and the Company will work to expand the education to a Latina radio station in Spanish. Engagement with the Latina community has made us aware that radio is a preferred resource for relaying community information as opposed to print and email formats.

4. Removing barriers to participation – A large barrier to participation comes in the form of income verification. The Company was fortunate to provide self-attestation based, moderate income, defined as 60 – 80% state median income, no-cost weatherization services through RGGI supported funding from OER. This opportunity allowed the Company to serve customers and then determine whether these customers were considered moderate income after their participation. The Company proposes continuing to serve customers with either a self-attestation method or no qualification if they live within a Justice40 designated community.

3. Demonstrations, Pilots, and Assessments

Commercial, Industrial, and Residential demonstrations, pilots, and assessments are all vehicles that may be used to identify, test, analyze, and deliver new innovative solutions and services that are technically feasible, desirable by customers, and viable for inclusion in the portfolio. 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 additional details on evaluations for demonstrations, pilots, and assessments.

Consistent with PUC Guidance, the Company uses the following definitions for demonstrations, pilots, and assessments.

Demonstrations: 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.

Pilots: a small-scale, targeted program that is limited in scope, time, and spending and is designed to analyze the feasibility of a future program or rate design. Pilots are designed to test technologies and approaches to energy management not included in the core energy efficiency programs that could potentially become a new, standalone program. Given the scope of adding a new core program to the Company portfolio, it is likely that pilots will require a long-term commitment and broader set of stakeholder input, Savings associated with Pilots will not contribute to shareholder incentives. Pilots may be evaluated with either an independent or a vendor evaluation.

Assessments: 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. 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 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 2024 Annual Plan includes funding for one pilot (greater detail will be provided in Attachment 8). The Company also recognizes the need to stay abreast of relevant technological and policy innovations in energy efficiency. RI Energy is a member of several organizations that foster collaboration among efficiency program administrators and provide ongoing insights into emerging opportunities that support the efforts of the Company to deliver energy efficiency solutions to customers. These include:

- Electric Power Research Institute (EPRI)
- Northeast Energy Efficiency Partnerships (NEEP)
- Consortium for Energy Efficiency (CEE)

3.1 Multiyear 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.

There is no such multi-year commitment envisioned for 2024.

4. Coordination with Other Programs and Policies

Continuing to provide the best value to Rhode Island customers necessitates that the Company coordinate with other parts of the energy system, rather than pursuing savings programs and strategies in isolation. For its 2024 energy efficiency program plan, the Company highlights specific ways in which it plans to implement the energy efficiency portfolio of programs in coordination with other Company filings and activities, and state policies and objectives.

4.1 System Reliability Procurement

There are two points of integration between energy efficiency and system reliability procurement.

First, while the demand response program had historically been housed within the energy efficiency program, demand response will now be integrated into system reliability procurement (see the forthcoming 2024-2026 System Reliability Procurement Three-Year Plan for more information). While the program will maintain its core design, its new home within system reliability procurement will prompt additional coordination between energy efficiency program staff and system planning team members.

Second, energy efficiency may be a potentially viable solution to system needs. The system reliability procurement process evaluates the ability of energy efficiency to resolve system needs either partially or fully in a manner that less than the cost of the best alternative utility reliability procurement solution. In this manner, energy efficiency coordinates with system reliability procurement to potentially mitigate specific system needs as they arise.

4.2 Advanced Metering Functionality (AMF) and Grid Modernization

The increased availability of more near real-time customer energy usage data, if enabled by AMF deployment, will allow for enhancements to energy-efficiency program design and implementation. Currently, the Company's plan for AMF meter deployment if approved begins with a "Solution Validation" phase, installing approximately 500 meters starting in late 2024, followed by continual deployment expected to go through the end of 2025/early 2026. Therefore, this Annual Plan does not include activities that rely on AMF. However, throughout 2024, the Company will identify activities which may help lay the groundwork for implementing program enhancements which AMF will enable in future years. The intent of such activities would be to increase participants', stakeholders', and the Company's comfort and familiarity with targeted programs and Pay-4-Performance programs. As these are foundational program enhancements enabled by AMF, laying the groundwork for these concepts in 2024 should help facilitate a smooth implementation of AMF-enabled enhancements once they are available.

4.3 2021 Act on Climate

The 2021 Act on Climate sets enforceable state-wide, economy-wide greenhouse gas emissions reduction mandates culminating in net zero greenhouse gas emissions by 2050. The State's 2022 Update to the 2016 Greenhouse Gas Emissions Reduction Plan identifies energy efficiency as a priority action in the near-term to get Rhode Island on the path to achieving an interim mandate of 45% reduction in greenhouse gas emissions by 2030. This 2024 energy efficiency program plan directly advances greenhouse gas emissions reductions through energy savings. Tables E-6A and G-6A in Attachments 5 and 6 include the projected carbon reductions from the 2024 Plan.

4.4 Coordination with State and Federal Incentive Programs

The Company plans to coordinate with OER on the new $25M heat pump program to facilitate the customer experience, ensure that all available incentives are communicated, and explore synergies in implementation. The draft proposed program design released by OER on July 25, 2022, indicates that the program will include funding for fuel switching and will complement RIE's efforts to promote efficient heat pump adoption for residential, low-income, and small commercial customers. As indicated in Section 2.3 of this plan, the Company will work with OER to complement the federal funding they will make available for home efficiency improvements.

4.5 New Codes and Standards

In January 2023, the Rhode Island House of Representatives passed legislation, H6101/S0855 Sub A, requiring the state to adopt the 2024 International Energy Conservation Code (2024 IECC) within three months of publication.[26] The law requires adoption of the 2024 IECC with no weakening amendments as well as the creation of a plan for 90 percent compliance within six months for residential and commercial new construction and renovation projects. These residential code changes will most likely shift the new construction and renovation industry away from prescriptive pathways toward a performance-based pathway for compliance (i.e., energy ratings) and as a result, more Home Energy Rating System (HERS) Raters will be needed. The Company will increase trainings to support code compliance. To support this increase, the Company and OER will leverage IRA funding that assists states in adopting the 2024 IECC and/or a zero-energy code, as well as implementing a code compliance plan. OER will be responsible for administering this funding and the Company will work closely with the agency to support code training efforts.

4.6 Future of Gas

The Public Utility Commission Docket 22-01-NG Investigation into the Future of the Regulated Gas Distribution Business in Rhode Island is underway with regular meetings of the established stakeholder committee, the expected kickoff of the Technical Analysis expected this fall and a policy development phase to follow in 2024 informed by the results of the Technical Analysis. As such, the outcomes of the

[26] The 2024 IECC is expected to go into effect in January 2024.

docket are unlikely to impact the 2024 annual plan although the Company expects to have better visibility into future decarbonization pathways in light of this docket to inform subsequent annual plans.

5. Evaluation, Measurement, and Verification

EM&V provides independent verification of impacts to ensure that savings and benefits claimed by the Company through its energy efficiency programs are accurate and credible. EM&V also provides insight into market characteristics and guidance on energy efficiency program design to improve the delivery of cost-effective programs.

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 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 2010 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, or upon request.

Additionally, the EM&V Plan for 2024 is presented in Attachment 3 and includes brief descriptions of each of the proposed studies. The areas proposed for study in 2024 were chosen based on several 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. This list may be added to as the year progresses and different evaluation priorities are identified. In particular, the Company 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. Consistency with Least Cost Procurement 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 in Docket No. 23-07-EE in July 2023. The Standards guide how energy efficiency services are delivered – in a manner that is optimally cost-effective, reliable, prudent, and environmentally responsible.

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.

6.1 Cost-effectiveness

6.1.1 Interpretation of Standard

The RI Test compares the present value of the total lifetime benefits derived from efficiency savings to the total costs of acquiring those savings (i.e., program and customers' costs). According to the Standards, "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. 4600, qualitative benefits and costs may be considered in determining cost-effectiveness. The portfolio must be cost-effective, and programs must be cost-effective."[27]

In Docket 23-07-EE, changes to the Standards required the following:

- An additional view of cost-effectiveness that, "for categories with value or cost that is shared between Rhode Island Energy and other jurisdictions (both within the state and region), presents only those benefits and costs that will be allocated to Rhode Island Energy." In considering the nature of "other jurisdictions," the Company interpreted this to refer to states other than Rhode Island, and that "Rhode Island Energy" therefore refers, in this case, to Rhode Island. Using this interpretation, the Company identified certain categories of benefits that flow outside of Rhode Island. These include a portion of demand reduction induced price effects (DRIPE) and pool transmission facility (PTF) capacity values. Attachments E-5B and G-5B present the requested additional view that shows that programs are still cost effective absent these benefits. To the best of the knowledge of the Company, no costs accrue outside of Rhode Island.
- The "RI Test shall include the costs of CO2 mitigation as they are imposed and are projected to be imposed by the Regional Greenhouse Gas Initiative, Rhode Island Renewable Energy Standard and Rhode Island Act on Climate." In consultation with the OER, EERMC, and Division, a value and approach for CO2 mitigation was developed which is used in all cost-effectiveness analyses in this Plan. This approach is to use Marginal Abatement Cost (MAC) and Social Cost of Carbon (SCC) from prior AESC study in the analysis, while parties await resolution of the future of gas docket.

6.1.2 Compliance with Standard

The Company has analyzed the cost-effectiveness for the proposed 2024 portfolio and programs using the RI Test as required by Docket 4600 and the LCP Standards. The portfolio and programs proposed for 2024 satisfy these criteria for cost-effectiveness.

As provided for in the Docket 4600 RI Test Framework, 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, non-embedded NOx reduction benefits, the value of improved reliability, and non-energy impacts (NEIs). Costs include all projects costs, program planning

[28] RI PUC Docket 5015, LCP Standards, Section 3.2N

and 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. The RI Test as applied to the 2024 Annual Plan utilizes the regional avoided cost study, referred to as AESC 2021, completed by Synapse Energy Economics in May 2021 that provided the monetization of most benefit categories. The monetization of benefits also incorporates the latest EM&V results that affect claimable savings in the programs. Attachment 4 provides additional detail on changes in the avoided costs.

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 1.78 in the presentation of BCR results, which means that approximately $1.78 in monetized lifetime 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 1.79 in the presentation of BCR results, which means that $1.79 in lifetime benefits is expected to be created for each $1 spent on the portfolio. The tables in Attachments 5 and 6 also demonstrate cost-effectiveness at a program level.

Cost-effectiveness results do not include economic impacts such as employment and gross state product impacts from energy efficiency investments. Per agreement with stakeholders, economic impacts are shown separately from the benefit-cost analysis in Attachment 5, Table E-5a (Economic Benefits) and Attachment 6, Table E-6a (Economic Benefits). In addition, the RI Test and the Docket 4600 Framework guidance also indicate that categories of the Framework can be considered qualitatively in the assessment of cost-effectiveness. When considering the significant economic activity generated directly by the programs, including supporting close to 800 FTEs associated with the programs and more than 1,000 companies involved, as well as non-quantified benefits such as resiliency, a reasonable assumption is that the macroeconomic benefits of the programs are positive and potentially significant and, were those benefits included in the RI Test screening as quantified benefits, the programs would achieve more favorable benefit-cost ratios.

6.2 Reliability

6.2.1 Interpretation of Standard

The Standards for reliability create an expectation that the Company will be able to deliver the programs described herein and that the savings realized from program delivery are accurately estimated and measured. In addition, as applicable, programs should be scalable and be tailored to meet specific system needs.

6.2.2 Compliance with Standard

The programs developed under this Annual Plan will continue the Company's extensive history of offering best-in-class energy efficiency programs to customers. 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.

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 **Error! Reference source not found.** 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 Rhode Island Energy 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 incentivized 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 as accurate of a picture as possible of the impact of the Company's energy efficiency programs, accounting for spillover, free ridership, and other industry standard adjustment factors. Taken together, this approach complies with the Standard of Reliability.

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 8.2.3, 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 meet the high standards for participation in the ISO-NE FCM.

6.3 Prudency

6.3.1 Interpretation of Standard

The Company has considered, and continues to consider, several key components in the analysis of prudency. These components can be summarized as considerations about the proposed investments on the following:

- Support for the purposes of Least Cost Procurement
- Synergy savings through alternatives that meet multiple needs

- Management of risks to ratepayers and the distribution Company
- Effective use of funding sources
- Equitable in the allocation of costs, benefits, access to services, and participation
- Rate and bill impacts
- Continuity of implementation efforts

The Standard for Prudency was clarified regarding equitable access to resources in the revisions in Docket 23-07-EE.

6.3.2 Compliance with Standard

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.

Purposes of Least Cost Procurement. This plan secures cost-effective energy efficiency resources to support the electric and gas system through the creation of customer benefits in various components enumerated in both the RI Test, comparison with the Cost of Supply, as well as the Performance Incentive Mechanism.

Synergy savings. Program design seeks out synergies in customer participation, through a comprehensive view of savings opportunities wherever possible and tiered incentive offers. As an example of the way that the proposed investments in this plan address multiple needs, the Company will coordinate with the Office of Energy Resources regarding engaging customers to weatherize at the same time they are converting to heat pumps.

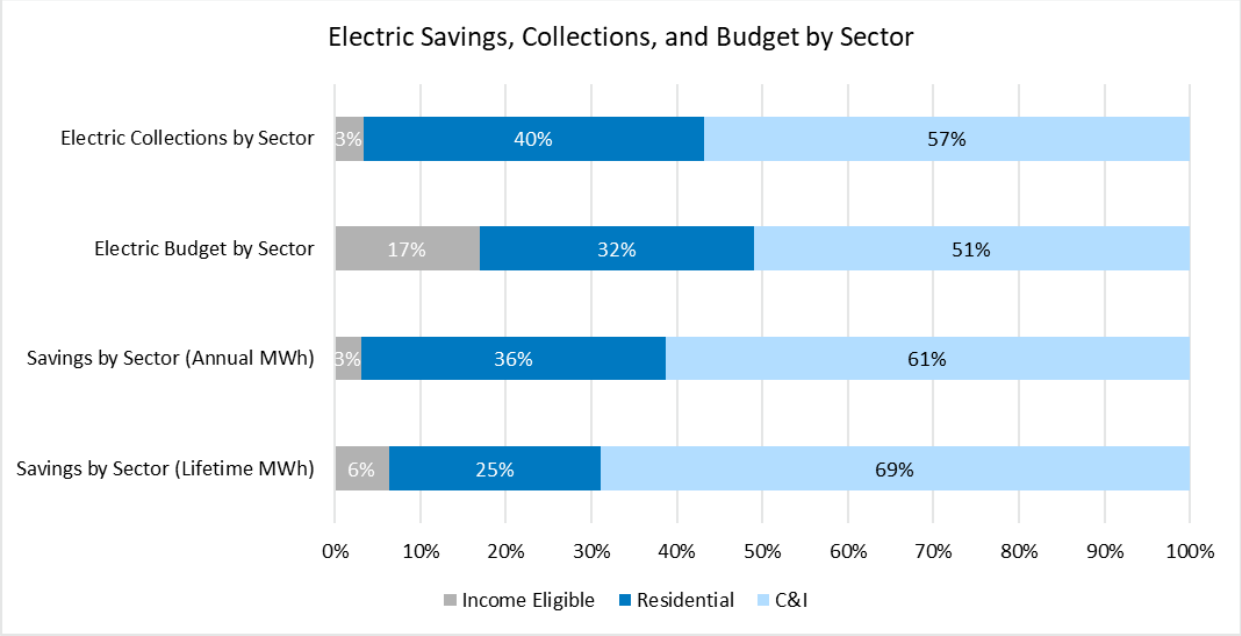
Management of risks. Energy efficiency investments are generally low risk investments. Savings have been well researched and documented through evaluation studies and the Company has confidence, based on those studies, that predicted savings will be realized. Continued research through new evaluation studies contributes to continuous program improvement and increasing levels of confidence. Furthermore, many programs include customer education, post-installation inspection, or commissioning to provide a foundation for assumptions about savings persistence. This further reduces risk to ratepayers. Additionally, when the savings are reliably estimated, it serves to increase confidence and reduce risk related to the energy efficiency resource in distribution planning. Finally, by reducing costs and reliance on fuel supply by reducing demand, energy efficiency can offer some protection and risk reduction associated with market and energy price volatility.

Effective use of funding. As described in Section 8.2, the Company has identified a number of funding sources to support the Plan budget. Furthermore, several sources of financing are offered to customers to enable program budgets to go further to achieve Plan targets. Finally, effective use of funding is represented in the mix of measures and incentives planned in order to balance the portfolio to achieve the Plan's objectives.

Equitable Allocation of Costs, Benefits, Services and Participation. An equitable allocation of costs and benefits serves to minimize the cost of the power system to all customers.[28] The Company has assessed equitable allocation among sectors along dimensions of collections, budgets, and savings. As shown in Figure 1. , 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 part of the collections from the residential and C&I customer classes are used 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). $22.8 million is budgeted for the delivery of the gas and electric income eligible sector programs, 21.0% and 15.9% of the total funding for each fuel portfolio respectively in 2024. Taken together, these investments represent 17.3% of the overall electric and gas portfolio budgets.

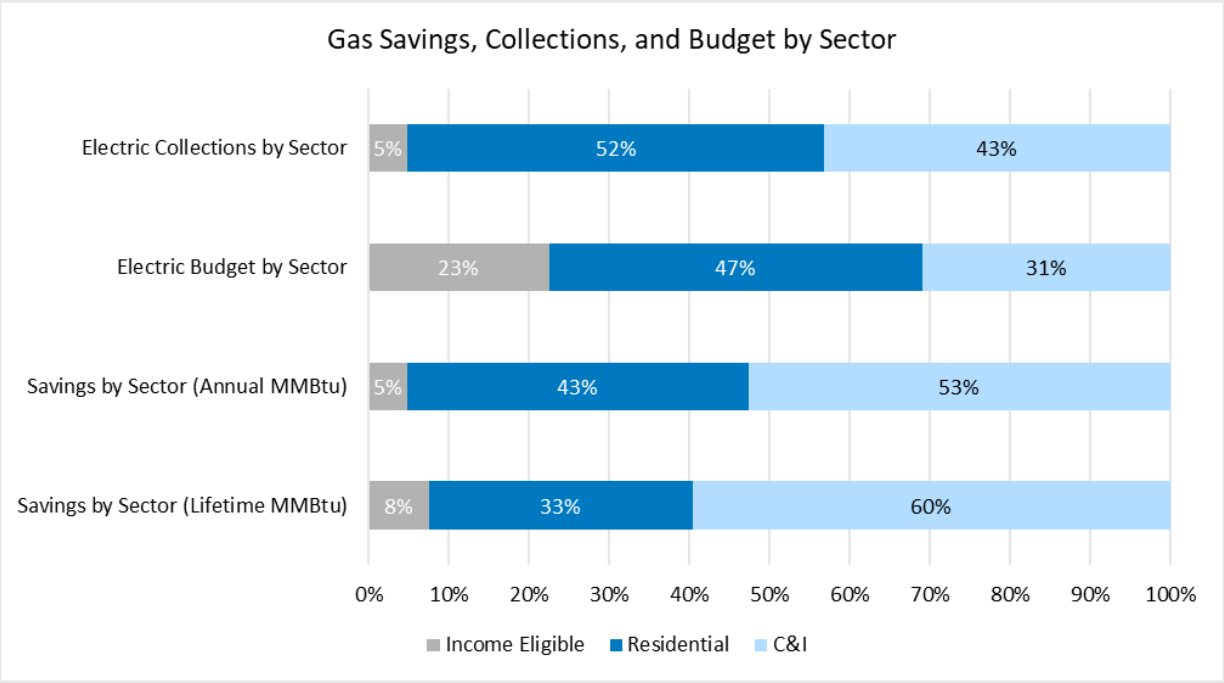
Figure 1. 2024 Graphical representation of Attachment 5 Table E-1, E-7, and total Electric Savings by Sector, Cumulative



[28] The equitable allocation of services promotes equity of access or opportunity and is addressed in Section 2.6 and other areas of the Plan.

For the gas portfolio, there is also parity between the collections by a customer class and the resulting savings. There is less equitable allocation 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 2 shows the distribution of savings, collections, and budget in the gas portfolio.

Figure 1. 2024 Graphical representation of Attachment 6 Table G-1, G-7, and total Gas Savings by Sector, Cumulative



Given these considerations, as well as the continued interest in supporting income eligible programs, the allocation of costs and benefits is prudently equitable.

The Company intends to provide information about equitable participation in the final draft of this Plan.

Rate and Bill Impacts. The Company has assessed rate and bill impacts of the proposed electric and gas portfolios. Summary results are included in the tables below, while additional details are available in Attachment 7, Rate & Bill Impacts. Electric programs are projected to usually generate slight upward movement on long term rates, but sometimes generate a reduction in long term rates. The range of long-term rate impacts is between XX% and XX%. For both residential and C&I participants, modeling shows a reduction in bills between XX% and XX%. Natural gas programs are projected to generate slight upward movement on long term rates between XX% and XX%. For income eligible customer

participants, small C&I participants, and large C&I participants, modeling shows a reduction in bills between XX% and XX%.[29]

Table 3 3 and Table 4 summarize the results of the electric and natural gas rate and bill analyses for the 2024 proposed programs, respectively. All electric sectors, except standard residential, see slight increases in long-term rates.[30] For all sectors, average electric customers see small decreases in overall bills. Furthermore, average electric participants see decreases in their long-term bills. All gas sectors see a slight increase in long term rates due to the 2024 programs.[31] With the exception of the large C&I customers, the average gas customer sees a small increase in long term bills. On the other hand, the average gas participant experiences a reduction in long-term bills across all sectors.

Table 3: Rate and Bill Impact Results for the Electric Portfolio

Sector	Long-Term Rate Impacts (% of Total Rate)	Typical Bill Savings (% of Total Bill)		
		Non-Participants	Average Customer	Average Participant
Residential (Model 1: HERs only)				
Residential (Model 2: All Programs Except HERs)				
Residential (Model 3: All Programs)				
Income Eligible (Model 1: HERs only)				
Income Eligible (Model 2: All Programs Except HERs)				
Income Eligible (Model 3: All Programs)				
Small C&I				
Medium C&I				
Large C&I				

[29] The calculated impacts on long-term rates are not designed to reflect the net increase or decrease to the EE charge from the prior/current EE plan. Instead, the models calculate the long-term rate impact of the electric and gas EE portfolios by comparing a "No EE" scenario to an "EE" scenario of customer rates. In other words, the "No EE" scenario models rates in the absence of an EE program, and, therefore, contains no EE charge while the "EE" scenario models rates in the presence of an EE program, and, therefore, contains an EE charge. Additionally, long-term rate impacts are captured as a levelized average over the study period rather than a single year.

[30] "Long-term" means over the 20-year study period.

[31] "Long-term" means over the 25-year study period.

Table 4: Rate and Bill Impact Results for the Natural Gas Portfolio

Sector	Levelized net change in rates due to 2023 Programs	Long Term Average Change in Bills		
		Non-Participants	Average Customer	Average Participant
Residential (Model 1: HERs only)				
Residential (Model 2: All Programs Except HERs)				
Residential (Model 3: All Programs)				
Income Eligible				
Small C&I				
Large C&I				

When the HER program is considered in isolation (Model 1), average participants see a reduction in bills of XX% for residential electric, XX% for income eligible electric, and XX% for gas. These results can largely be attributed to the relatively short duration of savings from this program. When all other residential programs except HERs are considered together (Model 2), average participants see XX%, XX%, and XX% reductions in average bills for electric residential, electric income eligible, and gas customers, respectively. Lastly, when all residential programs are considered together including the HER program (Model 3), long-term average reductions in bills are XX% for electric residential, XX% for electric income eligible, and XX% for gas. The Company asserts that this rate and bill impacts analysis demonstrate a prudent investment of ratepayer funds in the pursuit of the objectives of Least Cost Procurement.

The Company has also developed an estimate of the delivered fuel bill impacts experienced by electric energy efficiency program participants who heat with delivered fuels. While delivered fuels are unregulated, integrating delivered fuel and electric bill analysis provides a sense of the overall impact electric energy efficiency programs have on total bills. See
5 below and Attachment 7 for details.

Table 5. Delivered Fuels and Combined Bill Impacts

Sector	Long Term Average Change in Bills	
	From Delivered Fuels	Total (Electric and Delivered Fuels)
Residential (Participants)		
Income Eligible (Participants)		

The Company also has assessed the annual change in rates from 2023 to 2024 driven by the funding plan and budgets discussed later in this Plan as another dimension of prudency. **Error! Reference source not**

found. Table 6 summarizes the changes in rates based on the E-1 and G-1 tables.[32] While the Company's proposed budget for 2024 is approximately equal to the budget levels approved in the 2023 Annual Plan, several factors contribute to the change in the energy efficiency charges being negative. The primary factor is the change in the fund balance projection going into 2024 compared to the projection for 2023. Other factors include the budget levels, other sources of funding, and anticipated electric loads and natural gas sales. The changes to annual rates caused by these factors may be considered to be prudent. These elements are discussed further in Section 8 of this Plan.

Table 6. Summary of Changes in Rates between 2023 and 2024

Rate Category	2023	2024	2023 – 2024 Growth
Gas Residential SBC ($/dtherm)	$1.136	$1.279	12.6%
Gas C&I SBC ($/dtherm)	$0.620	$1.093	76.3%
Electric SBC ($/kWh)	$0.00960	$0.01334	39.0%

Continuity of implementation efforts. While not explicitly spelled out in the Standards, the Company has historically considered the continuity of implementation efforts as an element of prudency. Continuity of implementation efforts means changing the scope or scale of programs in a way that is sensitive to maintaining and developing a skilled workforce and receptive to the prevailing economic conditions in the marketplace. The Company generally informs vendors of planned program changes to enable them to prepare their workforce as necessary (for example to ramp up or provide training). The Company also pays attention to this aspect of continuity because, absent continuity, skilled workers may move to other jobs which could result in disruptions of energy efficiency services to customers.

6.4 Environmentally Responsible

6.4.1 Interpretation of Standard

Environmental responsibility includes compliance of the energy efficiency plan with state policies, particularly pollution reduction. It further requires proper valuation of environmental costs and benefits in the plan.

Modifications to the Standards in Docket 23-07-EE specify that demonstration of environmental responsibility include an assessment of compliance with state climate policies, and proper valuation of climate costs and benefits, in addition to environmental costs and benefits. The Company's interpretation of this addition is that, by distinguishing between environmental policies and values and climate policy and values, the Commission intends for the Company to assess the climate impacts of its programs, specifically as they relate to the Act on Climate targets.

[32] This analysis uses the rates and electric energy efficiency surcharge in effect for the last 9 months of 2023.

6.4.2 Compliance with Standard

The energy efficiency programs and portfolios described in the Annual Plan are environmentally responsible. As detailed in Section 4.3, the Act on Climate stipulates mandatory and time-bound emissions reductions for the state. This Annual Plan seeks to continue the progress that has been made in reducing emissions by providing customers across all sectors with ways to reduce their energy consumption. Energy efficiency therefore contributes directly to meeting the Act on Climate's goals. In addition to direct emissions reductions benefits, energy efficiency investments reduce the potential environmental costs and footprint of avoided infrastructure investments and support the ongoing growth and development of a sustainable, green job ecosystem in Rhode Island.

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. As shown in Attachments 5 and 6, the electric and natural gas portfolios, considered together, will reduce annual emissions by 72,976 short tons of carbon in 2024[33]. The values of non-embedded avoided carbon are calculated using avoided cost values determined in AESC 2021 and the AESC Supplemental Study: the non-embedded values of CO_2 and NO_x benefits generated by the 2024 annual plan over the lifetime of the measures are $52.6M and $4.1M respectively. These monetized values of emissions are included as benefit streams in the RI Test benefit-cost assessment and in the assessment of cost of supply for the portfolio; however, they are excluded from the calculation of net benefits in the Performance Incentive Mechanism.

The Company's 2024 Plan complies with – or otherwise advances – the 2021 Act on Climate, which sets statewide, economy-wide greenhouse gas emissions reduction mandates. The proposed investments reduce both electric and gas consumption. On the electric side, prior to meeting the 100% Renewable Energy Standard in 2033, any electric savings will directly support the State in meeting its 2030 greenhouse gas emissions reduction mandate. On the gas side, all gas savings will directly support the State in meeting its 2030 greenhouse gas emissions reduction mandate. Indeed, the State's *2022 Update* to the *2016 Greenhouse Gas Emissions Reduction Plan* calls out both electric and gas energy efficiency as a priority short-term action to get Rhode Island on the path to meet the 2021 Act on Climate's 2030 mandate. To properly value the environmental and climate costs and benefits associated with the proposed investment in energy efficiency, the Company used both marginal abatement cost and social cost of carbon, as appropriate, to monetize both embedded and non-embedded value of greenhouse gas emissions reduction.

As noted in Section 2.5.2, this Annual Plan includes several activities designed to support upskilling of the green workforce. 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

[33] While all energy savings seen in the plan are net, these emissions are calculated based on gross energy savings from EE measures because meeting the state's targets does not depend on who is getting credit for the GHG reductions. The marginal carbon emission rates are from "Avoided Energy Supply Components in New England: 2021 Report" Appendix G.

programs help to ensure that the local workforce will exist to support the state's environmental policy goals.

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 and contributes to the environmental responsibility of the Plan. 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 continue to help to support the prominence of environmental issues in customers' minds. Additionally, through the Community Solutions, 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.

A final component of the environmental responsibility of the Company's Plan in 2024 is its ongoing efforts in electrification. The Company will be continuing its efforts to transition electric resistance heating customers to more efficient heat pumps. The Company will also continue to cooperate and coordinate with the Office of Energy Resources and others as the state implements its electrification and decarbonization strategies.

6.5 Lower than the Cost of Supply

6.5.1 Interpretation of Standard

In accordance with the LCP Standards, the Company assessed the cost of incremental 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 2023 Plan.

Like the Standard for cost-effectiveness, in Docket 23-07-EE, changes to the Standards required an additional analysis of the cost of supply comparison that, "for categories with value or cost that is shared between Rhode Island Energy and other jurisdictions (both within the state and region), presents only those benefits and costs that will be allocated to Rhode Island Energy." In considering the nature of "other jurisdictions," the Company interpreted this to refer to states other than Rhode Island, and that "Rhode Island Energy" therefore refers, in this case, to Rhode Island. Using this interpretation, the Company identified certain categories of benefits that flow outside of Rhode Island. These include a portion of demand reduction induced price effects (DRIPE) and pool transmission facility (PTF) capacity values. This additional view on the cost of supply will be provided in the final version of the 2024 Annual Plan. To the best of the Company's knowledge, no costs accrue outside of the state.

6.5.2 Compliance with Standard

Based on the Company's calculation, the total cost of energy efficiency for the electric portfolio is $121.4M and the total cost of electric supply to meet the same need would be $184.2M. This is a total savings of $62.8M 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 $46.2M and the total cost of natural gas supply to meet the same need would be $53.1M. This is a total savings of $6.9M 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. For the purposes of this assessment, the avoided cost values in the RI Test can also be applied as the costs of procuring additional energy supply. 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 7 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 defined 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 7. 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, Rhode Island Energy 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	With the exception of the three NEIs 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
• Utility	Yes	Costs associated with utility carrying costs as a result of customers encountering issues with utility services or paying their 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 Act on Climate. 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 electricity, 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 2024 Plan occur only in 2024 and are therefore not discounted. The results of the Cost of Supply analysis are presented in 8.

Table 8. Costs of Energy Efficiency and Costs of Energy Supply

Benefits	Electric	Gas
Electric Energy	$56,028,589	$306,969

Electric Generation	$5,157,446	$142,347
Electric Transmission Capacity	$11,013,262	$292,099
Electric Distribution Capacity	$17,144,726	$454,720
Natural Gas	-$564,380	$31,804,144
Delivered Fuel	$28,738,552	$0
Price Effects	$29,262,188	$390,502
Non-Embedded Greenhouse Gas Reduction	$35,664,835	$16,940,167
Non-Embedded NOx	$1,367,137	$2,697,564
Reliability	$148,088	$1,138
Income Eligible Rate Discount	$75,776	$0
Arrearages	$32,064	$0
Utility	$115,675	$35,514
Cost of Supply	**$184,183,957**	**$53,065,163**
Costs	**Electric**	**Gas**
Program Implementation Expenses	$89,518,378	$35,384,409
Customer Contribution	$26,256,042	$9,734,066
Shareholder Incentive	$5,639,464	$1,043,524
Cost of EE	**$121,413,883**	**$46,161,999**
Difference	**$62,770,074**	**$6,903,164**

Based on this analysis, the 2024 Plan is compliant with the Standard of Lower Than the Cost of supply.

7. Savings Goals

In 2024, the Company will primarily measure performance through lifetime energy savings. These savings align with the energy savings Targets as proposed by the EERMC in Docket 23-21-EE.[34] 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 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, will continue to be measured and reported in annual units of kW.

The Company will also track net annual and lifetime all-fuel MMBtu (electric, gas, oil, and propane) savings for both the electric and gas portfolios.[35] Tracking net annual and lifetime all-fuel savings (MMBtu) more fully captures the net effect of all-fuel savings efforts (electric, gas, 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.

[34] https://ripuc.ri.gov/Docket-23-21-EE
[35] See Tables E6-A and G6-A for calculation of annual and lifetime MMBtu of all fuels.

Carbon reductions will be calculated and reported as a secondary goal in 2024 consistent with the Standards and the Act on Climate.[36]

Savings goals for the electric portfolio are presented in Attachment 5 and for the natural gas portfolio in Attachment 6.

7.1 Annual Plan Compared to the Three-Year Plan

The energy and cost savings for the 2024 program year are consistent with the objectives and requirements of Least Cost Procurement. For 2024, the values in the Three-Year Plan are identical to the values in the Annual Plan.

In future Annual Plans during this Three-Year term, the Company will examine key drivers contributing to differences with the Three-Year Plan. Among the drivers will be budgets, cost to acquire energy efficiency, measure mix, evaluation results, changes to avoided costs, and addition or elimination of categories of benefits.

8. Budget and Funding Plan

8.1 Budgets

The Company is proposing energy efficiency portfolio budgets for 2024 that are 0.1% lower than the final approved budgets for 2023.[37] In developing the 2024 Annual Plan, the Rhode Island Energy team has focused on striking the best balance between delivering the necessary benefits of energy efficiency and maintaining a budget that reduces bill pressure on our customers given present economic realities affecting Rhode Island. The Company submits that its approach in developing the budget for 2024 is consistent with the prudency requirements of the Standards.

The portfolio of energy efficiency programs and services for 2024 will have an overall budget of approximately $95.2 M for electric programs and $36.4 M for natural gas programs. The budget is segmented 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. A comparison of these proposed budgets to the 2023 budget is provided in Attachment 5, Table E-4 and Attachment 6, Table G-4.

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

[36] See Tables E6-A and G6-A for calculation of annual short tons of CO2.

[37] Costs approved for ConnectedSolutions programs in 2023 are excluded from this comparison, as those programs are no longer part of the energy efficiency program portfolio.

projected one-time incentive in excess of $3 million. For all other projects, except those with incentives greater than $3 million, there would be no commitment budget.

8.2 Funding Plan

The 2024 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 2023 large C&I program commitments, capacity payments received from ISO-NE (electric only), and forecast year-end 2023 spending. The sources of funding and the amounts of the funding proposed for the 2024 energy efficiency programs are shown in Table E-1 for electric programs and Table G-1 for natural gas programs. Annual Plan funding sources are described in the sections that follow.

8.2.1 Energy Efficiency Charges

The sources of funding for the 2024 electric programs are shown in Attachment 5 Electric EE Program Tables, Table E-1. To collect these funding sources for the 2024 cost-effective programs, the Company proposes: (1) one line on the customers' bill labeled "Energy Efficiency Charge" at $0.01334 per kWh, as calculated in Attachment 5, Table E-1 (composed of the existing energy efficiency program charge of $0.0096 per kWh plus a fully reconciling funding mechanism charge of $0.00374 per kWh in accordance with the requirements of R.I. Gen. Laws § 39-1-27.7); (2) projected Large C&I commitments from 2023, if any; (3) projected carryover of the year-end 2023 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.

The sources of funding for the 2024 natural gas programs are shown in Attachment 6 Gas EE Program Tables, Table G-1. The Company proposes that the 2024 budget should be funded from the following sources: (1) one line on the customers' bill labeled "Energy Efficiency Charge" at $1.279 per dekatherm for residential customers and $1.093 per dekatherm for non-residential customers as calculated in Attachment 6, Table G-1 (composed of the existing energy efficiency program charge of $1.136 per dekatherm plus a fully reconciling funding mechanism of $0.143 per dekatherm for residential customers and the existing energy efficiency program charge of $0.620 per dekatherm plus a fully reconciling funding mechanism of $0.473 per dekatherm 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 2023 fund balance, including interest at the rate in effect for customer deposits. Funding sources do not include revolving loan funds.

The increase in the proposed EE Program Charge per kWh is driven by a smaller positive projected 2024 year end fund balance forecast relative to 2022 year-end of $8.77M. The increase in the C&I and Residential Program Charge per Dth is driven by the negative 2022 Year End Gas Fund Balance forecast of ($2.1M).

The Company forecasts electric energy deliveries and gas loads for a variety of filings. In the context of the Annual Energy Efficiency Plan, the forecasts primarily factor into the calculation of the per-unit energy charges that fund the gas and electric energy efficiency portfolios. At the time of the preparation of this plan, the Company used a gas forecast based on the June 2023 release and an electric forecast based on the September 2022 release. The sections below provide an overview of the forecasting processes for the electric energy delivery and gas load forecasts.

Electric Forecast Summary. The electric energy deliveries forecast is developed in several steps. The first step was to "reconstitute," that is add-back or subtract, as applicable, the impacts of energy efficiency ("EE"), solar-photovoltaics ("PV"), electric vehicles ("EV"), and electric heat pumps ("EH") to the historical monthly energy dataset. This set of programs and technologies is termed Distributed Energy Resources ("DERs"), and the reconstituted data is termed "gross" to reflect the fact that it represents data prior to the impacts of DERs.

The second step is to develop an econometric forecast of gross energy deliveries based on Rhode Island economic conditions, normal weather, and days billed, as appropriate, using this reconstituted dataset. The economic conditions are from Moody's economy outlook. The weather variables considered are cooling degree days ("CDDs") and heating degree days ("HDDs"). Normal weather is defined by the average CDDs and HDDs of the most recent ten years. Due to the unavailability and / or great uncertainties of long-term weather forecasts, it is a common practice to use normal weather for long-term load forecasting.

The third step is to create the "net" forecast by adjusting the gross forecast by the projections for future DERs. Impacts for EE and PV (reflecting decreased electric load on the system) are subtracted from the gross forecast, impacts of EV (reflecting increased electric load on the system) are added to the gross forecast, and impacts of EH are added to or subtracted from the gross forecast depending on the season to create the net forecasts. These forecasts were first developed in terms of revenue classes – residential, commercial, and industrial. They were then allocated to the various rate classes using the current revenue to rate class percentages from the Company's billing system.

Gas Forecast Summary. The Company's gas load forecast is based on a comprehensive methodology for forecasting retail customer load requirements using a series of econometric models to determine the changes expected for Residential Heating, Residential Non-Heating, Commercial, and Industrial classes. To determine total gas demand and projected growth over the forecast period, the econometric models use historical economic, demographic, and energy price data, and weather data.

The product of the Company's retail demand forecast is a forecast of meter counts, use-per-customer, and volume by month by internal rate code under normal weather conditions. The Company's retail demand forecast is then converted to wholesale supply requirements at the Company's city gates based on the daily relationship between city gate volumes (including supplementals) and weather. The product of the Company's wholesale customer requirements forecast is a forecast of daily volumes under normal and design weather conditions."

8.2.2 Fund Balances

The Company estimates that the electric projected fund balance at year-end 2024 will be $8.77M, as shown in Line 3, Attachment 5, Table E-1; the gas fund balance at year-end 2024 is estimated to be ($2.1M), as shown in Line 2 Attachment 6, Table G-1. For the first draft, the Company has included 2023 year-end fund balance forecasts (electric and gas) on line 3 of the E-1 and on line 2 of the G-1 tables in Attachment 5 and Attachment 6, respectively. The fund balance forecasts include estimated implementation expenses and estimated earned performance incentives.

Adjustments for 2023 Year-End Fund Balance. The 2023 year-end fund balance will be a function of actual implementation expenses and Company earned performance incentive through year-end 2023. Consistent with recent practice, on November 17, 2023[38] the Company will provide updated year-end fund balance forecasts, reflecting updated sales, collection, and program expenditure forecasts through year-end and revised tables E-1 and G-1 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, 2024. 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 2024 energy efficiency programs. If the actual year-end 2023 fund balance as filed in the Year-End Report is higher or lower than that amount projected in the November 17, 2023 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.

The fund balance does not currently include credits from shareholder funds, with interest, to the fund balance based on the Company's involvement in Docket 22-05-EE. All credits identified thus far in that process were accounted for in the 2023 Annual Plan.

8.2.3 ISO-NE Capacity Market Revenue

Consistent with the LCP Standards, Annual Plan, and PUC decisions regarding annual plans since 2008, the 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.

[38] This date is being moved up two weeks due to the Annual Plan Filing date being moved up two weeks from October 15th to October 1st.

The Company is to 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 Company may recover its prudently incurred costs from the energy efficiency program fund. 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[39], 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 the financial assurance monies would be forfeited.

8.2.4 RGGI Funding

RGGI funding is allocated to the State of Rhode Island based on quarterly auctions for emissions allowances. The OER develops a plan for the allocation of auction proceeds. No RGGI proceeds have been allocated to the Company for 2024 energy efficiency programming.

8.2.5 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.[40]

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 Company has developed recommendations for a process under which a manufacturer may submit its self-directed

[39] 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.

[40] 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.

program and the required annual reports for approval. The Company recognizes 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.

8.2.6 Budget Management

Deviations from the planned budget for 2024 are possible during the program year. The Company contemplates three potential overspending scenarios, and will address them as follows:

- Anticipated overspending up to 10%. The Company's expenditures for 2024 may exceed the total portfolio 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 2024 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.
- Anticipated overspending in excess of 10%. During 2024, if the Company anticipates that continued operation of its programs is likely to result in actual expenditures exceeding the total portfolio 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. The PUC will not provide advance approval of expenditures exceeding the total budget by more than 10%. The Company will be required to demonstrate to the PUC that the overspend was prudent. Support from the Division, OER, and EERMC will be considered in the PUC's review of prudency.
- Unanticipated overspending in excess of 10%. If the Company did not anticipate and notify stakeholders identified above that its actual expenditures would exceed the total portfolio 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 overspending occurred and how the expenditures are reasonably consistent with the original plan and in accordance with Least Cost Procurement. Such a demonstration would be required to be part of the 2024 Year-End Report.

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

8.2.7 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 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.

9. Performance Incentive Plan Structure

The PIM, as approved in Docket 5076, established the measurement of performance as a net benefits framework based on a set of prioritized benefit categories. This prioritizes utility system impacts over resource benefits generated by the programs and omits the societal benefits. The "netting" calculation incents budget controls so that the benefits are achieved in line with the portfolio budgets as proposed in the Plan.

Equation 1. Illustrative Calculation of Net Benefits for Performance Incentive Mechanism

$$Total\ Benefits = (100\%\ of\ Utility\ System\ Benefits + 50\%\ of\ Resource\ Benefits)$$

$$Net\ Benefits = (100\%\ of\ Utility\ System\ Benefits + 50\%\ of\ Resource\ Benefits) - (Programmatic\ Costs + Regulatory\ Costs)$$

The PIM measures performance at the sector and fuel level:

- Non-Income Eligible Residential Electric
- Income Eligible Residential Electric
- Commercial and Industrial Electric
- Non-Income Eligible Residential Gas
- Income Eligible Residential Gas
- Commercial and Industrial Gas

The PIM calculations include a set of potential adjustments that are intended to further incent the company to maintain budget controls in the delivery of savings, and therefore prioritized benefits, by adjusting earnings under this mechanism based on cost relative to budget. The Company is not proposing structural changes to the PIM for 2024.

Attachment 5, Table E-8A and Attachment 6, G-8A show the categories of benefits that are included in the PIM calculations, categories omitted from the PIM, and the weighting assigned to those benefits in the calculation. The categories of benefits are also summarized in Table *9* for electric and Table 10 for

gasTable 10 below. The monetized benefits included in the PIM are calculated from a subset of benefit categories included in the RI Test, calculated using the same methods and inputs as the RI Test.

Table 9. Electric Energy Efficiency Portfolio Benefits Alignment for PIM Calculations

Benefit	PIM Categorization	Percent Allocation in PIM Calculation
Summer Generation	Electric Utility System Benefits	100%
Capacity DRIPE		
Transmission		
Distribution		
Reliability		
Winter Peak Electric Energy		
Winter Off Peak Electric Energy		
Summer Peak Electric Energy		
Summer Off Peak Electric Energy		
Electric Energy DRIPE		
Utility Non-Energy Impacts (NEIs)		
Non-Embedded Carbon		
Natural Gas and Natural Gas DRIPE	Resource Benefits	50%
Oil and Oil DRIPE		
Propane		
Water		
Non Resource (NEIs)	Other Not Included Benefits	0%
Non-Embedded NOx		
Economic		

Table 10. Gas Energy Efficiency Portfolio Benefits Alignment for PIM Calculations

Benefit	PIM Categorization	Percent Allocation in PIM Calculation
Natural Gas	Gas Utility System Benefits	100%
Natural Gas DRIPE		
Utility Non Energy Impacts (NEIs)		
Summer Generation	Resource Benefits	50%
Capacity DRIPE		
Transmission		
Distribution		
Reliability		
Winter Peak Electric Energy		
Winter Off Peak Electric Energy		
Summer Peak Electric Energy		
Summer Off Peak Electric Energy		
Electric Energy DRIPE		
Oil and Oil DRIPE		
Propane		
Water		
Non Resource (NEIs)	Other Not Included Benefits	0%
Non-Embedded Carbon		
Non-Embedded NOx		
Economic		

Tables E-8B and G-8B show the costs that are used in the "netting" calculations in the PIM, and that are incorporated in the SQAs in the sectors to which they apply. The core of the costs included in the PIM is the "Eligible PIM Budget"[54] derived from Attachment 5, Table E-3 and Attachment 6, Table G-3. The Eligible PIM budget is calculated based on the total budget from Tables E-2 and G-2 with regulatory costs equally distributed and commitments, EERMC costs, pilot costs, assessment costs, and performance incentive value removed.

Electric: In 2024, two electric sectors (non-income eligible Residential and C&I) are eligible to receive performance incentives. The combined eligible net benefits of these sectors have increased from 2023 to 2024. In 2024, the Company proposes a payout rate of 10.1% of 2024 planned PIM-eligible net benefits, which the same rate used to calculate the 2023 payout pool. Because of the greater amount of PIM-eligible benefits, this payout rate yields a target incentive pool of $5,369,464, which is $2,280,303 more in electric performance incentives than in 2023.

For 2024, the Company has proposed raising the maximum income eligible electric SQA from $313,802 to $342,985. This adjustment is directly scaled to the increase in total income eligible benefits between 2023 and 2024. The non-income eligible and C&I sectors are not eligible for SQAs in 2023.

Gas: As in 2023, in 2024, the gas performance incentive is entirely allocated to the C&I sector (the only sector with positive eligible net benefits). Therefore (consistent with the calculation of the electric performance incentive), the specific decrease in the Company's proposed 2024 gas incentive was calculated by keeping the 2023 gas C&I payout rate of 11.7% constant for 2024. In 2024, the Company is seeking a payout pool of $1,043,524 which is $251,522 more in gas performance incentives than in 2023. This increase aligns with the increase in natural gas eligible net benefits.

In 2024, the Company has proposed lowering the maximum non-income eligible gas SQA from $333,102 to $308,312 and lowering the maximum income eligible gas SQA from $123,176 to $101,346. The adjustments are directly scaled to the changes in total sector-specific eligible benefits between 2023 and 2024. The C&I sector is not eligible for an SQA in 2024.

Tables E-8C and G-8C show the final summarizations of the calculations for the PIM and SQAs, including target earning opportunities and maximum earning opportunities.

9.1 Future Performance Metrics

The Company does not propose any additional performance metrics for the 2024 Program Year.

10. Advancing Docket 4600 Goals and Principles

Along with the quantitative benefits detailed in the Plan, as measured by the RI Test, the energy efficiency investments and innovation planned for 2024 also advance the Docket 4600 principles and goals.[58]

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."[59]

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 11.

Table 11. 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 $232.7M to Rhode Island's Gross State Product (GSP), equivalent to 2,361 job-years.
Address the challenge of climate change and other forms of pollution.	Advances: The Plan will avoid 72,976 short tons of carbon in 2024 from the installed measures as well as reduce other pollutants associated with the generation and 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 and provides handoffs to other programs including EV charging 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 2021 Act on Climate, Power Sector Transformation goals, Heating Sector Transformation goals, and the 100% Renewable Electricity goal while allowing the Company to earn a performance incentive.

11. 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.
- Rhode Island Energy may convene the Energy Efficiency Technical Working Group no less than six times in 2024 to review the status and performance of the Company's 2024 energy efficiency programs and advise the Company on potential energy efficiency programs for 2025.

12. Reporting Requirements

In 2024, the Company will provide reports, including a report for the first three quarters of 2024 and an annual 2024 report. These reports will be sent to the EERMC, the Division, OER, the EE TWG, and the PUC and will include 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 reports will also include a 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.

- Beginning with 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 2024 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.

- Per the Standards adopted in Docket 23-07-EE, the Company will provide to the EE TWG, and file with the PUC its 2024 Year-End Report no later than May 1, 2024. This report will include achieved natural gas and electric energy savings in 2024 and earned incentives for 2024. The report will also include a discussion of deviations from planned quantities as specified in the Standards.
- The Company will provide 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 2024 programs, in the Plan to be filed by October 1, 2023.

13. Requested Rulings

The Company respectfully requests that the PUC approve the 2024 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 2024.
- The pilots, demonstrations, and assessments the Company proposes for program year 2024 and the associated budgets and customer collections required to fund those efforts.
- The performance incentive mechanism and associated earning opportunity provided in this Annual Plan.

14. 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

Annual Plan Attachment 10. Definitions

Annual Plan Attachment 11. Energy Efficiency Equity Working Group Final Report (To be provided with final plan filing)

Tables

Table of Figures