

**2022 Energy Efficiency Plan  
Outline Memorandum  
June 3, 2021**

Dear Energy Efficiency Technical Working Group Members and EERMC Councilmembers,

The Narragansett Electric Company, d/b/a National Grid (Company) is providing stakeholders with this 2022 Energy Efficiency Plan Outline Memorandum (“Outline”) to provide early insights regarding the major changes and topics that will be addressed in the coming draft of the 2022 Annual Energy Efficiency Plan. The intention of this Outline is to highlight key programmatic elements of the forthcoming annual plan, programmatic and policy enhancements that are changes from previous Plans and that will be of interest and shape the discussion with stakeholders during the remainder of the planning process. The inclusion of this Outline follows the 2020 and 2021 planning processes where the Outline was first introduced as a way to preview key themes for the upcoming plan.

Creating this Outline gives guidance into the areas of focus for the upcoming Plan and provides stakeholders with additional notice regarding content areas that will be covered in the Plan to facilitate further conversations during the planning process.

As with the 2020 Annual Plan and 2021 – 2023 Three-Year Plan processes, the addition of the Outline and extended review time are intended to increase visibility and relieve some of the time pressure stakeholders have faced in the review process. Notably, there is some information that simply is not available in the earlier stages of the process and therefore will be provided later in the process. For example, this Outline does not include preliminary 2022 savings, benefits, or budgets because those detailed quantitative planning processes are in process. This outline also does not include quantitative analyses that are included in the Plan, including the assessment of cost of supply and rate and bill impacts. Those analyses are dependent upon the planning and screening processes and will therefore be provided at later stages of the annual planning process.

Further, when reviewing this Outline, please note the following:

- a. This Outline should not be considered as a complete list of topics that will be addressed in the first draft 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 reflecting the early stage at which this Outline is provided.
- b. This Outline highlights areas that will be covered where they are noticeably different, or of a larger focus, than in previous years.
- c. The structure of the Outline below is based on the 2021 Annual Plan. Significant restructuring and reformatting was undertaken during the development of the 2021 Annual Plan and those updates have been applied to this Outline. This Outline has been modified to account for anticipated adjustments to the Plan content and format. For example, there are sections in this outline with no content. In those cases the content will not be available until drafts of the plan are developed. When applicable, expected availability of additional content is indicated.
- d. 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 of this Outline by June 18, 2021 with an expectation that discussion of the Outline will continue at the June 17, 2021 Energy Efficiency Resource Management Council (EERMC) meeting and the June 24, 2021 EETWG meeting.

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## 1. Pre-Filed Testimony

Consistent with the revised Least Cost Procurement Standards (“LCP Standards” or “Standards”) approved by the RI PUC in Docket 5015<sup>1</sup>, the Company will include pre-filed testimony with the Plan that describes the cost-effectiveness of the programs and portfolios, the assessment of prudence and reliability, how the Plan is environmental responsibility, and assesses the cost of additional supply compared to the Plan.

## EXECUTIVE SUMMARY AND INTRODUCTION

### 2. Introduction

No major revisions anticipated to the structure of the introductory section.

## STRATEGIES AND APPROACHES TO PLANNING

### 3. Programs and Priorities

#### 3.1 Strategic Overview of Programs and Priorities

During the March and April 2021 Energy Efficiency Technical Working Group meetings the Company sought input from a broad stakeholder group regarding their priorities and focus areas for the 2022 Annual Plan. From these diverse perspectives, the Company identified several common themes shared by many stakeholders, summarized below. During the planning process the Company will continue to engage with stakeholders to identify if and how the plan can address these identified priorities.

Priorities	Office of Energy Resources (OER)	Acadia Center	Green Energy Consumers Alliance	Energy Efficiency and Resources Management Council (EERMC)	Rhode Island Center for Justice	Division of Public Utilities and Carriers (DPUC)	City of Providence
Electrification / Decarbonization	✓	✓	✓		✓		✓
Equity	✓	✓	✓	✓	✓	✓	✓
Innovate / Diversify Programs	✓	✓	✓	✓	✓	✓	✓
Cost Efficiency	✓			✓	✓	✓	
Planning / Reporting Process	✓		✓	✓			
Policy / Regulatory Alignment	✓	✓	✓	✓		✓	

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<sup>1</sup> RI PUC Docket 5015. <http://www.ripuc.ri.gov/eventsactions/docket/5015page.html>

In addition to the above main priorities, National Grid highlighted key priorities for each stakeholder:

- Office of Energy Resources (OER)
  - Support a just transition to a decarbonized economy
  - Minimize customer risk (through cost effectiveness/efficiency and transition to PPL)
  - Innovate & diversify for maximum benefit
- Acadia Center
  - Prioritize housing quality improvements
  - Ensure alignment with climate mitigation
  - Embrace clean heating and whole-house electrification
  - Sustain investments in efficiency as the leading energy resource
- Green Energy Consumers Alliance
  - Emissions reductions: in alignment with Act on Climate
  - Include broader stakeholder engagement and more consistent reporting
- Energy Efficiency and Resources Management Council (EERMC)
  - Align with Three-Year Plan
  - Comply with LCP Standards
  - Incorporate stakeholder input
  - Ensure effective & efficient development & review process
- Rhode Island Center for Justice
  - Reduce adverse climate change and health impacts associated with fossil fuel usage
  - Mitigate increased costs to low-income customers
  - Transition away from lighting towards deeper measures
- Division of Public Utilities and Carriers (DPUC)
  - Meet program goals
  - Ensure programs reduce customer costs
  - Expand equitable EE programs for customers and the delivery workforce
  - Leverage EE to provide economic stability, recovery, and growth post-COVID
  - Improve the EE performance incentive mechanism
- City of Providence
  - Net zero buildings and decarbonized transportation
  - Resilience: municipal microgrids

### *3.1.1 Principles of Program Design*

In addition to the key stakeholder priorities identified through the early stages of the planning process, the Company indicated five key objectives and themes in the 2021 – 2023 Three-Year Plan. These themes will be further explored and expanded through strategies and program adjustments identified for the residential, income eligible, and commercial and industrial sectors.

- Deepen customer relationships;
- Drive adoption of comprehensive measures;
- Expand active demand response;
- Achieve cost optimization and efficiency; and
- Apply a deeper equity lens across all program planning and delivery.

## 3.2 Residential and Income Eligible Programs

**EnergyWise:** EnergyWise will be adapting the program to streamline costs given diminishing electric savings from the reduction in lighting upgrades. 2022 changes include:

- Reduction in weatherization incentives for non-electric and non-gas heated homes.
- Supporting equity by adding a reporting element for Independent Insulation Contractors that are sub-contractors in the EnergyWise program. The lead vendor will report on the number of minority and women owned businesses working within EnergyWise so a baseline can be established.
- The program anticipates introducing a moderate income offering in the 2022 plan.
- The program will also look for additional electric savings that can be incorporated within the portfolio of offerings.
- The Lead Vendor will continue workforce development upskilling that supports EnergyWise. Historic trainings have included sales support for promoting energy efficiency, identifying opportunities for electric heat.

**Residential Consumer Products:** Analysis of the ENERGY STAR® Retail Products Platform (RPP) is ongoing in 2021. The RPP moves some of the consumer products items to a midstream program design. Ideally this approach could be a path to encourage adoption of the most efficient appliances.

Income Eligible Services Single Family: The Income Eligible Services program will continue to support the newly introduced third-party support model that was introduced in 2021.

**High-Efficiency Heating, Cooling and Hot Water Program (Energy Star HVAC):** The Energy Star HVAC Program will work in parallel with EnergyWise, IES, RNC and the RI Marketplace to improve program participation, and to provide consistent contractor training across the Residential EE Programs. 2022 Energy Star HVAC Program enhancements include:

- Collaborate with EnergyWise for HVAC lead generation; with IES for contractor training; with RNC for all electric home design, construction and testing; and with the RI Marketplace as a potential delivery channel.
- Require continuing education for inclusion on the “Approved Contractor” list.
- Research the lack of participation in heat pump water heaters and test solutions to increase participation.

**Residential New Construction:** The Company will explore opportunities to restructure and refine the program’s level of cost-efficiency. This effort is particularly crucial on the gas side of the program considering its marginal cost-effectiveness projection.

### **Multifamily & Income Eligible Multifamily**

- **Customer Research**
  - The Company will utilize qualitative and quantitative studies to continuously enhance program design and implementation (e.g., Non-Participant Study, Multifamily Census Study, yearly program evaluations, and other market research).



- Based on the analysis and findings of the Multifamily Census Study and Non-participant Study, The Company will leverage a market segmentation approach to better align offers to customers, property type, and property size. Additionally, this research will provide the programs with the best available information to identify prospective participants.
- **Training and Upskilling**
  - In 2021, The Company organized a workforce development training for the Lead Vendor to attend. The subject matter of the training provided our Lead Vendor with sales training when discussing deeper measures with customers and the benefits associated when installing the measures. Based on the positive feedback from our Lead Vendor, this training will continue to be offered as a refresher training on an annual basis to our Lead Vendor and other potential sub-contractors, as appropriate.
  - Additional Workforce Development trainings will be considered and offered throughout the program year. Recognizing trainings may benefit all residential programs, The Company will coordinate across programs to ensure Workforce Development trainings are offered to all Lead Vendors, Sub-contractors, etc. as needed and appropriate.
- **Stakeholder Engagement**
  - In 2020 and 2021 The Company hosted two stakeholder brainstorm sessions leading into the 2021 program year. Based on the input from the brainstorming sessions, The Company will continue to host proactive stakeholder engagement opportunities in 2021 for the 2022 program year to ensure feedback and suggestions are captured and can be implemented into programs as appropriate.
  - The Company will incorporate suggestions communicated in Multifamily deep dive sessions with stakeholders as appropriate.
  - The Company will reference the 2021 Commitment Tracker and bring forward commitments into the 2022 program year as appropriate.
- **Equity & Inclusion**
  - As The Company committed to in 2021, The Company will continue to track renter participation data, specifically in condo units for the 2022 program year. Capturing this information will allow The Company and Lead Vendor to identify customers and offer measures that are most meaningful to them.
  - The Company will consider including Multifamily measures in the Community Initiative in the 2022 program year. Based on the town that's selected, The Community Initiative has the potential to identify additional multifamily properties.
  - Marketing efforts for the Multifamily programs will aim to communicate the offers and benefits that are most meaningful to landlords, property managers, condo owners, and renters.
- **Flexibility & Ease**
  - If successful in 2021, The Company will continue to offer the "bring your own sub-contractor" model and consider expanding beyond ASHP if this model proves to increase program participation and quality of work remains intact.

- Based on the positive feedback from the Tiered Incentive pilot in 2020, The Company and Lead Vendor plan to review and revise the offer as needed and relaunch the offer in 2022.
- As committed to in 2021, The Company will continue to explore financing options for landlords and property managers.
- The Company will continue to explore new channels to provide outreach and awareness to the Multifamily programs.
- **Program Evolution Considerations**
  - Consider ways in which the company can help customers overcome pre-weatherization barriers including providing a list of approved contractors and additional financial incentives.
  - In lieu of lighting savings phasing out, the Company will explore emerging technologies that could bring cost effective electric savings to the program.

### *Income Eligible Programs*

**Income Eligible Services:** Income Eligible Services will continue to improve and expand its services to address equity of program implementation and will continue to incorporate measures to achieve savings and reduce customers' energy burden. 2022 IES Program enhancements include:

- Increase HVAC, hot water and envelope savings:
  - Focus on triple-decker units through a streamlined delivery process via a third-party provider.
  - Set goals for utilization of third-party vendor for weatherization.
  - Invest in incentive-based customer survey to collect data on heating and cooling systems and appliances.
  - Focus marketing on customers with electric heat to upgrade to air source heat pumps.
- Implement a workforce development program with a clear pathway to IES workforce opportunities.
- Continue to review potential new measures to decrease customer energy costs (ex. Water heaters, heat pump water heaters, smart thermostats, ventilation fans, etc).
  - Develop a customer education campaign on thermostat temperature control.
- In 2022, the Company will leverage the results from research conducted in 2021 on the costs and timeline of replacing oil/propane heating systems with air source heat pumps during non-emergency months. Based on the cost effectiveness, ease of implementation and approval to utilize rate-payer funds to convert oil heat to electric heat, this may require additional budgets and enhanced education for program staff, industry partners, and customers.
- Explore and test structural improvements to existing delivery model for enhanced IES delivery.

### **Income Eligible Multifamily**

\*Income Eligible Multifamily is combined with Multifamily above.

### 3.3 Commercial and Industrial Programs

- **Lighting:** Lighting savings are expected to decrease nearly 30% in 2022 as LED's increasingly become the industry standard. The primary mechanism for adjusting these savings is a measure life reduction from an average of roughly 12 years in 2020 to 8 years in 2022. This will result in a 15% reduction in C&I savings potential across all three scenarios in the Market Potential Study, which assumes lighting accounts for 55% of savings from 2021 to 2026.
- **Innovation and Barrier Reductions:** The Company engaged a third-party consultant to review and assess new and underutilized technologies, and to better understand the barriers associated with specific measures listed in the Market Potential Study. In 2022, the Company will leverage this research to increase adoption of select measures based on a combination of high potential, cost effectiveness, and ease of implementation. This may require additional education for program staff, industry partners, and customers and new program apparatus.
- **HVAC Industry Outreach:** To enable the C&I portfolio to pivot away LED lighting, promoting HVAC savings will be critical. To achieve this transformation, the Company proposes to consider an HVAC outreach initiative to promote awareness of incentives for new and underutilized measures (including those in the Market Potential Study), deliver targeted technical trainings, and provide other services to integrate efficiency program activities with the industry.
- **Training and Upskilling:** The Company will sponsor two categories of trainings focused on increasing adoption of non-LED measures:
  - Customer-oriented sessions to drive awareness and understanding of efficiency technologies and available incentives. Topics may include RCx, EMS', ventilation, and device-integrated HVAC controls, or lighting controls.
  - Industry-oriented technical sessions to upskill contractors, engineers, and others, which should improve design and implementation practices. Topics may include building automation (namely ASHRAE Guideline 36), measures identified in the Market Potential Study, and systems with poor realization rates in Evaluation studies.
- **Small Business Direct Install:** In 2022, the Small Business Program will continue to build on four main areas that were highlighted in the 2021 EE Plan:
  - Weatherization of gas and electric small businesses. This work will be done with a combination of ratepayer and RGGI funds. The Company is investigating whether a heating electrification offering is appropriate for electrically heated small businesses in conjunction with or after their weatherization is complete.
  - HVAC and other non-lighting measures for appropriate customers. This may include, but is not limited to, measures such as Demand Control Ventilation (DCV) in small commercial real estate, Condensing make-up air handling units (MAU) in non-chain restaurants and warehouses, and Packaged Terminal Heat Pumps (PTHP) in non-chain motels/hotels. The final mix of measures will depend on several factors including budget, the amount of expected benefits for each solution, and development of other solution pathways.
  - Increased focus on lighting solutions with controls. The Company reaffirms its commitment to deploying lighting solutions with controls where appropriate.

- Increased outreach to serve Woman and Minority Owned Businesses.
- **Demand Response**: The ConnectedSolutions program is a technology agnostic demand response offering that provides two curtailment options for commercial and industrial customers. The Target Dispatch offering calls on customers to curtail electricity or discharge energy from generators only a few times per summer (typically 1-8 events per summer). The Daily Dispatch option calls on customer to curtail energy or discharge energy many more times per summer (typically between 40-60 events per summer). In 2022, the Company will look to increase the number of customers participating the in Targeted and Daily Dispatch programs while subsequently increasing the average MW of curtailment across all events. The Company will also look to market the ConnectedSolutions program to customer that will be installing controlled HVAC systems, lighting control systems, and other energy efficiency offerings that can be used to curtail load.
- **Combined Heat and Power**: The Company is currently working with a customer that is pursuing an energy efficiency incentive for a 13.3 megawatt combined heat and power system that would provide electricity, hot water, and CO2 to their facility. The unique design of this system will allow the customer to capture the CO2 from the CHP and use the exhaust CO2 for their business operation. The CO2 harvesting will substantially reduce the greenhouse gas emissions from the CHP plant, while also reducing or eliminating the customers need to purchase food quality CO2. The incentive cost per a unit of energy is expected to be below \$0.03 per a lifetime kWh, making the project one of the most cost-effective offerings in the energy efficiency portfolio.
- **Retro-commissioning (RCx)**: The Company is exploring several options to expand participation in the Energy Systems Performance Optimization (ESPO) pathway: (1) Adding new low-cost tuning measures to streamline savings calculations, especially for Gas measures; (2) Standardizing guidance on savings calculation methodologies and funding available for system- and whole-building tuning; and (3) Supporting monitoring-based commissioning system set-up costs.
- **Energy Management Systems (EMS)**: The Company is revisiting its prescriptive EMS savings calculator. Assuming a method can be developed that provides sufficient accuracy, this tool will provide a standardized, simplified method for determining savings.
- **Sector-Oriented Initiatives**: The Company has been exploring initiatives to support the lodging and commercial real estate sectors in 2021. This exploration is likely to continue in 2022. Both sectors have considerable energy usage, however, launching and implementing this type of initiative requires considerable effort. In the meantime, the Company will continue supporting these customers through existing pathways.
- **COVID-19 Developments**: COVID-19 continues to impact the market landscape, creating both challenges and potential opportunities. Some C&I sectors remain reluctant to invest in their facilities (e.g., commercial offices), and rising materials costs threaten to slow new construction activity while driving up equipment costs. Conversely, if office spaces close or are repurposed in the coming years, this may be a good time to retrofit existing equipment and to ensure building controls are properly programmed to meet new operating patterns.

## 3.4 Cross-Cutting Programs

### 3.4.1 *Community-Based Initiative*

The Community-Based Initiative serves as way for the collective Residential and Small Business Energy Efficiency Programs to be elevated within a City by enlisting community-based channels and local stakeholders to promote the Initiative and established goals. In 2022, the emphasis for selecting the Cities to participate in the Program, in addition to energy efficiency, will include elements of equity and workforce development. This will be an important endeavor as COVID-19 greatly impacted the ability to engage with customers on the ground in the community in 2020 and 2021.

### 3.4.2 *Codes and Standards Support*

The Codes & Standards Technical Support Initiative (CSTS) develops and delivers technical guidance to a wide variety of stakeholders to support energy efficiency policies applicable to the state's building sector. CSTS is a highly cost-effective initiative that unlocks sources of typically long-lived energy savings and primarily benefits historical nonparticipants and customer segments considered "hard to reach" (HTR) by raising efficiency baselines market wide. CSTS saves energy by: (1) increasing overall market compliance with current minimum energy efficiency codes and standards, and (2) increasing the level of energy efficiency required by such policies. The Company has successfully demonstrated both of these approaches with respect to building energy codes; starting in 2022, the Company plans to extend these strategies to better support appliance and equipment standards. Active technical support of codes & standards, and appliance and equipment standards in particular, aligns very well with stakeholder goals for this Plan, and the Company will continue to coordinate with stakeholders to develop a clear path to attribution for these activities.

### 3.4.3 *Workforce Development*

In 2022, the Company plans to maintain its historical workforce development investments as well as investigating specific areas where there is high confidence in delivering ratepayer benefits. Examples of continued Residential and Income Eligible sector activities include training to EnergyWise and Multifamily program vendor/subcontractor sales and technical staff focused on promoting deeper savings measures to customers as well as technical training for air source heat pump opportunity identification. Examples of continued C&I sector activities include brief technical trainings on controls, retro-commissioning, and HVAC to facility/energy managers and program vendors to generate interest in deeper measures as well as in-depth technical trainings on control and HVAC topics for industry professionals. Feedback from activities conducted in 2021 will inform the planning of similar activities in 2022.

## 3.5 Participation

No major revisions anticipated.

## 4. Pilots, Demonstrations and Assessments

No major revisions anticipated, additional information provided in Attachment 3 section below. The Company will continue to incorporate pilots, demonstrations, and assessments in the portfolio. The Company anticipates that calendar year 2022 will be the last year in which the gas demand response pilot is included as a pilot offering. The Company will assess the viability of this approach to meeting capacity constraints as part of non-pipeline alternative (NPA) solution development that is underway.

## 5. Evaluation Measurement and Verification Plan

No major revisions anticipated to the section. Additional information provided in Attachment 3 section below indicating what EM&V.

## 6. Coordination with Other Energy Policies and Programs

This section will continue to describe the ways that the energy efficiency programs coordinate with, influence, and are influenced by other dockets before the RI PUC and by state and Company policies. At this time the Company anticipates several areas of continued focus and coordination will inform the plan.

### 6.1 System Reliability Procurement

No major revisions anticipated. The Company will continue to coordinate with SRP plans and filings, including the development of the NPA framework within the SRP pathway.

### 6.2 Act on Climate

The Act on Climate Legislation was signed into law by Governor McKee in April 2021. This legislation accelerates the timeline of legislated GHG reductions in RI. Specifically, 10% below 1990 levels by 2020; 45% below 1990 levels by 2030 (previously 2035); 80% below 1990 levels by 2040 (previously 2050); and net-zero emissions by 2050 (new). Moving forward, the Company's energy efficiency programs will continue to set energy reduction goals which contribute to these statewide GHG emissions reduction targets and will be reporting out on GHG emissions reductions in quarterly and annual reports, consistent with the 2021 Annual Plan.

#### *6.2.1 Electrification, Heat Pumps, and Delivered Fuel Policy and Objectives*

The Company plans to continue to offer enhanced incentives for customers installing heat pumps using allocated RGGI funds from OER, to the degree that those funds extend into 2022. At this time the Company does not have visibility to a direct regulatory pathway to the promotion of electrification for delivered fuel customers by way of system benefit charge collections. The Company will also assess the implications of the PUC's decision on prioritized benefits in the Performance Incentive Mechanism to determine if adjustments are warranted in the composition of the portfolio.

### 6.3 Advanced Metering Functionality, Grid Modernization, Rate Cases, Renewables

The Company will assess how the energy efficiency portfolio can best coordinate with dockets before the RI PUC including the AMF business case and Grid Modernization filings made in early 2021.

### 6.4 Codes and Standards Program and Accounting for New Codes and Standards

With an update to the state energy code (to the 2018 IECC) projected in late 2021, savings opportunity in 2022 will be reduced due to rising baselines.

## 7. Multi-Year Strategies

Consistent with the revised LCP Standards in Docket 5015, the Company will continue to note multi-year strategies in the Annual Plan. At this point the Company plans to include two multi-year strategies, continuing from the Three-Year Plan.

### 7.1 Combined Heat and Power

- **Combined Heat and Power:** The Company is currently working with a customer that is pursuing an energy efficiency incentive for a 13.3 megawatt combined heat and power system that would provide electricity, hot water, and CO<sub>2</sub> to their facility. The unique design of this CHP will allow the customer to capture the CO<sub>2</sub> from the CHP system and use the gas for their business operation. The CO<sub>2</sub> harvesting will substantially reduce the environmental emissions from the CHP plant, while also reducing or eliminating the customer's need to purchase food quality CO<sub>2</sub>. The incentive cost per a unit of energy is expected to be below \$0.03 per a lifetime kWh, making the project one of the most cost-effective offerings in the energy efficiency portfolio. The project is expected to be operational in late 2022. A minimum of 20% of the energy efficiency incentive payment will be held until commissioning is complete in 2023.

### 7.2 Rhode Island Infrastructure Bank (RIIB)

Consistent with the RI PUC rulings in the Docket 5076 proceeding, the Company will continue to work with OER and RIIB to assess the need and appropriateness of transfers of collected funds to the RIIB Efficient Building Fund (EBF).

## CONSISTENCY WITH STANDARDS

### 8. Least Cost Procurement Law and Standards

This section will continue to describe the Company's assessment of the Plan's compliance with Least Cost Procurement Law and the LCP Standards as revised in Docket 5015.

#### 8.1 Prudency

No major revisions anticipated.

### *8.1.1 General Considerations of Prudence*

No major revisions anticipated.

### *8.1.2 Equity*

Although there are no major revisions anticipated to the equity related processes and timelines outlined in the 2021 Plan, the Company expects preliminary information and feedback from the equity working group and relevant evaluation studies to inform the 2022 design and delivery of the residential and income eligible programs. Outcomes will be integrated as appropriate into the relevant section(s) of the 2022 Plan.

### *8.1.3 Parity Among Sectors*

No major revisions anticipated.

### *8.1.4 Rate and Bill Impacts*

No major revisions anticipated.

## 8.2 Reliability

No major revisions anticipated.

## 8.3 Environmentally Responsible

No major revisions anticipated.

## 8.4 Cost Effectiveness

As in past years, the Company will continue to prioritize cost efficiencies and identify areas to reduce costs and increase energy savings and benefits. Additional details on the approach to cost effectiveness and anticipated changes to the methodology for application in the 2022 Annual Plan are detailed in Attachment 4.

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

No major revisions anticipated. The Company plans to use a methodology for cost of energy supply calculations consistent with the 2021 Annual Plan and 2021 – 2023 Three-Year Plan.

# FUNDING PLAN, BUDGET AND GOALS

## 9. Savings Goals

No major revisions to structure of section anticipated, savings goals will change from those included in the 2022 year of the 2021 – 2023 Three-Year Plan Compliance Filings.



## 9.1 Electric Portfolio Savings Goals

No major revisions to structure of the section are anticipated.

## 9.2 Natural Gas Portfolio Savings Goals

No major revisions to structure of the section are anticipated.

## 10. Annual Plan Compared to the Three-Year Plan

The Company anticipates there will be changes to program year 2022 from the illustrative savings, benefits, and costs as shown in the Company's compliance filings for the Three-Year Plan (3YP). Changes from the Three-Year Plan compliance filings will be explained in the text of the Annual Plan. Top-line values from the Three-Year Plan compliance filings are shown in the table below for reference.

*Table 1. Comparison of 2022 Electric Portfolio in Three-Year Plan Compliance Filing and 2022 Annual Plan*

Electric Portfolio	2022 in 3YP Compliance Filing	2022 Annual Plan	% Change
Annual Savings (MWh)	129,302	-	-
Lifetime Savings (MWh)	1,379,789	-	-
Total Benefits (RI Test)	\$ 564,810,142	-	-
Total Spending	\$ 122,625,209	-	-
Benefit Cost Ratio (RI Test)	3.93	-	-
Cost/Lifetime kWh	\$ 0.100	-	-
EE Program Charge per kWh	\$ 0.01616	-	-

*Table 2. Comparison of 2022 Gas Portfolio in Three-Year Plan Compliance Filing and 2022 Annual Plan*

Gas Portfolio	2022 in 3YP Compliance Filing	2022 Annual Plan	% Change
Annual Savings (MMBtu)	427,504	-	-
Lifetime Savings (MMBtu)	4,278,262	-	-
Cost/Lifetime MMBtu	\$10.53	-	-
Total Benefits (RI Test)	\$144,538,274	-	-
Total Spending	\$36,723,443	-	-
Benefit Cost Ratio (RI Test)	3.09	-	-
C&I EE Program Charge per Dth	\$0.773	-	-
Residential EE Program Charge per Dth	\$1.109	-	-

## 11. Funding Plan and Budgets

The 2022 Annual Plan will be submitted to the RI PUC on October 1, 2021, consistent with the revised LCP Standards issued by the RI PUC in 2020. Given this updated timeline compared to prior years, the Company may not be able to include its updated annual electric load forecast for the October 1<sup>st</sup> filing.

When the electric forecast is available, the Company will provide an updated filing to the RI PUC, consistent with past practice when incremental information on in-year spend is available following filing.

### 11.1 ISO-NE Capacity Market Revenue

Similar to the past several years, FCM revenues will continue to decline from approximately \$16.0M in the 2021 Annual Plan to \$14.5M in the 2022 Annual Plan, placing further upward pressure on the electric energy efficiency rate.

### 11.2 Exceptions to the Natural Gas Energy Efficiency Program Charge

No major revisions anticipated.

### 11.3 Budgets

Based on guidance from the RI PUC at the December 22, 2020 open meeting, the Company, absent the identification of additional opportunities to drive the prioritized net benefits streams identified by the PUC, anticipates adhering to the 5% target budget increase communicated by the PUC in its approval of the 2021- 2023 Three Year Plan. Any adjustments to this target 5% budget increase above levels approved by the RI PUC for years 2022 and 2023 in the most recent energy efficiency hearings and open meeting decisions will need to take into account the Commission's guidance on prudence and reliability, including an understanding of long-term bill impacts and realization of prioritized benefit streams.

### 11.4 Transferring Funds

No major revisions anticipated.

### 11.5 Budget Management

No major revisions anticipated.

### 11.6 Notification of large customer incentives

No major revisions anticipated.

## 12. Performance Incentive Plan

The RI PUC approved a performance incentive mechanism for 2021 – 2023 in Docket 5076. The Company does not anticipate proposing changes to the PIM as approved. During 2021 the Company is tracking performance to the new PIM and will apply any lessons learned to program implementation in 2022.

## 13. Future Performance Metrics

Throughout the planning process, the Company will engage with stakeholders as needed if updates are needed to this section of the plan.

## CONCLUSION

### 14. Miscellaneous Provisions

No major revisions anticipated. This section will indicate specific caveats and stipulations of the Plan.

### 15. Reporting Requirements

No major revisions to this section are anticipated. This section will provide information on the quarterly and annual reporting on the implementation of the 2022 Annual Plan.

### 16. Requested Rulings

Consistent with the latest revised LCP Standards, this section will indicate the specific rulings the Company requests of the RI PUC through this filing.

## ATTACHMENTS

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

Anticipated revisions to program strategy highlighted in section 3.2 above. This attachment will continue to provide detail about all elements of the Residential and Income Eligible programs.

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

Anticipated revisions to program strategy highlighted in Section 3.3 above. This attachment will continue to provide detail about all elements of the Commercial and Industrial programs.

### Annual Plan Attachment 3. Evaluation, Measurement & Verification Plan

This attachment will provide an overview of the Evaluation, Measurement & Verification (EM&V) Process in Rhode Island, including description of how EM&V studies influence program savings, program designs, and what areas may be explored through EM&V studies in 2022. The table below lists the evaluation studies that are expected to inform savings assumptions in the 2022 Plan.

*Table 3. Evaluation, Measurement, and Verification Studies Informing the Claimable Savings in the 2022 Annual Plan*

Programs	Study Name	State
Products	RI-21-RE-AppRecycling - Appliance Recycling Impact Factor Update	RI
C&I Lighting	RI-19-CE-UpstrLight - Impact Evaluation of PY2019 Upstream Lighting Program	RI
C&I Gas	RI-20-CG-CustGasPY19 - Impact Evaluation of PY2019 Custom Gas Installations	RI

Programs	Study Name	State
C&I Elec	RI-19-CE-CustElec - Impact Evaluation of PY2018 Custom Electric Installations	RI
C&I Elec	RI-20-CE-CustElecPY19 - Impact Evaluation of PY2019 Custom Electric Installations	RI
Multiple	RI-20-XG-GasPeak - Gas Peak Demand Savings	RI
Res Products	RI-21-RE-AppRecycling - Appliance Recycling Impact Factor Update RI-19-RE- AppRecycle - Residential Appliance Recycling Savings Update	RI
Res HVAC	Net-to-Gross Research of RCD and Select Products Measures (MA20R28)	MA
Multiple	Programmable Tstat Impact (MA20R25-B-PTSTAT)	MA
Res EnergyWise SF	RCD Virtual Assessment Study	MA
Multiple	Smart Thermostat Impact Study (RES 24)	MA
Multiple	MA19R17-B-TRM Comprehensive TRM Review	MA
C&I	Baseline Repository (MA20C02-B-ISPREPOS)	MA
C&I	Energy Management System (EMS) ISP Study (MA20C03-B-EMSISP)	MA
C&I	Franchise Controls Evaluation (MA20C07-E-DUN)	MA
C&I	Lifetime Gross AML Adjustment Analyses	MA
C&I Elec	Ground Source Heat Pump Savings (MA20C15-B-GSHP)	MA
IES MF	Low Income Multifamily Health NEI (TXC 50)	MA
Products	Residential Downstream/Upstream Products Net-to-Gross Study (MA20X04-B-PRODNTG)	MA
RNC	Residential New Construction Renovations and Additions NTG (MA20X06-B-RENOADDNTG)	MA
Products	C&I HVAC NTG & Market Effects Measurement (MA20X08-B-CIHVACNTG)	MA
Multiple	C&I O&M and non-O&M NEI with Small Business Focus (MA20X10-B-CIOMNEI)	MA

This section will also detail evaluation studies to be conducted in 2022. The Company will develop a list of 2022 evaluation studies and will incorporate feedback from the EERMC Consultants and OER during the planning process. In addition, the Company will review the M&V legislated study recommendations and implement those that are feasible when developing the 2022 EM&V Plan.

#### Annual Plan Attachment 4. Rhode Island Benefit Cost Test Description

This section will provide a description of the approach to calculating all component benefits and costs in the RI Test as applied to the Energy Efficiency portfolio, and how the RI Test aligns with the benefit cost framework as detailed in Docket 4600. Several changes will be made to the approach to the Rhode Island Test in the 2022 Annual Plan.

- Application of updated avoided costs from the regional avoided cost study (AESC 2021)<sup>2</sup>.
  - During 2020 – 2021 the Company, along with all the New England program administrators participated in a new avoided cost study for the purpose of screening demand side management programs in New England. The AESC 2021 study, again completed by Synapse Energy Economics, replaces the AESC 2018 study that had been used to screen programs in years 2019, 2020, and 2021 (including the Rhode Island Three-Year Plan covering years 2021 – 2023).
  - The Company will apply Counterfactual #4 from the AESC 2021 Study to the screening of the 2022 Energy Efficiency and Demand Response portfolios. Counterfactual #4 models a future energy system without programmatic energy efficiency or demand response resources.
    - Most categories of avoided costs declined from AESC 2018 to AESC 2021 due to a variety of factors. Some categories, notably the non-embedded GHG cost, increased. These changes will be discussed in this section of the Annual Plan.<sup>3</sup>
- Application of macroeconomic benefits in the 2022 Annual Plan.
  - The Company anticipates showing primary benefit-cost ratios in the 2022 Annual Plan that omit macroeconomic benefits. This is a change from the practice used in the screening of the 2020 and 2021 Annual Plans (and the Three-Year Plan covering years 2021 – 2023). Macroeconomic benefits are a category of benefits to be included in the RI Test, per the guidance issued in RI PUC Docket 4600. Therefore, the Company undertook an effort to improve the method of quantification for this benefit stream during 2018 – 2019, resulting in the methodology applied in the two most recent Plan filings. However, recently the Company has had conversations with stakeholders, led by the Division, regarding challenges in completely eliminating double counting of benefit streams in the calculation of macroeconomic benefits. As an initial approach, the program and portfolio cost-effectiveness screening will be shown with and without the macroeconomic benefits. Omission of the macroeconomic benefits will lower benefit cost ratios for all programs and the portfolios as a whole.

For illustrative purposes, the tables below summarize the RI Test Benefit Cost Ratios for year 2022 *from the Company's Compliance Filing for the Three Year Plan* with the existing AESC 2018 applied and how that same planning screens under the AESC 2021 Counterfactual #4 avoided costs that will be applied to the 2022 Annual Plan. These tables also show the RI Test results with and without macroeconomic benefits. Note that these benefit-cost ratios only reflect the planning done for the Three-Year Plan, as updated by the Company's Compliance Filing. These benefit-cost ratios will change with detailed

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<sup>2</sup> Avoided Energy Supply Components in New England: 2021 Report, May 14, 2021 Amended Release. [https://www.synapse-energy.com/sites/default/files/AESC%202021\\_20-068.pdf](https://www.synapse-energy.com/sites/default/files/AESC%202021_20-068.pdf)

<sup>3</sup> Refer to AESC 2021 ES-Table 4 for an illustrative comparison of the changes between AESC 2018 and AESC 2021 Counterfactual #4. [https://www.synapse-energy.com/sites/default/files/AESC%202021\\_20-068.pdf](https://www.synapse-energy.com/sites/default/files/AESC%202021_20-068.pdf)

planning for the 2022 Annual Plan, including the application of the most recent evaluation, measurement, and verification (EM&V) study results over the next several months.

Table 4. 2022 Electric Portfolio, Three-Year Compliance Filing. Illustrative Comparison of RI Test Results with AESC 2018 and AESC 2021

		AESC 2018 Applied		AESC 2021 Applied	
		RI Test w/ Economic Benefits	RI Test w/o Economic Benefits	RI Test w/ Economic Benefits	RI Test w/o Economic Benefits
Sector	Program				
<b>Large Commercial &amp; Industrial</b>					
	Commercial New Construction	5.96	3.15	6.18	3.38
	Commercial Retrofit	5.75	2.39	6.24	2.89
	Direct Install	3.47	1.84	3.62	1.99
	Commercial ConnectedSolutions	9.87	7.68	4.85	2.66
<b>C&amp;I SUBTOTAL</b>		<b>5.14</b>	<b>2.41</b>	<b>5.28</b>	<b>2.55</b>
<b>Income Eligible</b>					
	Low Income Single Family	2.64	1.78	2.71	1.85
	Low Income Multi Family	1.91	0.72	1.94	0.75
<b>Income Eligible Residential SUBTOTAL</b>		<b>2.34</b>	<b>1.47</b>	<b>2.40</b>	<b>1.53</b>
<b>Residential Programs</b>					
	Residential New Construction	2.83	1.92	3.12	2.21
	EnergyStar HVAC	2.83	1.76	3.05	1.98
	EnergyWise	1.92	1.02	1.98	1.08
	EnergyWise Multi Family	2.22	1.06	2.23	1.08
	Behavior Feedback	3.19	2.19	3.04	2.04
	EnergyStar Lighting	N/A	N/A	N/A	N/A
	EnergyStar Appliances	2.87	1.84	3.03	1.99
	Residential ConnectedSolutions	6.43	5.60	2.16	1.33
<b>Residential SUBTOTAL</b>		<b>2.45</b>	<b>1.55</b>	<b>2.28</b>	<b>1.37</b>
<b>TOTAL</b>		<b>3.93</b>	<b>2.01</b>	<b>3.97</b>	<b>2.04</b>

Table 5. 2022 Gas Portfolio, Three-Year Compliance Filing. Illustrative Comparison of RI Test Results with AESC 2018 and AESC 2021

		AESC 2018 Applied		AESC 2021 Applied	
		RI Test w/ Economic Benefits	RI Test w/o Economic Benefits	RI Test w/ Economic Benefits	RI Test w/o Economic Benefits
Sector	Program				
<b>Large Commercial &amp; Industrial</b>					
	Large Commercial New Construction	5.08	3.57	5.36	3.85
	Large Commercial Retrofit	5.56	4.03	6.08	4.55

		AESC 2018 Applied		AESC 2021 Applied	
		RI Test w/ Economic Benefits	RI Test w/o Economic Benefits	RI Test w/ Economic Benefits	RI Test w/o Economic Benefits
Sector	Program				
	Small Business Direct Install	3.15	1.67	3.40	1.93
	Commercial & Industrial Multifamily	4.55	2.80	4.80	3.05
<b>C&amp;I SUBTOTAL</b>		<b>4.93</b>	<b>3.56</b>	<b>5.33</b>	<b>3.97</b>
<b>Income Eligible</b>					
	Single Family - Income Eligible Services	2.96	1.97	3.00	2.01
	Income Eligible Multifamily	4.27	2.72	4.31	2.76
<b>Income Eligible Residential SUBTOTAL</b>		<b>3.23</b>	<b>2.10</b>	<b>3.27</b>	<b>2.14</b>
<b>Residential Programs</b>					
	EnergyStar® HVAC	1.66	1.30	1.76	1.39
	EnergyWise	2.03	1.11	2.06	1.13
	EnergyWise Multifamily	4.71	3.38	4.80	3.48
	Home Energy Reports	4.10	3.04	4.94	3.88
	Residential New Construction	1.10	0.99	1.15	1.03
<b>Non-low income Residential SUBTOTAL</b>		<b>2.03</b>	<b>1.35</b>	<b>2.10</b>	<b>1.43</b>
<b>TOTAL</b>		<b>3.09</b>	<b>2.12</b>	<b>3.25</b>	<b>2.28</b>

## Annual Plan Attachment 5 and Attachment 6. Electric and Gas Energy Efficiency Program Tables

The Company will make incremental updates to the tables in Attachments 5 and 6. Primarily these will be to provide greater clarity where needed. At this time the Company plans to update the gas portfolio benefits table to provide greater clarity, and the performance incentive tables to reflect the structure of the PIM, consistent with the changes made by the PUC in Docket 5076.

## Annual Plan Attachment 7. Rate and Bill Impacts

No significant changes to the methodology for rate and bill impact analyses are anticipated at this time. The revised methodology used for gas rate and bill impacts developed for the 2021 Plan will be applied again for 2022. The Company anticipates that this analysis will not be included in the draft plan released in July.

## Annual Plan Attachment 8. Pilots, Demonstrations & Assessments

This section will detail the Company's pilots, demonstrations, assessments proposed for the 2022 program year. The Company will continue to identify opportunities to test, analyze, and deliver new solutions and services for customers that are technically feasible, desirable by customers, and viable to the portfolio. The Company plans to explore logical program extensions like new or substitute measures, adaptations to program or delivery approaches to drive incremental improvement and completely new offering creation. The Company expects to use evaluation studies, customer and market research, and

stakeholder feedback to identify areas for potential exploration and will prioritize efforts based on materiality, speed of development, and area of impact. Each customer segment and saving technologies have unique barriers to adoption and will be assessed on a situational basis.

## Annual Plan Attachment 9. Cross-Program Summary

No major revisions anticipated.

## Annual Plan Attachment 10 Definitions

No major revisions anticipated.

## 2022 ANNUAL PLAN TIMELINE

### March

March 18 – EERMC Council Meeting

- 2022 Plan Priorities Vote

March 25 – EE Technical Working Group

- Presentations from stakeholders on their priorities for the 2022 Annual plan

### April

April 22 – EERMC Council Meeting

April 29 – EE Technical Working Group

- Presentations from stakeholders on their priorities for the 2022 Annual plan

### May

May 3 – Begin Development of 2022 Annual Plan Outline

May 20 – EERMC Council Meeting

May 27 – EE Technical Working Group

### June

June 3 – 2022 Annual Plan Outline Memorandum sent to EERMC and TWG.

June 17 – EERMC Council Meeting

June 18 – Comments due from EERMC and Stakeholders on Plan Outline Memorandum

June 24 – EE Technical Working Group

- Discussion of comments from stakeholders on plan outline memo

### July

July 2 – EM&V changes to BC model locked for draft

July 15 – 2022 Annual Plan Draft sent to EERMC and TWG

July 16 – Submit Draft 2022 EE BC model and TRM database to EERMC Consultant Team

July 22 – EE Technical Working Group



- Initial input on 2022 Draft Annual Plan

July 29 – EERMC Council Meeting

July 30 – Comments due from EERMC and Stakeholders on Draft Plan and BC Model

## **August**

August 12 – Submit meeting materials to EERMC

August 13 – Deadline for RI and MA Evaluation Studies to be completed

August 19 – EERMC Council Meeting

August 20 – Final updates made to BC Models from evaluation studies

August 26 – EE Technical Working Group

- Final stakeholder discussion and inputs on the 2022 Annual Plan for incorporation into final

## **September**

September 8 – 2022 Annual Plan Final sent to EERMC and TWG

September 9 – 2022 BC Model sent to C-Team

September 23 – EERMC Council Meeting

- Vote on 2022 Annual Plan

September 24 – EE Technical Working Group

- Settlement discussion with stakeholders

September 24 – Circulate signature pages to settling parties

September 26 – Signature pages due from settling parties

## **October**

October 1 – File 2022 Annual Plan with PUC

October 4 – Submit final 2022 EE Annual Plan BC model

October 11 – TRM filed with PUC this week

October 11 – Submit final TRM database to C-team for record keeping

October 21 – EERMC Council Meeting

October 28 – EE Technical Working Group

October TBD – Updated E-1 and G-1 submitted to PUC account for new electric forecast and fund balance updates

October 1 – late November: 2022 Annual Plan Hearing Prep and anticipated PUC Discovery

## **November**

November 18 – EERMC Council Meeting

November 19 – EE Technical Working Group

Late November – PUC Hearings on 2022 Annual Plan