

Recommended Targets for Energy Efficiency and Active Peak Demand Reduction Savings for 2024-2026

Prepared for



STATE OF RHODE ISLAND
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

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Table of Contents

- I. Introduction 3
 - Purpose of the Targets 3
- II. Overview of Targets’ Relation to Planning Process 5
- III. Market Potential Study Scope and Application 6
 - Context and Industry Overview 6
 - Market Potential Study Refresh 6
- IV. Conclusion and Recommended Efficiency Savings Targets 7
- Appendix A: Market Potential Study Refresh Overview 9
- Appendix B: Summary of Model Input and Assumption Updates 10
- Appendix C: Relevent Meeting Minutes 11
- Appendix D: Relevent Meeting Materials 12

I. INTRODUCTION

This report presents proposed Three-Year Savings Targets (“Targets”) for Rhode Island Energy’s upcoming 2024-2026 Energy Efficiency Procurement Plan (“Three-Year Plan”). These recommendations are based on the Energy Efficiency & Resource Management Council’s (“EERMC”) Consultant Team’s oversight and review of findings of the EERMC-funded 2021-2026 Rhode Island Market Potential Study (“the 2021-2026 Study”) and its subsequent refresh for the 2024-2026 period (“The MPS Refresh”), conducted by Dunsky Energy + Climate Advisors; discussions with stakeholders and EERMC members; and review and alignment with relevant legislative and regulatory guidance on Target setting. Upon EERMC approval of Targets, as recommended or with modification, the EERMC’s counsel will file the proposed Targets with the Rhode Island Public Utilities Commission (PUC).

This will be the fifth submittal of triennial Targets by the EERMC to the PUC since the promulgation of the 2006 Comprehensive Energy Conservation, Efficiency and Affordability Act, or “Least-Cost Procurement (LCP) Law.” This process has also served to meet the EERMC’s legislated requirement in R.I. Gen. Laws § 39-1-27.7(c)(1):

“The commissioner of the office of energy resources and the energy efficiency and resources management council, either jointly or separately, shall provide the commission findings and recommendations with regard to system reliability and energy efficiency and conservation procurement on or before March 1, 2008, and triennially on or before March 1¹, thereafter through March 1, 2024. The report shall be made public and be posted electronically on the website of the office of energy resources.”

The proposed Targets presented are for Electric and Natural Gas energy efficiency energy savings, as well as active electric peak demand reductions, in each of the three years from 2024 to 2026. During the development of the 2021-2023 Targets, stakeholders recommended, and the Council approved, a shift towards presenting energy savings targets in lifetime instead of annual savings units. The Targets proposed herein continue the approach of using lifetime savings targets.

Purpose of the Targets

The purpose of energy efficiency targets as recommended by the EERMC to the PUC has been consistent in the four previous Target submittals, as clearly articulated in the September 1, 2014 filing when the EERMC stated:

The EERMC and the parties understand that the efficiency savings targets are intended to serve as guideposts as the utility develops its Three-Year EE Procurement Plan and more detailed annual EE Program plans. As the parties described in a joint brief filed with the Commission in Docket 4202 on April 1, 2011:² “It is important to note that the energy efficiency savings targets

¹ Due to time required complete the MPS Refresh, the EERMC vote on Targets was moved to April 20, which was communicated to the PUC

² The joint brief is available at: [http://www.ripuc.org/eventsactions/docket/4202-EERMC-JointRR\(4-1-11\).pdf](http://www.ripuc.org/eventsactions/docket/4202-EERMC-JointRR(4-1-11).pdf)

are just that, targets of what the EERMC assessment estimates is potentially available for cost-effective efficiency...

*...The 2010 legislation recognizes that the energy savings targets themselves do not constitute a plan, but rather **the targets are just high-level estimates of the potentially available cost-effective efficiency**, whose function is to guide the development of actual Three-year LCP and annual efficiency plans.”*

The purpose of the Targets is clear in its focus on establishing what is “potentially available cost-effective efficiency.” It is meant to guide the ensuing purpose of establishing savings goals in Three-Year EE Procurement Plans and Annual EE Plans, which also require the consideration of additional analysis covering factors such as prudence and reliability, as directed in the PUC’s LCP Standards³.

In 2019 the EERMC solicited via a competitive RFP process a Market Potential Study for Rhode Island to provide an objective estimate of all potentially available cost-effective energy efficiency resources during the 2021-2026 period. The 2021-2026 Study was completed in 2020 and was used to inform Targets for the 2021-2023 period. In 2022, the EERMC issued a competitive RFP to conduct a refresh (“MPS Refresh”) of the 2021-2026 Study for the 2024-2026 period. The scope and application of the MPS Refresh to savings targets are summarized in Section III of this report, while the results of the MPS Refresh are drawn upon to inform the recommended targets described in Section IV. Appendix A contains the presentation on the MPS Refresh’s high-level results and Appendix B contains a memo that gives a summary of model input and assumption updates. Together, Appendix A and B have sufficient granularity to inform Targets.

This report presents the EERMC’s recommendations for 2024-2026 savings targets for Rhode Island Energy’s upcoming Three-Year Plan and ensuing Annual Plans for consideration by the EERMC in their deliberations regarding the savings targets they will recommend to the PUC. These proposed targets are derived primarily from the MPS Refresh, which provided a comprehensive, analytical process to determine all cost-effective energy savings. The 2021-2026 Study included a range of modeling scenarios to help understand the landscape for energy efficiency in Rhode Island, and to quantify the impact of different modeling assumptions. A key difference from the 2021-2026 Study is that the MPS Refresh considered a narrower set of modeling scenarios. In particular, rather than three achievable scenarios, the MPS Refresh considered a single achievable scenario. This single achievable scenario was defined in a manner to inform the targets. Additionally, we built on prior submittals of Targets to the PUC; reviewed the LCP legislation and current LCP Standards; considered input from stakeholders; and factored input from the EERMC during Council meetings and during individual meetings held with council members and OER to inform our recommendation.

Further, to support consideration of the distinction between Targets and the goals associated with Three-Year EE Procurement Plans and Annual EE Plans, we acknowledge that while the 2024-2026

³ http://rieermc.ri.gov/wp-content/uploads/2020/08/5015-lcpstandards-final_8-25-20.pdf

electric and natural gas savings targets have been developed using the best information and data available at this time, and that additional relevant information is likely to be learned as time passes. Consequently, the lifetime savings targets, including considerations such as their associated budgets as estimated during the planning process, should be reviewed during the development of 2024-2026 Three Year Plan and its ensuing Annual Plans. Following this review, the plan goals should document how the Targets were considered and applied and clearly explain any deviations from the Targets as described further in Section II of this report. The parties participating in the development of the energy efficiency plan goals should agree that deviations from the lifetime energy savings Targets should be based only on clearly documented changes in cost-effective resource availability, or unforeseeable and/or unavoidable constraints to their full pursuit and achievement.

II. OVERVIEW OF TARGETS' RELATION TO PLANNING PROCESS

In 2010, the legislature adopted the ratemaking concept of revenue decoupling, in R.I. Gen. Laws § 39-1-27.7.1. Pursuant to § 39-1-27.7.1(f). The EERMC was required to submit proposed energy savings targets to the PUC by September 1, 2010. The purpose of these targets was to give the utility guidance on the potentially available cost-effective efficiency resources in the state that would feed into the normal LCP Three-Year and Annual energy efficiency program planning processes under § 39-1-27.7.

During the Three-Year and Annual planning processes required by Rhode Island law, the efficiency strategies, programs, and budgets are developed by the utility and the cost-effectiveness of the budgets and programs is reviewed and considered for approval by the EERMC before being filed with the PUC for their consideration and action. It is during these planning activities that a wide range of factors are considered and fully vetted, in a transparent way with significant stakeholder engagement, to inform what percentage of the total cost-effective energy savings potential could be realized during the three year period, and more accurately in ensuing annual plans based on evolving market trends and other factors. In particular, this is where “prudent and reliable” portion of the LCP law, which directs Rhode Island Energy to secure all cost-effective energy efficiency that is less than the cost of supply and is prudent, reliable, and environmentally responsible, should be applied.

Appropriately, the Council anticipates that once the impacts of a full consideration of prudence and reliability are documented, there will be gaps between the MPS Refresh-informed Targets and Three-Year and Annual Plan Goals, which represent the portion of Targets that will be proposed as Plan savings goals with associated budgets. The process for understanding the size of this difference includes a full review and vetting of all barriers that preclude reaching the full achievable savings. This is a collaboration between Rhode Island Energy, the EERMC and its Consultant Team, the Office of Energy Resources, and other stakeholders, and takes the form of a well-documented, transparent process involving full stakeholder engagement and input. At the end of this process, Rhode Island Energy's Annual Plans will be able to clearly detail the various reasons that Plan goals are below Targets and justify the magnitude of the gap.

Factors that typically are analyzed during this process include overall costs, rate and bill considerations, workforce factors, environmental, equity, other non-energy considerations, market characteristics such as energy efficiency equipment supply chains and consumer education and awareness, and State policy objectives including carbon emissions reductions and associated clean energy goals, among others. Many of these factors represent constraints on the achievable potential reflected in the Targets, which can be alleviated over time through program design innovation, capacity building, and policies to support growth and competition in efficiency products and service markets. As a result, even when Targets are set consistently from year to year, as is the case for the Targets presented in Section IV, it is very reasonable for the detailed, granular planning process to generate Plan savings goals which ramp toward those Targets over time in the Three-Year and associated Annual Plans, while also supporting the removal of barriers for future Three-Year Plans.

III. MARKET POTENTIAL STUDY SCOPE AND APPLICATION

Context and Industry Overview

Market Potential Studies are widely used as a best-in-class, data-driven resource to inform efficiency program targets, as they represent a quantitative estimate of the efficiency resource that is available for efficiency programs to pursue. As examples, efficiency boards and/or utility commissions in nearby states including Massachusetts, New Jersey, New Hampshire, Pennsylvania, and Delaware, among others, have used market potential studies conducted to help inform efficiency program targets in their respective jurisdictions. This section summarizes the scope and purpose of the 2024-2026 Rhode Island Market Potential Study Refresh, whose results inform the recommended targets presented in Section IV.

Market Potential Study Refresh

In 2019 through the work of a vendor, the EERMC completed the 2021-2026 Market Potential Study for Rhode Island. The results of the 2021-2026 Study were integral in the development of Council recommended Targets for the 2021-2023 period. In 2022 and 2023, the Council worked with the same study vendor⁴ to conduct a refresh of the 2024-2026 period (MPS Refresh) from the 2021-2026 Study to inform its development of these targets. The objective of the MPS Refresh was to update key study parameters to reflect new information made available since the 2021-2026 Study, including updated codes and standards, evaluated measure savings, and avoided cost estimates. In addition to updated inputs, the MPS Refresh tightened its scope to ensure that it could be completed in a timely and cost-efficient manner to reliably inform these Targets. The key differences in study parameters are described in Table 1.

⁴ The same vendor was selected twice through independent competitive RFP processes.

TABLE 1 | KEY DIFFERENCES IN PARAMETERS BETWEEN 2021-2026 STUDY AND 2024-2026 MPS REFRESH

Parameter	2021-2026 Study	2024-2026 MPS Refresh
Study Period	2021 – 2026 (six years)	2024 – 2026 (three years)
Savings Sources	Energy Efficiency, Demand Response, Heating Electrification, Combined Heat and Power, and Solar Photovoltaics	Energy Efficiency and Demand Response only
Potential Assessment	Technical, Economic, and Three Achievable Scenarios	Technical, Economic, and One Achievable Scenario

A notable difference is the reduction in the number of achievable scenarios contemplated. Unlike the 2021-2026 Study, the MPS Refresh focused on a single achievable scenario so that translation between the results of the study and the proposed targets would be more straightforward. In addition, that achievable scenario was defined to align with best practice incentive levels based on the experience of the study vendor, which has the effect of partially incorporating cost control considerations into the resulting achievable savings estimates, relative to the prior study’s Max Achievable scenario, which was used to inform the 2021-2023 Targets.

The Council’s recommended efficiency Targets in the following section are proposed in the context of the overarching purpose of the Targets as established in this report and are based directly on the results of the MPS Refresh.

IV. CONCLUSION AND RECOMMENDED EFFICIENCY SAVINGS TARGETS

As discussed above, the Council engaged in an extensive process to identify the achievable potential of electric energy efficiency, natural gas energy efficiency, and electric active demand response opportunities in Rhode Island for the 2024-2026 period. The process undertaken estimates the achievable cost-effective potential energy efficiency savings and active demand response opportunities according to accepted industry practices for Market Potential Studies.

Table 2 shows the recommended energy efficiency savings targets associated with each of electric and natural gas, as well as the electric active demand response targets. These targets are denominated in their respective energy units; are not additive; represent targets for the full portfolio of efficiency

measures across all sectors, building types, and end uses within each fuel; and correspond to the achievable energy savings estimated in the MPS Refresh for each fuel.

TABLE 2 | RECOMMENDED ELECTRIC AND GAS ENERGY EFFICIENCY AND ELECTRIC ACTIVE DEMAND RESPONSE TARGETS

Year	Electric Energy (Lifetime MWh)	Natural Gas Energy (Lifetime MMBtu)	Electric Active Demand Response (MW)
2024	1,397,644	7,058,839	86.7
2025	1,401,610	7,090,690	89.7
2026	1,413,953	7,119,585	94.6

APPENDIX A: MARKET POTENTIAL STUDY REFRESH OVERVIEW



APPENDIX B: SUMMARY OF MODEL INPUT AND ASSUMPTION UPDATES



APPENDIX C: RELEVANT MEETING MINUTES



APPENDIX D: RELEVANT MEETING MATERIALS

