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2024-2026 System Reliability Procurement Three-Year Plan

Prepared for the Energy Efficiency and Resource Management Council August 17, 2023

LCP Standards Ch.6: Role of the Council

6.3: Guidelines for SRP Plans and Proposals

A. The Council **shall review** Three-Year System Reliability Procurement Plans. The Council may review SRP Proposals.

B. The distribution company shall seek ongoing **input from, and collaboration with, the Council on development of the Three-Year SRP Plan** and on development of annual reports related to the Three-Year SRP Plan. The distribution company shall seek to receive the endorsement of the Three-Year SRP Plan by the Council prior to submission to the PUC.

C. The Council **shall vote whether to endorse the Three-Year SRP Plan by October 21, 2020** and triennially thereafter. If the Council does not endorse the Three-Year SRP Plan, then the Council shall document the reasons and submit comments on the Three-Year SRP Plan to the PUC for their consideration in final review of the Three-Year SRP Plan.

D. The distribution company shall, in consultation with the Council, propose **a process for Council input and review of its Three-Year SRP Plan** and SRP Proposals. This process is intended to build on the mutual expertise and interests of the Council and the distribution company, as well as meet the monitoring responsibilities of the Council.

E. The distribution company shall submit draft Three-Year Plans to the Council and the Division of Public Utilities and Carriers for their review and comment at least one week before the Council's scheduled vote. Draft annual reports related to the Three-Year Plan shall be submitted to the Council and Division of Public Utilities and Carriers two weeks before filing the report with the PUC.

F. The Council shall prepare memos on its **assessment of the cost effectiveness** of the Three-Year SRP Plan, pursuant to R.I. Gen. Laws §39-1-27.7(c)(5), and submit them to the PUC no later than three weeks following the filing of the respective Three-Year SRP Plans with the PUC, or in accordance with the procedural schedule set in the applicable docket.

G. The distribution company shall submit any draft SRP Proposal to the Council and the Division of Public Utilities and Carriers for their review six weeks prior to filing the SRP Proposal with the PUC. The Council may determine its endorsement or opposition, involvement or abstention, or any other level of action related to the filing on a case-by-case basis.

Process for Council input and review

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STATE OF RHODE ISLAND
ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

CONSULTANT TEAM

2023 EERMC
Key Deliverables and Schedule

Presented By: EERMC C-Team
Date: January 19, 2023

2024-2026 SRP Planning Calendar

SRP Plan

June
- 8th 2024-2026 SRP Plan Outline Memo
- 30th Partial First Draft 2024-2026 SRP Plan

July
- 28th Full First Draft 2024-2026 SRP Plan

August
- Work on SRP Plan Development continues

September
- 6th Second Draft 2024-2026 SRP Plan
- 21st Final Draft 2024-2026 SRP Plan

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Background | 2024-2026 Plan Timeline | Monthly Schedule of Activities | Council Discussion

2024-2026 SRP Planning Calendar

SRP Plan

October
- 19th Council Vote on 2024-2026 SRP Plan

November
- 16th Council Vote on Cost-Effectiveness Report
- 21st 2024-2026 SRP Plan Filing Deadline

December
- 12th Cost-Effectiveness Report Filing Deadline
- Discovery and Hearings begin

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Background | 2024-2026 Plan Timeline | Monthly Schedule of Activities | Council Discussion

Section 1. Introduction

Introduction

Figure 2. RIE Priorities for the 2024-2026 SRP Three-Year Plan

A	B	C	Objectives	How
		√	**Readable**: Easy to navigate and understand by any reader, including third-party solution providers	• Restructuring sections and content to be more responsive to the LCP Standards Chapter 4 • Organizational discipline • Concise writing, figures
√	√		**Useful**: Demonstrate clear alignment and integration with other business functions and investment proposals	• Links to overarching business objectives • Cross references • Calling out contingencies if/when they exist
√		√	**Actionable**: Where we identify areas of innovation or improvement, provide clear and actionable workplans	• Work/research/discussions needed • Milestones • Interim and end deliverables • Eval process for internal EE/DR/etc efforts
√	√	√	**Compelling**: Clear proposals for PUC ruling with well-supported justification and reasoning	• Screening requirements and implementation plans for non-wires and non-pipes solutions • Annual reporting requirements • Performance metrics and incentive plan • Other proposals, as appropriate

Notes: Presented to and discussed with the SRP TWG on May 17, 2023, and with the Energy Efficiency and Resource Management Council on May 18, 2023. Columns A, B, and C correspond to principles A, B, and C in Figure 1. Teal coloring indicates the objectives advance those principles.

Contents

This Plan is organized into sections aligned with required content as described in Chapter 4.4 of the Least-Cost Procurement Standards. Non-wires solutions and non-pipes solutions are each addressed throughout each of the sections of this Plan. The appendices to this Plan provide additional details to aid in understanding of the Report and to comply with legal and regulatory reporting requirements.

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Section 2. System Reliability Procurement Process
Section 3. Electric System Needs and Optimization
Section 4. Gas System Needs and Optimization
Section 5. Market and Stakeholder Engagement
Section 6. Performance Incentive Plan
Section 7. Annual Reporting
Section 8. Consistency with LCP Standards
Section 9. Requests for Regulatory Rulings

Appendix 1. Slide Deck Format
Appendix 2. Notes on Terminology
Appendix 3. Legal and Regulatory Basis
Appendix 4. Drafts of SRP Investment Proposals
Appendix 5. System Data Portal
Appendix 6. Electric SPR BCA Model
Appendix 7. Electric SRP Technical Reference Manual
Appendix 8. Gas SRP BCA Model
Appendix 9. Gas SRP Technical Reference Manual
Appendix 10. Expected Valuation

Section 2. System Reliability Procurement Process

Overview

In this Section, Rhode Island Energy describes the system planning process, from identification of system needs, screening for system reliability procurement, and procuring, evaluating, and implementing solutions.

We describe each step in detail. Although many steps are the same regardless of whether the system need or optimization is for the electric or gas system, there are some steps in which we handle electric system needs differently from gas system needs. We take care in pointing out these differences and explain why these differences are appropriate within our pre-filed testimony.

Figure 3 summarizes the system reliability procurement process as a sequence of high-level steps. These high-level steps are fully integrated into the overall electric and gas system planning processes. We walk through each of these steps in order in the following subsections.

Figure 3. Overview of System Reliability Procurement Process

Identify system needs

Engineers use forecasts about energy demand and distributed energy resources alongside information like asset age to model the electric and gas systems. These models help engineers pinpoint system needs that should be resolved soon.

Screen for possible solutions

Engineers apply screening criteria to understand which types of solutions are potentially feasible. Possible solutions include infrastructure investment, utility-run programs, and system reliability procurement.

Scope best alternative URP solution

Engineers scope the best alternative utility reliability procurement (URP) solution for the system need or optimization. Possible solutions are utility owned and operated by definition.

Solicit proposals

If system reliability procurement is a potential feasible solution, then engineers will work with the procurement team to develop a competitive bid process for third-party vendors to propose their solutions.

Evaluate proposals

Representatives from throughout Rhode Island Energy will help evaluate proposals from third-party vendors using pre-defined evaluation criteria that assess technical and economic viability.

Request regulatory approval

If a proposal is successful, then Rhode Island Energy will formally submit the solution for regulatory approval through an “SRP Investment Proposal.”

Implement solution

If the SRP Investment Proposal is approved, Rhode Island Energy will work with the third-party vendor to implement the solution in time to resolve the system need.

Step 2. Screen for Possible Solutions – Electric System

Engineers screen system needs for the potential viability of a system reliability procurement solution. This screening is fully integrated into the planning process and is part of the normal course of business.

Screening criteria are described in Figure 7, below. These screening criteria are applied by the engineering team to all electric system needs and opportunities for optimizing system performance that arise during Step 1.

System needs that fail any of the screening criteria will be proposed as "wires solutions" through Rhode Island Energy's annual *Electric Infrastructure, Safety, and Reliability ("ISR") Plan* at the appropriate time.

System needs that pass the screening then advance through the following steps to solicit and evaluate the viability of system reliability procurement solutions.

Figure 7. Screening Criteria for Non-Wires Solutions through System Reliability Procurement

Not an asset condition issue

Electric assets that have reached the end of their lifetimes need to be replaced; a non-wires solution (whether system reliability or utility reliability procurement) cannot resolve an asset condition issue.

Eligible system need or optimization

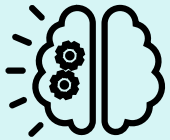
Eligible system needs and optimization include load relief, reliability, and supply cost mitigation. If the system need is load relief, the amount of load should not exceed 20% of total load in the area of the defined need.

Sufficient Market Interest

The system need or optimization must be substantial enough to plausibly result in market interest. Rhode Island Energy uses a guideline of the wires solution costing at least $1 million as a proxy for whether a system need is likely to gain sufficient market interest.

Adequate time to implement

There must be at least 24 months before the start date of non-wires solution implementation to allow adequate time to go to market, evaluate proposals, gain necessary approvals, and construct or deploy the proposed non-wires solution.



Additionally, by the Company's discretion, Rhode Island Energy may pursue a project that does not pass one or more of these screening criteria if there is reason to believe that a viable non-wires solution exists, assuming the benefits of doing so justify the costs.

Step 2. Screen for Possible Solutions – Gas System

Gas system reliability procurement is a nascent program and process, requiring ongoing development so that full integration into the gas planning process and normal course of business can be achieved. As with the electric system, the objective is for gas engineers to screen system needs for the potential viability of a system reliability procurement solution. Given the emergent nature of the program, we anticipate the screening process and criteria may evolve, informed by experience and learnings. Any proposed changes will be submitted for regulatory approval per LCP Standards at the appropriate time.

Once embedded in the gas planning process, screening criteria will be applied by the engineering team to system needs and opportunities for optimizing system performance that arise during Step 1. Screening criteria for the gas system are described in Figure 8.

System needs that fail any of the screening criteria will be proposed as "pipes solutions" through Rhode Island Energy's annual *Gas Infrastructure, Safety, and Reliability ("ISR") Plan* at the appropriate time.

System needs that pass the screening then advance through the following steps to solicit and evaluate the viability of system reliability procurement solutions. Projects that meet the screening criteria will be prioritized in consideration of capacity-constrained areas on the gas system.

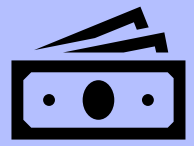
Figure 8. Screening Criteria for Non-Pipes Solutions through System Reliability Procurement

Not an asset replacement investment

Gas assets that pose immediate, local, and system-wide safety and/or reliability impacts must be replaced; a non-pipes solution (whether system reliability or utility reliability procurement) cannot resolve a critical safety or reliability issue.

Eligible system need or optimization

Eligible system needs and optimization include load reduction, load removal, and supply constraint mitigation.

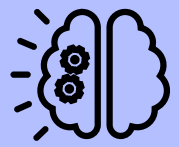


Sufficient Market Interest

The system need or optimization must be substantial enough to plausibly result in market interest. Rhode Island Energy uses a guideline of the pipes solution costing at least $0.5 million as a proxy for whether a system need is likely to gain sufficient market interest.

Adequate time to implement

There must be at least 24 months before the start date of non-pipes solution implementation to allow adequate time to go to market, evaluate proposals, gain necessary approvals, and construct or deploy the proposed non-pipes solution.



Additionally, by the Company's discretion, Rhode Island Energy may pursue a project that does not pass one or more of these screening criteria if there is reason to believe that a viable non-pipes solution exists, assuming the benefits of doing so justify the costs.

Step 5. Evaluate Proposals

With the objective of comparing possible solutions on a level playing field, all possible solutions – whether utility-run or third-party provided – are pursued and evaluated in parallel.

First, the procurement specialist will review all proposals to ensure their completeness. On a case-by-case basis, the procurement specialist may notify bidders of incomplete proposals and allow time for bidders to remedy their proposals. Bidders who do not or cannot submit complete proposals will be notified of their disqualification from the procurement process. The procurement specialist will share all complete proposals with members of the Rhode Island Energy evaluation committee, who will be determined prior to issuing the RFP.

All proposals will be evaluated by all members of the evaluation committee using the same evaluation sequence, evaluation criteria, and weighting. Each member will score each proposal; all member scores will be averaged to obtain the final score. The proposal with the highest score will be tentatively selected; all other bidders will be notified of non-selection.

Evaluation criteria is defined and described in the Least-Cost Procurement Standards, Section 1.3.A:

> *"Least-Cost Procurement shall be cost-effective, reliable, prudent, and environmentally responsible. … System Reliability Procurement shall be lower than the cost of the best alternative Utility Reliability Procurement."*

Rhode Island Energy adopts these criteria in its evaluation rubric, shown in Figure 8, below. As a threshold step, any proposal that costs more than the best alternative utility reliability procurement solution identified in Step 3 will be removed from consideration. Rhode Island Energy will conduct its comparison of costs using the stipulations defined in Least-Cost Procurement Standards Section 1.3.H.[5]

Figure 8. System Reliability Procurement Evaluation Rubric

Criteria	Description	Weight
Cost	Total project cost is less than or equal to cost of best alternative Utility Reliability Procurement	Go/No-Go
Cost-Effective	Using the Docket 4600 Benefit-Cost Framework, to what extent do benefits outweigh costs?	25; No-Go if BCR- < 1.0
Reliable	To what extent can the proposal reliably resolve the system need?	25; No-Go if deemed not reliable
Prudent	To what extent would advancing the proposal be considered a prudent decision?	25; No-Go if deemed not prudent
Environ-mentally Respon-sible	To what extent is the proposal environmentally responsible?	25; No-Go if not environ-mentally responsible
	Total	**100**

[5] "Lower than the cost of the best alternative Utility Reliability Procurement i. The distribution company shall compare the cost of System Reliability Procurement measures, programs, and/or portfolios to the cost of the best alternative Utility Reliability Procurement option using all applicable costs enumerated in the RI Framework. The distribution company shall provide specific costs included…"

Section 3. Electric System Needs and Optimization

Section 4. Gas System Needs and Optimization

Section 5. Market and Stakeholder Engagement

System Data Portal

Rhode Island Energy maintains an interactive website where third parties can access information about the electric distribution system, called the "System Data Portal." The primary objective of the System Data Portal is to use information to nudge development of distributed energy resources to locations on the grid that provide relatively more operational value. An ancillary benefit is that developers can gain insight into potential development locations that may result in relatively low interconnection costs and/or relatively quick interconnection times. Appendix 3 contains more information about how to use the System Data Portal, including specific use cases for various stakeholders including distributed generation developers, electric vehicle charging infrastructure developers, and building developers.

Rhode Island Energy is in the process of migrating the System Data Portal from National Grid's servers to PPL's servers, expected to be complete by May 2024. This migration will preserve all key components of the System Data Portal, including Company Reports, Distribution System Data Map, Heat Map, and Hosting Capacity Map, all of which will be updated by the end of the first quarter of each year on an ongoing basis.

Rhode Island Energy will make the following changes and improvements to the System Data Portal:

- Solicitations for System Reliability Procurement will be housed within the Company Reports tab instead of the tab currently titled "NWA." By housing all relevant materials together (i.e., solicitations, area studies, and the 2024-2026 SRP Three-Year Plan), we hope third-party solution providers and potential bidders can more easily access pertinent information for beneficial development of distributed energy resources and successful proposals for non-wires solutions.

- Equivalent materials for the gas distribution system and solicitations for non-pipes solutions will be added to the Company Reports tab.

- Rhode Island Energy will remove the fleets layer from the heat map, but add a map showing loading hosting capacity. The original objective of this layer was to help third parties identify fleets that could potentially be electrified. However, there is no compelling evidence that the fleet layer is actively used and there are administrative challenges with updating the layer. Instead, we will add a full map tab showing loading hosting capacity on each feeder. This layer will provide third parties information about which feeders may have the capacity to accommodate electric vehicle charging infrastructure with relatively low interconnection cost.

- Rhode Island Energy will remove the tab "SLR," which shows projections of sea level rise using data sourced from the National Oceanic and Atmospheric Administration. To aid third parties in developing distributed energy resources in locations with lower climate risk, Rhode Island Energy will add layers to each map tab that allow users to toggle on/off map layers from Rhode Island's STORM TOOLS, a suite of maps that show coastal flooding for various levels of storm and sea level rise that is used by the Coastal Resources Management Council. Rhode Island Energy recognizes the importance of climate resilience and climate adaptation for our energy resources and welcomes suggestions for other useful map overlays on an ongoing basis.

Section 6. Performance Incentive Plan – *forthcoming*

Section 7. Annual Reporting

Annual Reporting

Rhode Island Energy will submit an SRP Annual Report to the Rhode Island Public Utilities Commission by June 1 of each year covering activities completed within the prior calendar year (e.g., the *2024 SRP Annual Report* will cover activities conducted January 1 through December 31, 2024, and will be submitted by June 1, 2025). With the dual objectives of transparently reporting activities to interested stakeholders and holding the Company accountable, each annual report will include the following information:

- Results of screening for electric and gas system reliability procurement opportunities, with any opportunities added to a comprehensive listing of opportunities with summary information about system needs or optimization and next step/date of next step (akin to the descriptions provided in Sections 3 and 4);
- A summary of any major changes to the System Data Portal (beyond routine updating of data);
- A summary of engagement with the SRP Technical Working Group; and
- A description of any proposed changes to process, funding, performance incentive, annual reporting, or any other system reliability procurement activity with a justification for the proposed change and any request regulatory ruling related to the proposed change.

Section 8. Consistency with LCP Standards

Section 9. Request for Ruling – *forthcoming*

Request for Ruling – *forthcoming*

For reference: per LCP Standards (2023) Chapter 4.5 (Docket No. 23-07-EE)

A. The PUC will approve screening requirements and implementation plans that meet the Standards herein.

B. The PUC will approve annual reporting requirements that meet the standards herein.

C. The PUC may approve a three-year performance incentive plan for System Reliability Procurement.

D. The PUC will order adoption of any other proposals supported by the Plan and consistent with Least-Cost Procurement, and all applicable statutes, rules, and policies.

Appendices

Appendices

Appendix 1.	Slide Deck Format of *2024-2026 SRP Three-Year Plan – forthcoming*
Appendix 2.	Notes on Terminology – drafted
Appendix 3.	Legal and Regulatory Basis – drafted
Appendix 4.	Preliminary Conceptual Drafts of SRP Investment Proposals – *forthcoming*
Appendix 5.	System Data Portal – *forthcoming*
Appendix 6.	Electric System Reliability Procurement Benefit-Cost Assessment Model – *forthcoming*
Appendix 7.	Electric System Reliability Procurement Technical Reference Manual – *forthcoming*
Appendix 8.	Gas System Reliability Procurement Benefit-Cost Assessment Model – *forthcoming*
Appendix 9.	Gas System Reliability Procurement Technical Reference Manual – *forthcoming*
Appendix 10.	Expected Valuation – drafted

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A4. Drafts of SRP Investment Proposals

Rhode Island Energy will file:

- An *SRP Investment Proposal* for Electric Demand Response alongside, but separate from, the *FY2025 Electric Infrastructure, Safety, and Reliability ("ISR") Plan* in December 2023; and
- An *SRP Investment Proposal* for a Gas Demand Response Pilot Program.

Drafts of these proposals will be available for external review and comment within the next version of this Plan due to external stakeholders September 6, 2023. Revised proposal drafts will also be included as an appendix in the *2024-2026 SRP Three-Year Plan* to be filed with the Rhode Island Public Utilities Commission on or before November 21, 2023.

A5. System Data Portal

The objective of this appendix is to assist potential users with how to use the System Data Portal.

A6-A9. BCA Models and TRMs

No proposed changes.