



Rhode Island Energy™

a PPL company

Request for Proposal

Non-Wires Solution Project

to Provide Solutions for

Staples #112 Reliability 112W43

Cumberland & Woonsocket, RI

Rev 1, 6/17/2024

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1. Introduction

This Request for Proposals (RFP) for a non-wires solution is issued by The Narragansett Electric Company d/b/a Rhode Island Energy.

Section 1: Introduction describes background information about Rhode Island Energy, potential approaches to developing a solution and submitting a proposal, how this RFP fits into Rhode Island Energy's larger system planning process, and resources for bidders to obtain more information about being a supplier for Rhode Island Energy.

Section 2: Technical Specifications contains more information about the specific system need that Rhode Island Energy is seeking to resolve and the technical specifications proposed solutions are required to meet.

Section 3: Instructions for Proposal Content gives bidders guidance on what information is required in submitted proposals. Note that proposals are expected to follow the same organization as this section.

Section 4: Evaluation describes the process by which Rhode Island Energy will evaluate proposals and the next steps for the selected bidder.

The Appendix contains a bidder check list and a list of acronyms.

About Rhode Island Energy

Rhode Island Energy (RIE) provides essential energy services to over 770,000 customers across Rhode Island through the delivery of electricity or natural gas.

Our team is committed to providing, safe, affordable, reliable electricity and gas to every community we serve throughout the state — in all the places we call home — while working to help Rhode Island meet its climate and clean energy mandates over the coming decades.

Rhode Island Energy is part of the PPL Corporation (NYSE: PPL) family of companies addressing energy challenges head-on by building smarter, more resilient, and more dynamic power grids and advancing sustainable energy solutions.

Intent of this RFP

As a part of providing essential energy services in Rhode Island, RIE is pursuing the potential implementation of a non-wires solution in our service territory, in accordance with Rhode Island General Laws 39-1-27.7,¹ Least-Cost Procurement (LCP) Standards,² and Rhode Island Energy's proposed 2024-2026 System Reliability Procurement Three-Year Plan.³

¹ webserver.rilin.state.ri.us/Statutes/TITLE39/39-1/39-1-27.7.HTM

² Rhode Island Public Utilities Commission Docket No. 23-07-EE: [Microsoft Word - 5015_LCP_Standards_05_28_2020_8.21.2020 Clean Copy FINAL \(ri.gov\)](#)

³ Rhode Island Public Utilities Commission Docket No. 23-47-EE: [Docket No. 23-47-EE The Narragansett Electric Co. dba Rhode Island Energy | RIPUC](#)

What is a non-wires solution? A non-wires solution (NWS) is the inclusive term for any electrical grid investment that is intended to defer or remove the need to construct or upgrade components of a distribution and/or transmission system, or “wires solution”.⁴

NWSs are required to comply with the LCP Standards: reliable, prudent, environmentally responsible, cost-effective, and less than the cost of the best alternative utility reliability procurement (the wires solution). For more information about these standards, please see the LCP Standards available here: https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2023-07/2307-LCP%20Standards_final.pdf An NWS can include any action, strategy, program, or technology that meets this definition and these requirements.

Some technologies and methodologies that can be applicable as an NWS include demand response, solar, energy storage, combined heat and power (CHP), microgrid, conservation or energy efficiency, and other distributed energy resources (DERs) or distributed generation (DG). NWSs can include these and other investments individually or in combination to meet the specified need in a cost-effective manner.

Potential Approaches to Solutions

To identify potential solutions, Rhode Island Energy issues requests for proposals (RFPs) which are open to all NWS approaches; Rhode Island Energy is agnostic to technological approach as long as the NWS meets the Least-Cost Procurement Standards. We encourage potential bidders to consider the following solution approaches when developing a proposal:

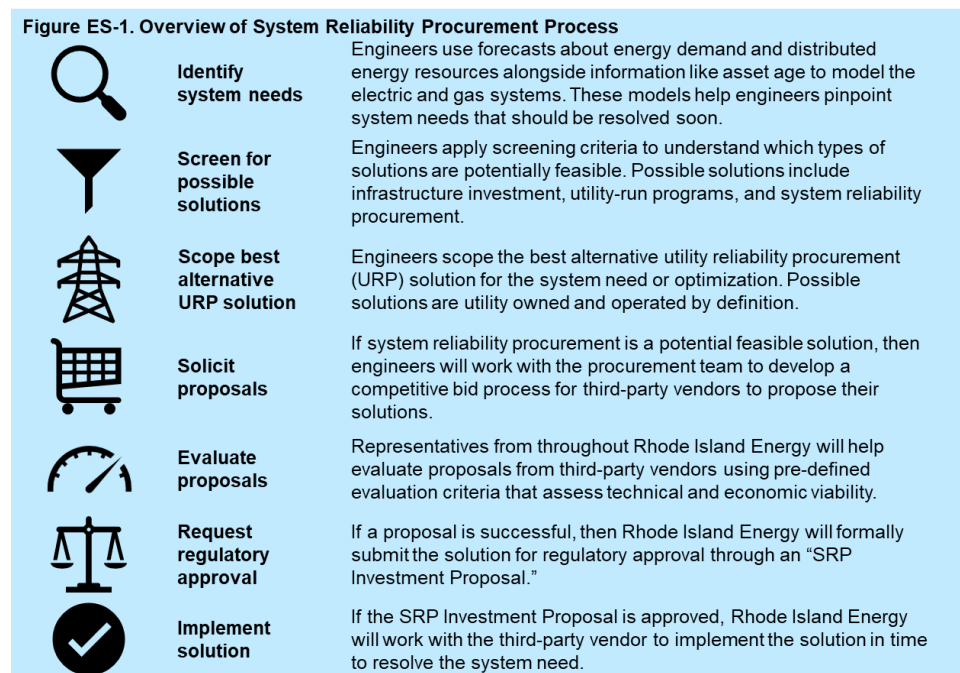
- Standard solution approach: Solutions that contain a single technology in a single bid proposal.
- Portfolio solution approach: Solutions that contain multiple technologies (i.e., solar and storage, targeted demand response and wind, etc.) in a holistic, integrated manner as part of a single bid proposal.
- Partial solution approach: Partial solutions that provide a portion of the solution requirements may be considered where Rhode Island Energy can independently identify other partners to formulate a full solution.
- Partnership solution approach: A solution approach where bidders team up as appropriate to offer a multifaceted, multi-bidder solution using multiple technologies as a joint, integrated proposal set, if this would provide the best-value proposition.

⁴ Specifically, a non-wires solution is a solution that satisfies a System Need or Optimization of System Performance through means other than utility-owned infrastructure, where a System Need or Optimization of System Performance includes needs to serve both customer load and customer generation, including, but not limited to, system capacity (normal and emergency), voltage performance, reliability performance, protection coordination, fault current management, reactive power compensation, asset condition assessment, distributed generation constraints, operational considerations, and customer requests and where Optimization of System Performance is an improvement of the performance and efficiency of the electric system that includes enhanced reliability, peak load reduction, improved utilization of both utility and non-utility assets, optimization of operations, and reduced system losses.

The Company may combine multiple, partial Proposals to meet the full need, where a single Proposal alone does not meet the full need, or Bidders could collaborate and submit a combined Proposal, consisting of several partial solutions, that together meet the full need.

Proposed technologies and methodologies must have the capability to address the electrical grid need and increase grid reliability while being cost-effective in comparison to the wires investment as stated in each RFP. Please note that Rhode Island Energy is seeking solutions that currently exist in the market (i.e., technology viability and solution approach have been demonstrated in a real-world application) to solve the stated need. Rhode Island Energy will account for technology readiness when evaluating each proposal for reliability; it is the responsibility of the bidder to provide compelling evidence of the technological readiness of their proposal.

System Planning Process



This RFP is pursuant to step 4 of the system reliability procurement process: solicit proposals. For more information about the system reliability procurement process, please reference the proposed 2024-2026 System Reliability Procurement Three-Year Plan, available here: [2347-RIE-SRP-3-YrPlan_11-17-23-bates_1.pdf](#).⁵

All proposals received by Rhode Island Energy ("RIE") in connection with this Request for Proposals ("RFP") are subject to public disclosure, specifically through filings made by RIE with the Rhode Island Public Utilities Commission ("PUC"). Filings with the PUC are subject to the Rhode Island Access to Public Records Act ("APRA"), R.I. Gen. Laws §38-2-1, et. seq. When making filings with the PUC, RIE will consider all proposals to be public unless RIE, in its discretion, finds that certain portions of information contained within the proposals are exempt from public disclosure pursuant to R.I. Gen. Laws §38-2-2(4), in which case, RIE may seek confidential treatment from the PUC.

⁵ Please note that this process has been filed with the Rhode Island Public Utilities Commission in Docket No. 23-47-EE. This process is subject to change as the regulatory review and approval process ensues. Please check back with Docket No. 23-47-EE for any updates to the proposed process.

Offerors are advised to clearly mark or label “confidential” any portions of information within their proposals that they believe are “trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.” When making a filing with the PUC, RIE will take into consideration any information marked by the offeror as confidential. However, broad disclaimers that label the entire proposal as confidential will not help RIE in its APRA analysis and may not be considered.

Suppliers

Find out everything you need to know about being a PPL-Rhode Island Energy supplier [here](#).

2. Technical Specifications

Project Overview

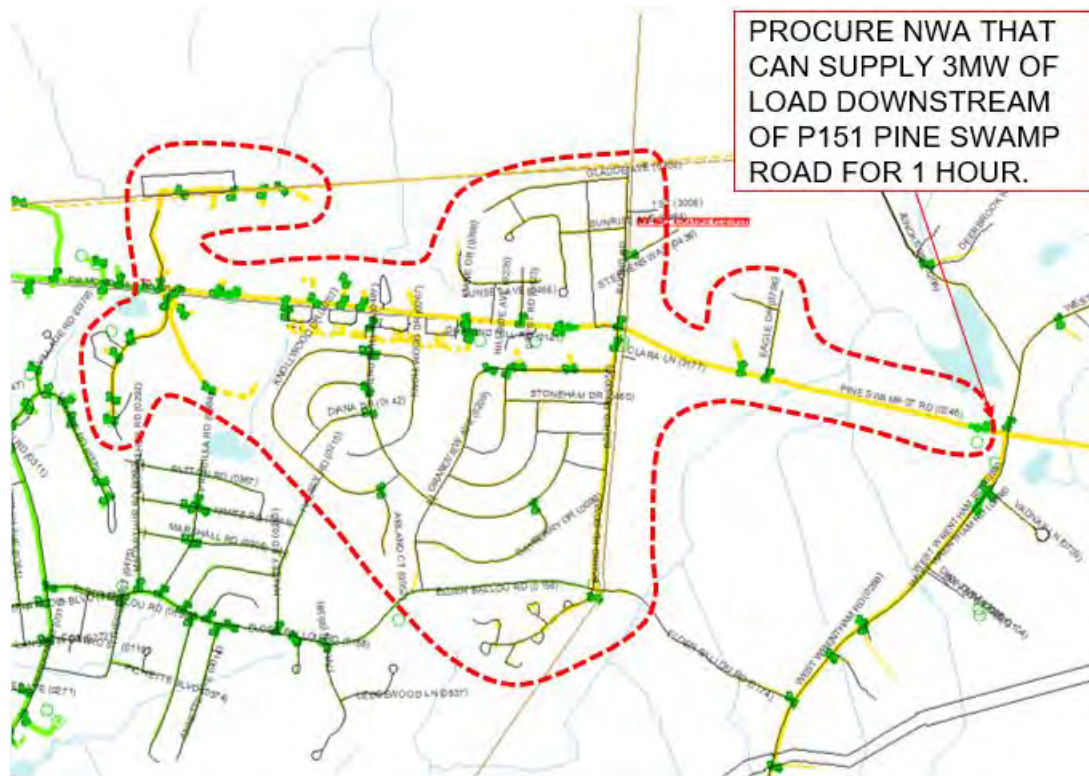
Table 1: Summary Information

Problem Statement	
Background & Description	Supply 3,000kW of 112W43 feeder load downstream of P151 Pine Swamp Road, between 287 Pine Swamp Rd to 1750 Diamond Hill Rd, for one hour in the event of a fault interrupting supply from Staples in order to reduce circuit outage frequency statistics to below 1.05
Solution Requirements	
Not to Exceed Cost	\$606K net present value over the contract term
Commercial Operations Date	Must be commercially operable by 4/1/2026
Contract Term	Minimum 10-year contract term
Maximum MWh Need per Event	Minimum 3 MWh load reduction; the solution must be dispatchable
Number of Times Called Per Year	3-5 calls per year; the solution must be dispatchable

Through this RFP, Rhode Island Energy is soliciting proposals to supply 3,000 kW of load for one hour (i.e., 3 MWh) in the event of a fault interrupting supply. Rhode Island Energy is advancing this project with the objective of reducing circuit outage frequency (CKAIFI) to below 1.05 interruptions per customer per year.

The selected solution is expected to provide contingency support. Proposed solutions must be on dedicated standby throughout the summer months (approximately June through September) to provide rapid response; proposed solutions that do not explicitly commit to providing dedicated standby response during summer months may be considered to be nonresponsive to this RFP. Rhode Island Energy expects to call on the proposed solution 3-5 times per year. The solution must be dispatchable; energy efficiency, passive demand response, and renewable energy that is not paired with battery energy storage are not viable solutions.

This contingency support is needed on feeder 112W43, downstream of P151 Pine Swamp Road, between 287 Pine Swamp Road to 1750 Diamond Hill Road (see map below).



Rhode Island Energy will not entertain any proposed bids costing more than \$606,000, net of alternative funding streams, net present value over the 10-year term of the contract.

Bidders must provide compelling evidence that the proposed solution will be commercially operable by April 1, 2026, and that the proposed solution is able to provide the contingency support needed for a minimum of 10 years (April 1, 2026 through March 31, 2036). More information about contractual terms, performance guarantees, and consequences for non-performance during the contract period are contained in Appendix D: Services Agreement.

Schedule

Rhode Island Energy's schedule for this solicitation is detailed in the table below (specific dates subject to change).

Generally, Rhode Island Energy anticipates having the RFP open for a minimum of one month (30 days), during which Rhode Island Energy will hold a pre-bid conference call and respond to questions from bidders. Rhode Island Energy anticipates six weeks for evaluating proposals, with selection or non-selection notifications sent to all bidders within two months (60 days) of the close of the RFP.

Following selection, there are two major milestones. First, Rhode Island Energy and the selected bidder must execute a contract for the proposed project, pending any mutually agreeable modifications required. Any compensation for the selected proposal will be contingent upon

successful completion of the second milestone, which is regulatory approval. Following contract execution, Rhode Island Energy will submit the proposed solution for regulatory approval within an “SRP Investment Proposal.” Filing will occur before or in parallel to Rhode Island Energy’s submission of its annual Electric Infrastructure, Safety, and Reliability (ISR) Plan. Rhode Island Energy anticipates a regulatory decision in parallel with the regulatory decision for its Electric ISR Plan, anticipated by the end of March, 2025.

Pending regulatory approval, the selected proposal must be commercially operable by April 1, 2026. An earlier in-service date may be negotiated, but a later in-service date will not be considered responsive to this RFP.

Table 2: Schedule

Planned Date	Milestone
6/19/2024	RFP Launch
6/28/2024	Pre-Bid Conference Call
7/10/2024	RFI Questions Due
7/31/2024	RFP Responses Due
9/13/2024	End of Evaluation; All bidders notified of their status
10/15/2024	Target Contract Execution
11/1/2024 – 3/31/2025	Regulatory Approval Process
4/1/2025	Anticipated Decision from Regulatory Approval Process
4/1/2026	Solution In Service Date

Note: Dates subject to change.

Technical & Operational Requirements

Table 3, below, contains the minimum technical and operational requirements for proposed solutions.

Table 3: Minimum Technical and Operational Requirements

Item	Value	Unit
Distribution or Transmission need	Distribution	-
Operating District	Capital-53	-
ZIP Code(s)	02864, 02895	-
Municipality(ies)	Cumberland, Woonsocket	-
Substation(s)	Staples	-
Feeder(s) / Transmission Line(s)	112W43	-
Comms present? (SCADA, RTU, etc.)	Yes	-
Operating Voltage(s)	13.8	kV
Summer Normal Rating (Amps)	559	A
Summer Normal Rating (MVA)	13.4	MVA
Load Reduction Needed (MW)	3.00	MW
Maximum MWh Need per Event	3.0	MWh
In-Service Date	April 1, 2026	-
Contract End Date	March 31, 2036	-
Days of the Week Needed	All days	-
Time of Day	0:00 - 23:59:59 (all hours)	-
Call Response Time	< 5	minutes
Duration per Event	1	hours
Minimum Period between Events	24	hours
Number of Events per Year	5	-
Number of Consecutive Days Called	3	-
Load Profile	Resi: 44.4% C&I: 55.6%	%
Customer Profile	Resi: 789 C&I: 177	-

Feeder Details

Refer to Appendix C – Feeder Details.

Project Economics

Rhode Island Energy is seeking proposals that are both less cost than the best alternative utility reliability procurement solution and cost-effective, in alignment with LCP Statute and Standards.

Less cost than the best alternative utility reliability procurement solution

Rhode Island Energy will compare proposed solutions solicited through this RFP to the next best alternative solution developed in-house. At this time, Rhode Island Energy has identified a wires

upgrade as the next best alternative solution. A ten-year deferral of the next best alternative results in a net present value of \$606,000, which is based on the current planning-level cost estimate for the wires solution and includes all project work, capital expenditure, annual service feeds, energy service agreement payments, and the locational incentive value. This net present value is subject to change throughout development of this next best alternative in parallel with the proposal solicitation process through this RFP.

Bidder must describe all funding streams, including any other incentives or compensation from other programs, funding streams, market participation, etc.

Between the dates October 1st to May 1st each year, the non-wires solution only needs to provide 2.5MWh in the event of a fault interrupting supply. The remaining 0.5MWh of spare capacity can be used to participate in wholesale markets or to seek other benefits.

Rhode Island Energy recognizes potential non-wires proposals may also support reduction in regional coincident peak demand and regional network load and are willing to pay up to an addition \$90/kW for this service based on avoided capacity cost and avoided regional network service charge. If the non-wires proposal targeting coincident peak is also capable of energy arbitrage, then Rhode Island Energy is willing to compensate an incremental \$10/kW. Peak demand reduced and energy arbitrage must be well-supported; the bidder must describe how this proposed peak demand and energy arbitrage will be reduced while the proposal meets its primary obligations (provide power for one hour in the event of a fault interrupting supply). The terms and conditions of the contract will include a penalty for non-performance. The project will not be able to earn any compensation from ConnectedSolutions.

Rhode Island Energy will ultimately choose the least-cost solution from among submitted proposals and the next best alternative utility reliability procurement solution. Bidders may propose solutions that exceed \$606,000 but must recognize the risk that the next best alternative may likely be the lower cost solution. Bidders are expected to provide complete details about total project cost and funding streams, clearly showing the cost to Rhode Island Energy for the proposed solution.

The illustrative example below is intended to provide clarity:

(a) Labor and materials cost:	\$800,000
(b) Interconnection cost ⁶ :	\$200,000
(c) <u>Total proposed solution cost over the 10-year contract term:</u>	<u>\$1,000,000</u>
(d) Less funding stream #1 – grant funding:	- \$250,000
(e) Less funding stream #2 – demand response for 200 kW:	- \$180,000
(f) <u>Bid price = total remaining cost:</u>	<u>\$570,000</u>

Cost-Effective

The benefits of the proposed solution must outweigh the costs of the proposed solution. Appendix A includes the required inputs for the benefit-cost assessment. Rhode Island Energy will conduct the benefit-cost assessment using a benefit-cost assessment model in alignment with regulatory guidance.

⁶ Interconnection costs will be determined by Rhode Island Energy.

3. Instructions for Proposal Content

Bidders are expected to submit proposals organized according to the following parts. Bidders should be as comprehensive and clear as possible; quality of submissions will be considered as a demonstration of quality of the bidder's work.

Part A - Bidder Information

Bidder shall provide the following information for use by Rhode Island Energy in assessing the experience, organizational structure, and financial viability of the Bidder. Bidder shall include additional sheets and supporting materials in responding to the requirements of this Appendix as necessary.

Experience, organizational, and financial information must be provided for the Bidder and any entity providing credit enhancement or other corporate support to the Bidder. As necessary, please specify whether the information provided is for the Bidder, its parent or Affiliates, or any other entity providing security on the Bidder's behalf.

OVERVIEW

1. Provide contracting party's name if different from Bidding entity.
2. Describe in detail Bidder's organizational structure. A written description and flow chart diagram showing relationships is required. List the legal registered name of all owners and participants, including but not limited to joint offer participants, of the project and their relative percentage ownership.

DEVELOPER EXPERIENCE

List and describe the Bidder's background and experience developing projects of a similar nature and technology.

BIDDING TEAM OVERVIEW

1. Please provide a description and organization chart of the personnel structure of the proposed project's development, design and construction, and operations and maintenance organizations.
2. Please provide a description of the Bidder's project management team and any sub-developers or vendors to be used; include team organization chart and resumes.

PROJECT DEVELOPMENT EXPERIENCE

1. Please provide current listing of environment certifications.
2. Please provide a history of projects and/or programs with environmental or eco awards, and a history of actions/incidents that are detrimental or beneficial to the environment.
3. If the solution is proposing behind the meter (BTM) solutions, please describe experience in customer acquisition.
4. Provide three (3) references of prior industry specific work that is similar in nature and relevant to solution proposed. References should include:
 - a. Client contact information

- b. Project location
 - c. Description of the solution provided
 - d. Commercial operation date
 - e. Construction/implementation timeline
 - f. Any other relevant information supporting and validating the proposed solution in response to this RFP
5. Projects using the proposed technology and completed and in commercial operation.

Total count of completed projects with similar solution technology: _____

For each completed project, list information in the format presented below. Include all relevant projects.

Project Name	MW (nominal)	MWh (nominal)	Use Case	Location, Utility	Contact/Reference	Bidder's role

6. Projects using the proposed technology and currently under construction.

Total count of completed projects with similar solution technology: _____

For each completed project, list information in the format presented below. Include all relevant projects.

Project Name	MW (nominal)	MWh (nominal)	Use Case	Location, Utility	Contact/Reference	Bidder's role

Part B – Project Financing

1. Please provide a detailed description of proposed short and long-term financing arrangement.
2. Please provide a full, detailed, and specific accounting of all funding streams that will be used for the proposed project. For each funding stream, include the funding amount, the source of the funding, and whether the funding is secured (if not, describe what securing funding is dependent on). Please make sure to include any and all incentives, rebates, and compensation from utility, state, and federal programs, if applicable.
3. Please provide sources of debt and equity.
4. Please provide financing organizations and supporting loan or credit agreements (include rates and terms).
5. Please provide a detailed description of on-going debt/equity ratio to be carried by the proposed project during construction and during operation.

6. Overview of proposed project's market participation strategy and how the NWA solution would support that strategy; in particular, provide assurance that the NWA solution would be available for contracted services.
 - a. Please specify any wholesale markets the NWA solution plans to participate in (i.e., energy, capacity, ancillary services, etc.).
 - b. Please specify any applicable tariffs that the NWA solution corresponds to or may be participating in (such as the Value Stack tariff, sometimes referred to as Value of Distributed Energy Resources (VDER), in New York).

Part C – Proposed Solution Information

Please provide the following project information in the order requested.

GENERAL REQUIREMENTS

PROJECT DESIGN

1. Provide a description and equipment specifications of the proposed project, including core technology modules (e.g., battery modules, solar panels, etc.), power converters, meters, communications equipment and protocols, disconnect devices, point of interconnection voltage, and any other related facilities necessary to interconnect the proposed project to the Rhode Island Energy's distribution system.
2. Include, as applicable, potential safety, risks, and mitigation plans associated with the proposed solution technology (e.g. fire suppression, lighting/indicators for first responders, visible open switches, etc.).
3. Consider and include, as applicable, customer, aesthetic, economic, acoustic, and environmental impacts of the proposed solution.
4. Please provide information relating to the availability of, and Bidder's access to, the equipment and components utilized / proposed for construction and operation of the project, including purchase lead times.
5. Provide a list of preferred technology suppliers.
6. Specify how the project's design will meet new equipment and certification requirements of all relevant national, state, local codes and standards, and any additional requirements of the local authority having jurisdiction (AHJ).
7. Physical size and footprint including preliminary site layout plan.
8. Identify lifecycle expectancy for all major components including but not limited to batteries, inverters, solar photovoltaic (PV) panels, and generators; confirm component replacement is considered in your overall business plan.
9. Identify changes in equipment capacity degradation over expected lifetime; confirm capacity degradation is considered in your overall business plan.
10. Accurate and validated (preferably independently verified) performance characteristics of the proposed project.
11. Describe how the system(s) and components will comply with all manufacturers' installation requirements, applicable laws, regulations, standards, codes, licensing, and permitting requirements. This includes, but is not limited to, all applicable state, city, town, or local laws, policies, acts, and regulations according to the building code, disposal, the

environment, and interconnection standards; the National Electrical Code®(NEC); Rhode Island Energy's Electric System Bulletins (ESB)

1. 12; and all applicable State, city, town, or local ordinances or permit requirements, and any additional requirements of the local AHJ. It is the Winning Bidder's responsibility to ensure compliance with all such laws.

OPERATIONAL PARAMETERS

Please note, not all criteria listed below may be applicable to all NWA solutions proposed.

1. The equipment must consist of commercial products carrying a manufacturer warranty. The warranty must cover the entire system, including ancillary equipment and power electronics.
2. The Bidder's Proposal must list any restrictions on system use, including but not limited to restrictions based on warranty conditions.
3. Describe what capabilities will be in place for remote monitoring and control (e.g., equipment, communication means, and protocols used).
4. Describe what change management controls and procedures will be used to coordinate between Rhode Island Energy and the project owner regarding any changes to the project.
5. Submit control schemes, electrical configurations, and sufficient detail for the utility to review and confirm acceptance of Bidder's Proposal. Detail any integrated control scheme(s) that are included in the interconnected inverter(s), if applicable.
6. Provide a description of the communications and control architecture along with any diagrams as applicable for the proposed project and how the project intends to integrate with Rhode Island Energy's supervisory control and data acquisition (SCADA) systems.
7. Specify guaranteed Round-Trip Efficiency, if applicable.
8. Specify guaranteed availability, if applicable.
9. Specify guaranteed MW load reduction per event, if applicable.
10. Specify guaranteed MWh availability per event, if applicable.
11. Specify guaranteed call response time in minutes, if applicable.
12. Specify guaranteed maximum required time between events, if applicable.
13. Specify measurement and verification (M&V) capability.
14. Plant operations factors should be provided for equipment being proposed to include staff training programs, staffing requirements, maintenance support availability, any/all permit limitations on plant operations, long-term service agreement terms, maintenance outage requirements (i.e., impacts on availability), spare parts, and labor agreements.
15. Ability of proposed project to directly integrate with Rhode Island Energy's Energy Management System (EMS)/Distribution Management System (DMS) systems.
16. Control scheme to maintain system stability and transition from grid to island modes (if applicable).

MAINTENANCE PARAMETERS

Note, not all of the criteria may be applicable to all NWA solutions proposed.

1. Provide a description of the expected Operating Life of the proposed project including any inverter equipment and the long-term replacement or shuffle (e.g., augmentation) plan, if applicable.

2. Provide a description of how the Bidder will maintain the MW and MWh ratings of the proposed project during the term of the Agreement.
3. Provide any information regarding planned or forced outage rates based on manufacturer's recommendation and experience.
4. Provide a description of how the Bidder will provide operational and/or maintenance onsite and remote support in real time (e.g., via an operating center with 24x7x365 support).
5. Provide a description of the emergency response plan and schedule.
6. Proposed protection scheme that will integrate the NWA solution with the Rhode Island Energy's EPS.

Part D – Schedule, Site Control, and Permitting

Bidders are solely responsible for:

1. Ascertaining the requirements and necessary approvals to construct and operate the proposed project on the site;
2. Interfacing with the municipality, preparing and filing all required applications, making all necessary public hearing and civic association appearances and obtaining all required municipal approvals; and
3. Complying with all municipal requirements and permits. Bidder must include a permitting plan and cost estimates related to these activities as part of the proposed project's all-in costs. Bidders are responsible for all costs associated with the above-referenced approvals and are responsible for compliance, mitigation measures, and/or other conditions of approval. Bidders should provide these costs as part of their RFP Proposal.

Bidder shall provide the information requested below for use by Rhode Island Energy in assessing the proposed solution's schedule, site preparation and control, and permitting plan. Bidder shall include additional sheets and supporting materials in responding to the requirements of this Appendix as necessary.

OVERVIEW

Please provide the following project information. Indicate if a question is not applicable but do not leave any required responses blank. Please see list of definitions in the main RFP as applicable.

1. Site's Street Address, City, State, Zip Code (all sites of interest);
2. Site's Tax Map Number (i.e., Section, Block and Lot)

PROJECT MILESTONE SCHEDULE

An appropriately detailed project milestone schedule will help the Rhode Island Energy review team evaluate the Bidder's understanding of the project development process in each respective jurisdiction and the proposed project's likelihood of meeting the requirement for being operational by the in-service need date.

1. Please provide a detailed project schedule describing financing, permitting, engineering, procurement, construction, interconnection, commissioning, and start-up activities timelines and status; the schedule should include detail milestones for each phase.
2. Please include a site control timeline and details in the proposed schedule.

3. Please provide a cut-off date by which an agreement between the parties must be fully executed in order for the project to be in-service by the need date.
4. Describe the customer acquisition plan and how it incorporates into the schedule, if applicable.
5. Discuss any risks or challenges anticipated with the overall project and project construction schedule.

PERMITTING OVERVIEW

Please provide the following project information for each site where you are proposing to construct NWA solutions:

1. Address, City, State, Zip Code; Tax Map Number (i.e., Section, Block and Lot);
2. Municipality (i.e., Town, Village or City) where the Site is located;
3. A description of the Bidder's current legal property interest in the site (i.e., fee ownership, lease, easement, license, existing option, exercisable option) demonstrating that the Bidder has/will have the site owner's authorization to build the project and maintain same for the entire term of the Master Services Agreement (MSA);
4. Google Earth Aerial Map of the site, depicting where Bidder is considering constructing the NWA equipment on the site (with the understanding that this is subject to change); and
5. A second Google Earth Aerial Map of the site, "zoomed out" far enough so that Rhode Island Energy can see the surrounding neighboring uses in the area (i.e., 1,000-foot radius around the property boundary);
6. A detailed explanation for why the site is the first choice (or multiple sites); and
7. A table of bulk and dimensional standards applicable to the Bidder's proposed use/zoning district for the site (i.e., minimum front yard setback; minimum side yard setback; minimum rear yard setback; maximum height; maximum impervious surface coverage; maximum fence height requirements) and whether the proposed project location complies with same.
8. Please note that all permitting costs are the responsibility of the Bidder even if the NWA solution is located on Rhode Island Energy-owned land.

FOR PROPOSALS INCLUDING ENERGY STORAGE

A rapid deployment of energy storage has directly led to permitting challenges, including concerns by local municipalities that may include, but are not limited to, safety, acoustic, visual impact, thermal runaway, etc. caused by energy storage systems. For Rhode Island Energy to properly gauge the Bidder's permitting qualifications, please provide the following supplementary information (indicate if a question is not applicable but do not leave any required responses blank):

1. List of Bidder's (or Bidder's subcontractor) construction projects permitted in the state. Project examples similar to the proposed solution are preferred (please briefly describe the proposed use permitted, the permitting timeline, any challenges faced and associated mitigations);
2. Please describe the permitting process and plan for the proposed solution;
3. List of Bidder's (or Bidder's subcontractor) construction projects that faced community opposition (please briefly describe the proposed use, the permitting timeline, resolutions to the community's opposition, and any challenges faced and how they were overcome); and

4. Please briefly describe the general strategy for obtaining all necessary municipal approvals to construct an energy storage project.
5. For open-air lithium-ion battery storage systems, please use 50 feet as a minimum separation distance between the lithium-ion battery storage system and vegetation, tree growth, and/or combustible materials and associated storage locations to prevent starting a fire. The open-air battery storage system must be containerized.
6. For warehouse lithium-ion battery storage systems, please use 311 feet as a minimum separation distance between the warehouse lithium-ion battery storage systems and vegetation, tree growth, and/or combustible materials and associated storage locations to prevent starting a fire.

FOR PROPOSALS INCLUDING INTERMITTENT ENERGY GENERATION

While useful in several contexts, solutions containing only intermittent energy generation (e.g. solar, wind, hydro, etc. that do not include storage) do not provide a reliable solution for the electric grid in the context of NWA. Only dispatchable power and energy capacity will be considered to reliably address the need statement defined in the NWA RFP.

Dispatchable resources must have a dependable energy source (such as stored electric energy in a battery). Intermittent resources such as wind and solar can be included in the proposed solution and will be considered when evaluating project benefits, including the BCA, but will not count towards solving the need unless they include storage capacity of some type.

Transmission and distribution planning must consider all contingencies when addressing system needs, including loss of intermittent fuel or energy supply (such as solar irradiance or wind), which is the reason an intermittent resource cannot be considered as reliably solving a system need.

If a bidder submits a bid proposal that includes intermittent energy generation, the solution must include storage capacity of some type for the intermittent energy generation to be considered as potentially solving the system need in a reliable manner and therefore included in the evaluation of NWA bids.

FOR PROPOSALS THAT USE FUELS

Fuel-based energy systems have historically been commonly deployed in genset installations for grid reliability and use fuel types such as hydrocarbons, alkanes, alcohols/hydroxyls, biofuels, etc. This has led to concerns by local and state municipalities that may include, but are not limited to, safety, acoustic, visual impact, and environmental impact. For Rhode Island Energy to properly gauge the Bidder's permitting qualifications, please provide the following supplementary information (indicate if a question is not applicable but do not leave any required responses blank):

1. List of Bidder's (or Bidder's subcontractor) construction projects permitted in the state. Project examples similar to the proposed solution are preferred (please briefly describe the proposed use permitted, the permitting timeline, any challenges faced and associated mitigations);
2. Please describe the permitting process and plan for the proposed solution;
3. List of Bidder's (or Bidder's subcontractor) construction projects that faced community opposition (please briefly describe the proposed use, the permitting timeline, resolutions to the community's opposition, and any challenges faced and how they were overcome);

4. Please briefly describe the general strategy for obtaining all necessary municipal approvals to construct an energy storage project;
5. Detail the expected acoustic impact in magnitude of dB;
6. Detail the visual impact in terms of site plan and visual presence; and
7. Detail the nominal power rating of each genset, fuel type(s), estimated fuel consumption in liters of each fuel type, efficiency of the system(s), the volume and content of any anticipated runoff, and estimated annual emission levels for NO_x, Sox, CO, CO₂, O₃, nonmethane hydrocarbons (NHMC), and particulate matter (PM) of the system(s).

FOR PROPOSALS THAT INCLUDE ENERGY MANAGEMENT SYSTEMS

Energy management system proposals must meet or exceed the bidder's proposed guaranteed nominal power rating and guaranteed nominal capacity rating by including dispatchable generation and/or by reducing specific customer loads (through measures such as EE and DR) downstream of the asset or grid element that has loading concerns. Since Rhode Island Energy expects solutions to meet a system need, an energy management system (e.g. DERMS) is not considered a viable proposal unless DER is included in the solution that meets or exceeds the defined need as stated in this RFP or meets the partial need specified in a bidder's proposed partial solution.

4. Evaluation

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 for Rhode Island Energy 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 top scoring proposals will be moved to a short list for tentative selection and further discussion; 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 solution Utility Reliability Procurement.”

Rhode Island Energy adopts these criteria in its evaluation rubric, shown in Table 4, below. As a threshold step, any proposal that costs more than the best solution 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 LCP Standards Section 1.3.H.5.

Table 4: Evaluation rubric

Criteria	Description	Weight
Cost	Total project cost is less than or equal to cost of best solution 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
Environmentally Responsible	To what extent is the proposal environmentally responsible?	25; No-Go if not environ-mentally responsible
	Total	100

The evaluation committee will review all remaining proposals and score them based on the extent to which they are cost-effective, reliable, prudent, and environmentally responsible. Rhode Island Energy will conduct its evaluation consistent with the requirements provided by the LCP Standards in Section 1.3, including adherence to the principles for cost tests and resource assessments in LCP Standards Section 1.3.B.6. Using the stipulations defined in LCP Standards Sections 1.3.C, 1.3.D, 1.3.E, and 1.3.F, any proposal that is found to be not cost-effective, reliable, prudent, or environmentally responsible will be removed from consideration.

Of all remaining proposals, Rhode Island Energy will tentatively select the proposal with the highest score for continuation in the system reliability procurement process. Outcomes of evaluations – including evaluations of third-party and internally-sourced proposals – will be reported within Rhode Island Energy’s SRP Annual Report.

Appendix A – Bidder Checklist

Pre-Submission Checklist	
Reviewed all RFP documents and applicable laws and regulations that in any manner may affect cost, progress, or performance of the proposed project.	
Review PPL Master Service Agreement	
Review Supplier Code of Conduct	
Review RIE Environmental Policy	
Prepare Required Bidders Information per Appendix A	
Prepare Proposed Solution Information per Appendix B	
Prepare draft Project Schedule	
Complete Vendor Bid Inputs Excel Form	

Appendix B - List of Acronyms & Definitions

Term	Definition
3V0	Zero-Sequence Voltage
ADCI	Avoided Distribution Capacity Infrastructure
Approximate Net Present Value	The estimated net present value of deferring the wires investment for the required timeframe.
BCA	Benefit-Cost Analysis
BCR	Benefit-Cost Ratio
C&I	Commercial and Industrial
CAIDI	Customer Average Interruption Duration Index
CESIR	Coordinated Electric System Interconnection Review
DER	Distributed Energy Resources
DG	Distributed Generation
DR	Demand Response
EE	Energy Efficiency
EPC	Engineering, Procurement, and Construction
EPS	Electric Power System
ESS	Energy Storage Systems
ESA	Energy Services Agreement
FERC	Federal Energy Regulatory Commission
ISO	Independent System Operator
ISO-NE	ISO New England Inc.
IT	Information Technology
kW	Kilowatt
LSRV	Locational System Relief Value
MSA	Master Services Agreement
M&V	Measurement & Verification
MW	Megawatt
MWh	Megawatt-hour
NERC	North American Energy Reliability Corporation
NWA	Non-Wires Solutions
NYISO	New York Independent System Operator, Inc.
O&M	Operations and Maintenance
PSC	Public Service Commission
PUC	Public Utilities Commission
PV	Photovoltaic
Resi	Residential
REV	Reforming the Energy Vision
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SCT	Societal Cost Test

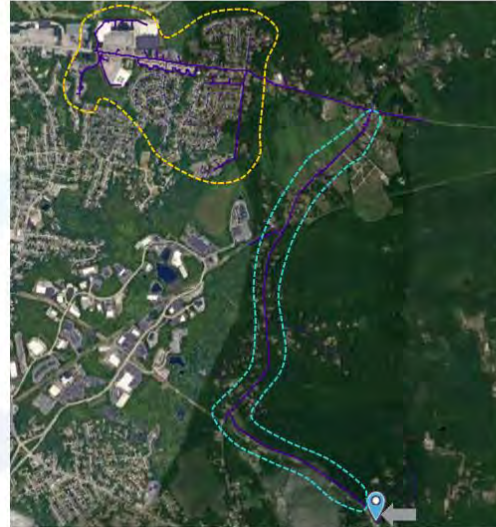
TB	Transformer Bank
T&D	Transmission and Distribution
WACC	Weighted Average Cost of Capital

Appendix C – Feeder Details

Staples 112W43 Reliability Issues



- **Reliability:**
 - Staples 112W43 CKAIFI & CKAIDI 5-year averages exceed criteria mainly due to tree related events.
- | Feeder | SAIFI | SAIDI |
|--------|-------|--------|
| 112W43 | 1.798 | 148.32 |
- Many of the tree related faults occurred on **West Wrentham Rd** between **Staples Substation** and **the load center on Diamond Hill Rd.**
 - **Solution:**
 - Non-Wires Alternative (NWA) project that can supply 3MW of load for the 744 customers downstream of P151 on Pine Swamp Road for at least an hour.



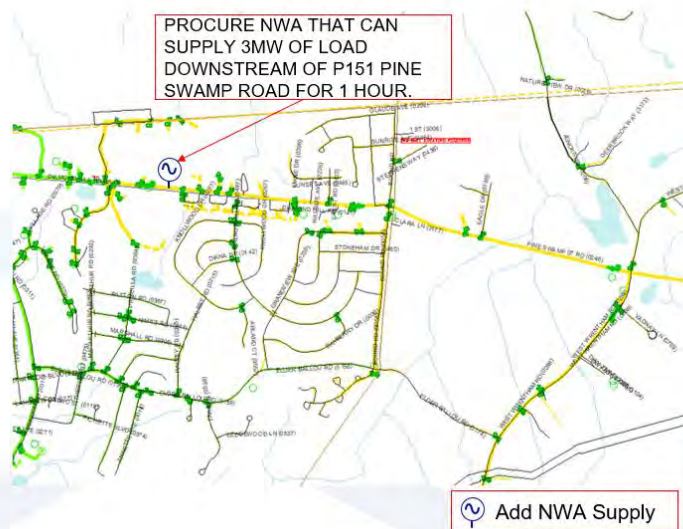
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Staples 112W43 Reliability NWA (SP# CRI3065)



- **Non-Wires Alternative (NWA):**
 - A project that can supply 3MW of load for the 744 customers downstream of P151 on Pine Swamp Road for at least an hour.
- **Estimated In Service Date:**
 - April 1, 2026



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Appendix D: Services Agreement

Under separate cover.