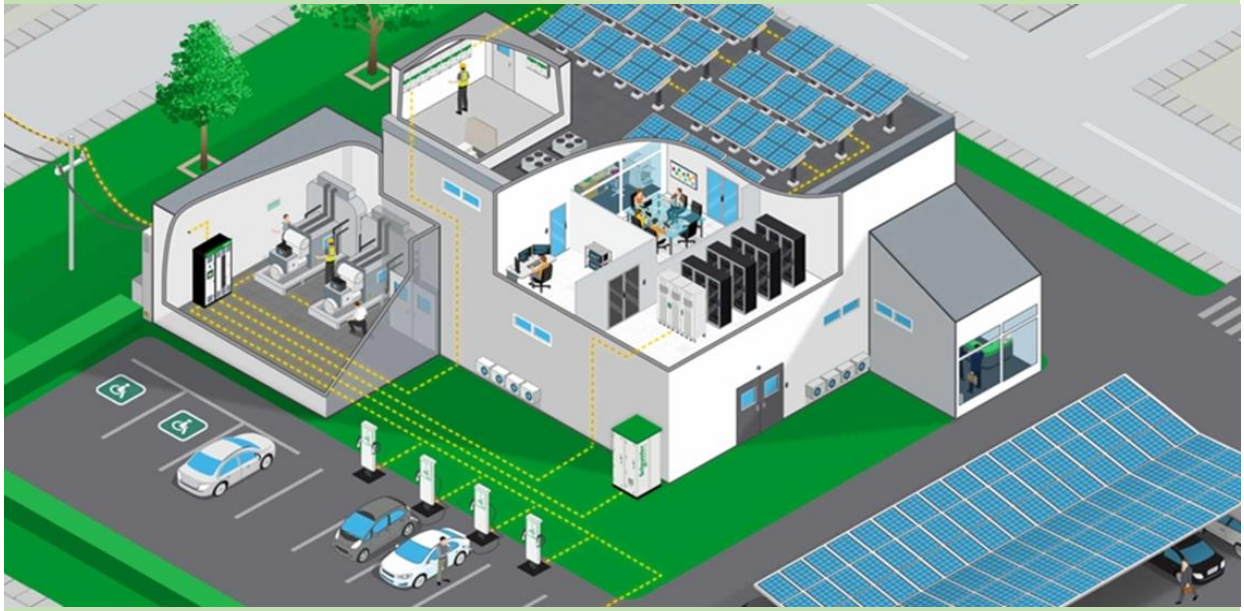

Resilient Microgrids for Critical Services—Phase 1: Feasibility Studies

December 2024

Request for Applications

RENEWABLE ENERGY FUND
POWERED BY RHODE ISLAND COMMERCE

STATE OF RHODE ISLAND
OFFICE OF ENERGY RESOURCES

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OPPORTUNITY SUMMARY

The Rhode Island Office of Energy Resources (OER) is a state agency dedicated to the mission of leading Rhode Island to a clean, reliable, affordable, and equitable energy future. RI Commerce's Renewable Energy Fund (REF) exists to help expand the role of renewable energy throughout Rhode Island, so the state and its citizens can reap the full benefits of cost-effective renewable energy from diverse sources. Together **OER and REF are seeking applications for microgrid feasibility studies from municipalities that will help to increase municipal energy resilience during times of electrical grid outages.** OER and REF seek to support microgrids that meet a range of objectives including reducing greenhouse gas (GHG) emissions, enabling the integration of renewable energy sources, delivering a public benefit to the community, and providing energy resilience for critical facilities during electrical grid outages. Successful applicants will identify opportunities for microgrids to empower community leaders, foster public-private partnerships, and protect vulnerable populations.

If selected, applicants will work with OER's technical consultants to carry out the full feasibility assessment. OER and REF will accept up to two applications per applicant for proposed microgrid projects.

This Request for Applications (RFA) represents the first phase of a multi-phase process. REF and OER anticipates **selecting 4-5 Requests for Applications for Phase 1: Feasibility Studies**. Projects that produce a favorable feasibility assessment may then be eligible to apply for Phase 2: Microgrid Construction to develop their proposed project. Participation in Phase 1 does not create an obligation to move on to Phase 2. Phase 2 is currently under development, however, OER and REF anticipate there will be a cost share component during this phase. OER anticipates awarding feasibility assessments on a rolling application, first come, first serve basis until December 21, 2025, or until funding is expended.

PROGRAM OVERVIEW & DEFINITIONS

The Resilient Microgrids for Critical Services Program is designed to catalyze the development of microgrids throughout Rhode Island municipalities, school districts, and fire districts to provide increased energy resilience during times of electrical grid outages. The program was developed in response to multi-day power outages caused by severe weather and other utility system events in recent years.

What is a Microgrid?

For the purpose of this RFA, a microgrid is defined as a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate in both grid-connected or island-mode. This can be a multi-user microgrid, providing electrical and/or thermal energy to multiple sites within a defined geographical area, or single user microgrids, providing electrical and/or thermal energy to a single site. For this program, microgrids developed through the Resilient Microgrids for Critical Services program must **serve critical infrastructure** and **provide a public benefit**.

Critical Infrastructure—includes those assets, systems, networks, and functions – physical or virtual – so vital to Rhode Island that their incapacitation or destruction would have a debilitating impact on security, economic activity, public health or safety, or any combination of those matters. Examples include but are not limited to any hospital, police station, fire station, water treatment plant, sewage treatment plant, public shelter or correctional facility, any commercial area of a municipality, a municipal center, as identified by the chief elected official of any municipality, or any other facility or area identified by Rhode Island Emergency Management Agency (RIEMA) as critical.

Public Benefit—For the purpose of this program, a public benefit is defined as an identifiable benefit that can be accessed by members of the public during times of emergency. Examples of public benefits include but are not limited to availability of emergency shelters, backup power during a power outage, and availability of fuel or other critical resources. Benefits that can only be accessed by private entities such as private businesses, are not considered public benefits. However, private facilities that allow for public access during an emergency would also qualify i.e., a private school gym that functions as a shelter during an emergency.

APPLICANT ELIGIBILITY

Applicants must meet the following requirements to be eligible to participate:

1. Is a Rhode Island municipality, or a Rhode Island school district, or a Rhode Island fire district.

PROJECT ELIGIBILITY

The proposed microgrid must meet the following criteria:

1. Located in a Resilient Rhody Municipality, as determined by the Municipal Resilience Program;
2. Serves at least one critical infrastructure;
3. Provides a community benefit;
4. Integrates renewable energy technology;
    a. Projects may include conventional generation sources, in addition to the renewable energy technology, to ensure that the microgrid remains operational during periods of extended storm conditions. However, if a microgrid project moves to Phase 2, no Resilient Microgrids for Critical Services funds may be used for conventional generation construction.
5. Establishes a contractual relationship between public and private entities - if applicable
6. All projects must be in accordance with the Rules and Regulations for the Renewable Energy Fund Development Program.

REQUEST FOR APPLICATION TIMELINE

This program has a rolling deadline. Applications will be reviewed and scored with funding made available on a first come, first serve basis.

HOW TO SUBMIT APPLICATION

Applications must be submitted to REF@commerceri.com.

REQUIRED APPLICATION COMPONENTS AND EVALUATION CRITERIA

To respond to this Request for Applications, submit a one-page **Executive Summary**, a **Project Narrative** of up to five (5) single-spaced pages, a completed **Interest Form**, and a **Letter of Support** from the town or city council or town manager. The interest form and a letter of support template can be found on the REF website (https://commerceri.com/financing/renewable-energy-fund/).

1. Executive Summary

The Executive Summary should briefly summarize the microgrid system-related problem or opportunity and the potential benefits of the proposed microgrid to the municipality and greater community. Briefly identify and prioritize the goals of the project, including, but not limited to resilience, greenhouse gas emissions reductions, and energy cost reduction. The Executive Summary must be no longer than one page and will not count toward the page limit for the Project Narrative.

2. Project Narrative

The purpose of the Project Narrative is to give the Resilient Microgrids for Critical Services team an understanding of your proposed microgrid including the critical infrastructure it will incorporate and the public benefit it will serve. Additionally, if chosen for a feasibility study, the Project Narrative will serve as a starting point for the technical consultant to begin the feasibility study.

The Project Narrative should describe the proposed municipal microgrid project and include the following: (1) the goals of the project including, but not limited to, resilience, greenhouse gas emissions reductions, energy cost reductions; and (2) a characterization of the buildings in the proposed microgrid area, including approximate size, purpose, and energy usage if known. In addition, the Project Narrative should include a description of the critical facility(ies) contained within the proposed microgrid area, including their uninterrupted power duration needs. If multiple facilities are included, please describe the unique needs of each facility and articulate why improved resilience is important for the facilities identified. To the extent relevant, please also describe other investments in resilience at the selected host sites or within the community (e.g. updated operational plans responsive to extreme weather events or other hazards, physical infrastructure investments, community-wide resilience strategies, etc.) and how those investments may impact the microgrid. Please include if the facilities have encountered any natural disaster such as flood and provide a flood map if available.

The Project Narrative should include the following information:

a. Project Eligibility Requirements

Ensure your proposed project clearly includes and emphasizes elements that meet the project eligibility requirements, specifically addressing the following:

- the goals of the project including, but not limited to, resilience, greenhouse gas emissions reductions, energy cost reductions.
- include a description of the critical infrastructure contained within the proposed microgrid area, including their uninterrupted power duration needs. If multiple facilities are included, please describe the unique needs of each facility and articulate why improved resilience is important for the facilities identified. To the extent relevant,
- include a description of how the microgrid will provide a public benefit.

b. Project Description and Site Characteristics

Describe the proposed project configuration, the project's purpose, the intended use, and the public benefits expected to result from the project to the best of your abilities.

- Provide a description of the site(s). Include a copy of any maps or other documentation (such documentation does not count against the page limit) that well-defines the geographical area and scale of the project including descriptions of customers and properties and locations of existing or proposed electric generation options. Include a copy of the map and lot number(s) of the site as identified by the Planning Office and/or Tax Assessor's Office for the municipality in which the site is located.
- Describe the property or properties you plan to include in the microgrid, including approximate size, purpose, energy usage, public and private interests, and the critical functions that are expected to benefit from the project.
- Discuss the type of renewable power generation sources you would like incorporated into the microgrid. If applicable, identify any existing generation resources at the site.

c. Energy and Resilience

- Identify any services or characteristics of the local electric utility that are unique in the area.
- If applicable, provide any evidence demonstrating historic power quality and/or reliability issues that are not storm-related that the project is expected to address. If so, describe the underlying cause.
- Provide any evidence demonstrating electric service disruption related to severe weather or other causes, particularly for critical facilities within the proposed microgrid. Please consider (1) what the current options are for the critical facilities in the event of a power outage, (2) the facilities' power duration needs, and (3) why improved resilience is important for the facilities identified. Please include if the facilities have encountered any natural disaster such as flood and provide a flood map, if available.
- If known, identify any existing or planned investments from the local utilities in the project area that may be leveraged and/or supplemented by the proposed microgrid.

- To the extent relevant, please also describe other investments in resilience at the selected host sites or within the community (e.g. updated operational plans responsive to extreme weather events or other hazards, physical infrastructure investments, community-wide resilience strategies, etc.) and how those investments may impact the microgrid.

d. Community Description and Benefits

- Describe the population of the community, including census tract income data, population density, whether it is a disadvantaged community according to the CEJST mapping tool[1] or an environmental justice area according to RIDEM's Map of EJ Areas[2] or EPA's Environmental Justice Screening and Mapping Tool (EJScreen)[3] and the expected beneficiaries of the project. Describe how the interests of the affected population are to be served by the proposed project.
- Discuss how the project might provide a public benefit to a disadvantaged community.
- Discuss the overall benefits of this project on the community and describe how the project will serve a public benefit.

e. Ownership and Operation

Please discuss how you would plan to own, maintain, and control generating and other assets of the microgrid project, including outlining any potential public-private partnerships.

f. Project Team

Identify Project Team members who will play an active role in the Assessment. Describe their role in conducting and/or supporting the Assessment, as well any relevant experience and qualifications. Identify the time commitment of each team member to support the project as well as an hourly rate, if applicable. Be sure to identify a project manager and clearly label this person as such in your application. Please include on the project team at minimum:

- One municipal representative
- One representative from Facilities or Public Works

Identify public interests, organizations and/or customers involved in the Project Team and describe their respective roles in and relationship to the project.

[1] https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5
[2] https://dem.ri.gov/environmental-protection-bureau/initiatives/environmental-justice
[3] https://ejscreen.epa.gov/mapper/

3. *Interest Form*

Respondents must complete the Interest Form and submit it with the rest of their application. The Interest Form can be found on the REF website.

4. *Letters of Support*

Respondents ***must include*** a letter of support from a town, city, or other local government official. A letter of support template is provided on the REF website. Respondents are also encouraged but not required to include a letter of support from their local utility company. ***Letters of support should signify the stakeholder's support of project implementation if the microgrid is found feasible.***

EVALUATION CRITERIA

All applications must meet the applicant and project eligibility requirements outlined above for their applications to be considered. REF and OER will evaluate and score all applications. The applications that score higher than 60 will be selected. Responses from qualified applicants will be reviewed and evaluated according to the criteria outlined below:

Evaluation Criteria	Scoring Matrix
Project Narrative: Our evaluation will include an assessment of critical facilities in the proposed microgrid area and the projected benefits of the proposed project. • Does the proposed microgrid show potential to provide resilience to one or more critical facilities? • Does the proposed microgrid show potential to provide a public benefit during an electrical grid outage?	35
Strength of Project and Project Team: Our evaluation will include an assessment of the qualifications and experience of the project team as well as the strength in the overall project based on support from stakeholders. • Does the proposed project have a well-rounded, qualified project team? • Does the proposed project have the active and engaged support of the local government, and the critical facility? • Has the project team engaged the local utility? • What is the Team's experience and capacity to implement a project long-term? Who will operate the microgrid?	25
Overall Quality of Proposal: We will assess the overall approach and strategy described/outlined in the proposal, considering the thoroughness and depth of project planning.	20
Benefits to Environmental Justice Communities: Our evaluation will consider the public benefit the proposed microgrid would have on environmental justice communities. Projects that serve environmental justice communities will be weighted more favorably. Please refer to the Program Guidance document for program official definitions. • Does the proposed microgrid serve an environmental justice community according to the CEJST mapping tool, RIDEM's Map of EJ Areas, or EPA's EJScreen?	20
Total	**100**

QUESTIONS AND CONTACT INFORMATION

Questions regarding this RFA should be submitted via email to Danielle.Jameson@energy.ri.gov. Information regarding this funding opportunity can be found on the Renewable Energy Fund's website: Renewable Energy Fund | REF Grants, Programs & Materials (commerceri.com)

DISCLAIMER

This RFA does not commit REF or OER to award any funds, pay any costs incurred in preparing an application, or procure or contract for services or supplies. REF and OER reserves the right to accept or reject any or all applications received, negotiate with all qualified applicants, cancel or modify the RFA in part or in its entirety, or change the application guidelines, when it is in its best interests. REF and OER reserves the right to continue negotiations with the selected utility until the parties reach a mutual agreement. REF and OER reserves the right to reject any or all responses; waive defects or irregularities in any response; enter into discussions with selected bidders; discontinue discussions with any bidder at any time and for any reason; correct inaccurate submissions; change the timing or sequence of activities related to this program; modify, suspend or cancel this program.