

Brownfield Energy Storage Adder Pilot Program

Rhode Island Renewable Energy Fund (REF) v5 Revised 5/18/2021



Request for Projects

Purpose

The Renewable Energy Fund (REF) and Rhode Island Office of Energy Resources(OER) seek to fund energy systems co-located and electrically integrated with local distribution system.

Energy storage is one technology that can help the state meet its clean energy goals. Energy storage can help match the timing of renewable energy generation with the timing of when we need electricity, particularly on the days when we use the most electricity. Energy storage can also help Rhode Islanders manage energy consumption and costs, and enhance energy resilience in our communities. By providing an adder to solar plus storage projects, we are recognizing the benefits of paired systems and helping offset incremental system costs.

This incentive is supported thanks to the state's participation in the Regional Greenhouse Gas Initiative (RGGI). Funding will be made on a first-come, first-serve basis based upon adherence to application requirements and contingent on funding availability. REF/OER reserves the right to extend, modify, or terminate this program based upon funding availability and/or other factors.

All projects must be in accordance with the Rules and Regulations for REF Programs.¹ All applications for project funding should be submitted on forms found on the REF website.² Applications will be accepted any time during the open solicitation period.

Eligibility Checklist – Questions for Potential Applicants

Eligibility Questions:	Yes/No
1. Are you submitting an eligible application to the REF Brownfield Program ³ for renewable energy co-sited with the energy storage system?	
2. Do all components of this project comply with REF's minimum technical requirements? ⁴	
3. Does the energy storage component of this project meet the technical eligibility requirements of National Grid's Connected Solutions program? ⁵	
If you answer no to any of these questions, you may not be eligible. If you are unsure about your eligibility, please contact REF@commerceri.com .	

¹ https://rules.sos.ri.gov/regulations/part/870-20-00-1



² http://commerceri.com/finance-business/renewable-energy-fund/

³ https://commerceri.com/wp-content/uploads/2021/05/Brownfield-Solar-PV-Program-Application-FINAL-2021.pdf

⁴ https://commerceri.com/wp-content/uploads/2019/05/RI-REF-Minimum-Tech-Regs-5.15.19.pdf

https://www.nationalgridus.com/RI-Home/ConnectedSolutions/BatteryProgram

Things to Know

- Throughout this documentation, we refer to a "project" as inclusive of all renewable energy and energy storage equipment and electrical connections. We refer individually to the "renewable energy component" and the "energy storage component" of a project. This program documentation describes incremental eligibility criteria and program requirements for the energy storage component of a project only.
- The energy storage adder is only available to eligible projects with an energy storage component that is co-located and electrically integrated with a new renewable energy project that is both (1) eligible for and (2) selected to receive a grant from the REF Brownfield Program.
- The entire project, including the energy storage component and the renewable energy component, must meet REF's minimum technical requirements.⁹
- The energy storage component must meet all technical eligibility criteria for National Grid's Connected Solutions¹⁰ program.
- The applicant must enroll the energy storage component in National Grid's Connected Solutions program or obtain a signature from the owner opting out of the program, unless the owner is not a National Grid electric distribution customer. Please note that National Grid reserves the right to limit participation on a first-come, first-served basis based on total program budget.
- Incentives, including the energy storage adder, are only available for systems that have not been installed, either partially or completely, prior to REF approval of the project application.
- This program documentation describes the incremental eligibility criteria, application requirements, and
 incentive adder for the energy storage component of a project. Please refer to applicable program
 documentation for the renewable energy component of the project. All application requirements for
 both the renewable energy component and the energy storage component of a project should be
 submitted as one application package.
- Please submit a complete electronic copy for all application requirements in the same email as your application for the renewable energy component of your project.
- Please submit all guestions to REF@commerceri.com.



⁹ https://commerceri.com/wp-content/uploads/2019/05/RI-REF-Minimum-Tech-Reqs-5.15.19.pdf

https://www.nationalgridus.com/RI-Home/ConnectedSolutions/BatteryProgram

Eligible Technologies

- This program is open to any customer of a Rhode Island electric distribution utility, including National Grid, Pascoag Utility District, and Block Island Utility District.
- Energy storage technologies that satisfy all technical eligibility criteria of National Grid's Connected Solutions¹¹ program, are eligible for this program.

Eligible Sectors

 Any sector that is eligible for the REF Brownfield Program is also eligible for the energy storage adder.

Application Qualifications

• The applicant must meet all eligibility criteria and requirements described in the REF Brownfield Program documentation, which, respectively, are incorporated by reference as if they were set forth fully herein.



https://www.nationalgridus.com/RI-Home/ConnectedSolutions/BatteryProgram

Project Funding

The energy storage adder depends on whether the renewable energy component of the project is seeking funding through REF Brownfield Program.

Brownfield Program:

For projects with a renewable energy component seeking funding through REF Brownfield program:

- REF will award a \$0.50/W adder based on the maximum continuous power rating the energy storage component of the project can deliver over three hours, up to a \$40,000 cap per project, for each project with an energy storage component that meets the eligibility requirement herein and a renewable energy component that is awarded funding through the REF Brownfield program. Generation from the renewable energy component does not count toward the maximum continuous power rating of the energy storage component.
- For the purposes of this program, the maximum continuous power rating the energy storage component of the project can deliver over three hours is calculated as:

 $\begin{aligned} & \textit{Maximum Continuous Power Rating} \\ &= \min\left(\frac{\textit{total battery capacity in Wh}}{3 \; \textit{hours}}, \textit{maximum continuous power rating of inverter in W}\right) \end{aligned}$

For example: Consider an energy storage component with a battery with a capacity 232 kWh and an inverter with a maximum continuous power rating of 1 kW.

- The maximum continuous power output of the battery is calculated by converting capacity from kWh to Wh (232 kWh * 1000 Wh/kWh = 232,000 Wh) and then dividing by three hours (232,000 Wh / 3 h = 77,300 W).
- The maximum continuous power rating of the inverter is 130 kW, which is equal to 130,000 W.
- The maximum continuous power rating of the energy storage component is then equal to 77,300 W, which is the minimum of 77,300 W and 130,000 W.
- The energy storage adder is \$0.50/W, so the total energy storage incentive is \$0.50/W multiplied by 77,300 W, which equals \$38,650.
- This incentive level is less than the cap of \$40,000.

Additional information on project funding:

- The energy storage adder does not count toward the developer cap per application.
- All energy storage adder applications are subject to review and approval.
- Funding level information and remaining balance is located on the REF webpage.
- All funding levels are subject to change.
- All awards are subject to availability of funds.
- For more details and updates, please refer to the REF webpage: http://commerceri.com/finance-business/renewable-energy-fund/.



Application Requirements

The following application requirements are for projects with an energy storage component and are incremental to the application requirements for the renewable energy component in the REF Brownfield program.

Incremental Requirements	Description	
1. Energy Storage Adder Application Addendum	Please complete all fields within the energy storage adder application addendum specific to the REF Brownfield program for which the renewable energy component is seeking funding.	
2. Executed turnkey contract	The executed turnkey contract must include any and all additional terms and conditions related to the energy storage component of the project. The contract must specify the energy storage component size (kW and kWh) and the expected REF energy adder award amount (\$). Applications submitted without an executed turnkey contract will not be accepted.	
3. Workmanship warranty	A minimum 3-year workmanship warranty on labor associated with the installation of the energy storage component is required. Please include a copy of the workmanship warranty for the energy storage component in the application package.	
4. Eligible technology attestation	The applicant must confirm the energy storage component of the project meets all current eligibility criteria of National Grid's Connected Solutions program. This attestation is included within the energy storage adder application.	
5. Connected Solutions enrollment	The applicant must complete the portion of the energy storage adder application related to enrollment in Connected Solutions or owner-decided opt-out of enrollment. Please note that National Grid reserves the right to limit participation on a first-come, first-served basis based on total program budget.	
6. Final inspection	RI Commerce reserves the right to inspect all projects before final funding is released.	
7. Project completion	Projects must be completed within eighteen (18) months of contract signing.	

