



**EFFICIENCY MAINE TRUST
PROGRAM OPPORTUNITY NOTICE**

Energy Storage System Program

PON EM-005-2024 v2

Opening: July 1, 2023

Closing: Per Program Availability

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Section 1: PON INFORMATION AND INSTRUCTIONS

1.1 Purpose of This Application Request

Through this competitive Program Opportunity Notice (PON), the Efficiency Maine Trust (the Trust) is seeking applications from demand metered customers in Maine with the goal of installing and dispatching energy storage systems (ESS) to reduce load during ISO-New England peak load conditions. The Trust will refer to this as the Energy Storage System Program Opportunity Notice (this PON). Projects awarded through this PON will be supported with funds from Electric Efficiency Procurement.

1.2 Program Description

The Trust is seeking applications from customers with demand meters to install and dispatch energy storage during ISO-New England peak summer load conditions. The Trust will require participants awarded under this PON to remain active in the program for a minimum of 5-years. Incentive awards will be \$200 per kW (per year for 5 years) of verified ESS dispatch during ISO-New England peak summer load conditions. Incentives will be issued following a performance evaluation period each fall for the 5-year commitment period. After the 5th year of participation, the customer will be eligible to apply for the incentive rate (if any) offered by the ESS PON in effect at the time on a year-to-year basis.

Annual incentive awards are anticipated to be capped at \$600,000 per year per project and \$3,000,000 over five years per project. Eligible systems must be at least 20 kW in size.

For incentive award consideration, applicants must submit a timely and complete application for an eligible project that satisfies the criteria and requirements set forth in this PON.

1.3 Contact Person

The Trust encourages any applicant who has interest in this PON to contact the Trust. The Trust's designated contact for this PON is as follows:

Jesse Remillard, Senior Program Manager
Efficiency Maine Trust
168 Capitol Street, Suite 1
Augusta, ME 04330-6856
jesse.remillard@efficiencymaine.com
(207) 368-2558

1.4 Program Term and Schedule

The Trust will accept applications to PON EM-005-2024 starting on July 1, 2023. This PON will close upon the full commitment of all available funds. The Trust will review applications periodically and make awards to applicants who meet the criteria set forth within this PON.

1.5 Efficiency Maine Trust Rules

Notwithstanding anything to the contrary in this PON, all applications submitted in response to this PON, and any incentive award resulting from this PON, shall be subject to all applicable rules and regulations of the Efficiency Maine Trust. See *State of Maine Rules Chapters for Independent Agencies*, 95-648 Efficiency Maine Trust.

Section 2: PROJECT ELIGIBILITY

2.1 Award Limitations

The Trust has budgeted a total of \$5,000,000 to be available for qualifying projects submitted under PON EM-005-2024. To ensure diversity of participants and minimize program non-performance risk, there is an annual performance incentive limit of \$600,000 per site per year, not to exceed \$3,000,000 per site over five years. The Trust will guarantee performance incentive eligibility providing that the project continues to demonstrate project milestone completion as described in [Section 5.2](#).

The incentive limit applies to single entities or multiple entities that are part of an affiliated group of companies under common ownership or control. Funds received through the Custom Electric PON EM-001-2024, Custom Thermal PON EM-002-2024, Custom Distributed Generation PON EM-003-2024 or through the Trust's Commercial and Industrial (C&I) Prescriptive Program for other projects will not be considered toward this cap.

2.2 Performance Incentives

Events

The Trust will require a minimum of fifteen (15) three-hour ESS dispatches per summer season when electricity demand on the ISO-New England grid is at peak demand conditions. Timing of the ESS dispatch events are the sole responsibility of the participant and will not be dictated by the Trust. The goal of the program is to reduce facility electric load during the ISO-New England peak system hour or the installed capacity (ICAP) hour.

Incentives

The Trust will provide an incentive award equal to \$200 per kW of validated reduction in grid-supplied energy if the ESS was dispatched during summer hours targeting the ISO NE ICAP hour. The system must be deployed at least 15 times per summer season (June, July, August, and September). Conditions of the performance payment are:

- Each dispatch must be at least 3 hours.
- ISO NE load must be within 15% of the peak summer load for the discharge event to qualify.

Following an evaluation period in the early fall, the Trust will verify performance and calculate incentives. The Trust will calculate incentives by taking the average performance of the dispatched energy storage capacity across all fifteen (15) dispatch events using 15-minute interval data. The Trust will discard dispatch events from the incentive calculation where those events occur when ISO NE load is not within 15% of the peak monthly load. For example, if the ESS dispatched 6 times in June, and 2 events occurred when ISO NE was not within 15% of the summer peak load, there would be 4 qualifying dispatch events for the month.

Data Requirements

Customer performance will be measured by interval data collected at the ESS inverter or through the ESS management system. All participants are required to install revenue grade metering capable of providing 15-minute interval data. The Trust must have access to this data to complete performance validation. The cost for any metering equipment and data collection capability required to partake in this PON is the responsibility of the customer. For purposes of the performance evaluation, the following data must be provided:

- 15 min interval data of battery activity for the months of June, July, August, and September.
- 15 min interval data of facility load for the months of June, July, August, and September.

Incentive Distribution

Incentives will be distributed in the fall after performance is validated. A notification of the incentive award will be sent to each participant. This process will take place each fall for a total of five years. The Trust will reserve the right to delay incentive payments due to issues such as missing interval data or abnormalities in event performance that necessitate further data review.

2.3 Eligible Projects

The following are requirements for projects to be eligible for funding under this PON:

- The ESS has yet to be installed;
- The project will be interconnected behind-the-meter;
- The facility must be located in Maine and have an account with a Maine electric utility;
- The ESS will range in capacity from approximately 20 kW to 3,000 kW;
- The facility must have a peak electric demand greater than the total demand reduction anticipated from the ESS;
- The ESS must be able to collect and transmit 15-minute interval data;
- An application must be approved by the Trust prior to participation;
- All systems must be designed to maintain a minimum 80% battery round-trip efficiency;
- The energy storage technology must carry at least a 10-year manufacturer's warranty;
- The energy storage technology must be UL-listed or certified by another nationally recognized testing lab and be recognized as meeting all safety requirements; and,
- The system and its components must comply with all manufacturer installation requirements, applicable laws, regulations, codes, licensing, and permit requirements.

Payments awarded under this PON are intended to influence the participation of projects that the applicant would not otherwise implement if not for the incentive.

2.4 Ineligible Projects

The following projects are not eligible for funding under this program:

- Systems configured for grid export;
- Participants without the required interval metering and data transmission capability;
- Electricity customers receiving service at transmission and subtransmission voltage levels are not eligible for the PON.¹
- Facilities not located in Maine or served by a Maine electric utility; or,
- Residential and small business customers.

Section 3: AWARD CRITERIA

Successful applications for an incentive award will demonstrate the project's ability to meet or exceed the criteria related to peak demand reductions and overall project readiness described in this section.

¹ For the purposes of this PON, "transmission voltage levels" means 44 kilovolts or more, and "subtransmission voltage levels" means 34.5 kilovolts.

3.1 Grid-Supplied Peak Demand Energy Reductions

Dispatch of the ESS must be targeted at ISO-New England summer peak demand times and result in verifiable reductions of customer electric load. The Trust will require that the dispatch of the ESS is measurable as described in [Section 2.2](#). All applications will be subject to an engineering review to validate project feasibility and cost-effectiveness. The Trust reserves the right to request more information when reviewing applications and when validating performance.

The Trust reserves the right to reject applications that do not fundamentally advance the goal of reducing grid supplied electricity peak demand. To participate in this PON, an applicant must first submit an application and be approved by the Trust for participation.

3.2 Management and Resource Adequacy and Project Readiness

Applications will be evaluated based on the resources and management in place to execute and maintain projects, as well as an overall assessment of project readiness. Please refer to [Section 4](#) for application requirements. The Trust will consider evidence that the following factors are in place when assessing project management and resource readiness:

- **Technical and Financial Proposal:** Applicants must include a clear discussion of how the ESS will be dispatched to target ISO-New England peak demand conditions. The applicant should also report the anticipated facility-specific electric energy and monetary benefits associated with peak demand dispatch during other months of the year. Additional benefits including offsetting internal combustion engine emergency generation co-located at the facility should also be discussed, if relevant.
- **Energy Storage System Technical Specifications:** Applicants must include a discussion of the ESS's underlying technologies, equipment and controls configuration, capacity, battery round-trip efficiency, siting and permitting considerations, and capability of the system to accurately target ISO-New England summer peak demand conditions.
- **Project Approvals:** Applicants must include evidence that all necessary project execution approvals are in place to proceed. If the applicant is unable to secure all necessary approvals before submitting the application, it must include a letter from the individual(s) with the authority to approve the project clearly stating the conditions needed for approval.
- **Costs and Financing:** Applicants must include evidence of the ability to fund or finance any project costs required to install the ESS through internal sources, third-party financing agreements, project partners, or other commitments.
- **Project Budget and Schedule:** Applicants must include the project's budget and schedule reflecting the required lead time for equipment procurement, installation, and commissioning.
- **Permitting and Interconnection:** Applicants must include the need for and status of all necessary permitting and utility interconnection requirements.
- **Project Management Organization and Qualifications:** Applicants must include the relevant qualifications of the project team including sub-contractors.
- **Risk Management:** Applicants must include a discussion of the strategies in place to limit exposure to uncertain future events that, if they materialize, will impact the ability of the project to deliver the claimed demand reductions.

The Trust reserves the right to disqualify an application that fails to demonstrate sufficient experience, planning, and resources needed to execute a successful project.

Section 4: APPLICATION REQUIREMENTS

Applications must present a concise and complete description of the proposed project and the applicant's capabilities for satisfying the requirements outlined in this PON. Applicants must adhere to the following outline and page limitations where specified.

4.1 Technical and Financial Proposal

The PON response should focus on the Technical and Financial Proposal and has no page restriction.

The ability for the ESS to provide demand reduction capability and the magnitude of expected peak demand impact should be a key focus presented in the Technical and Financial Proposal. The Technical and Financial Proposal should include an estimation of the demand impact and the calculation methodology, data, inputs, and assumptions used. All information and data that calculations are based on should be specific to the project site and as well-documented as possible. Please include a copy of the calculations in an Excel workbook or other open format that allows for a transparent review of inputs. The analysis should make use of facility metered consumption data and specified equipment performance data. Where this data is not available or practical to obtain, inputs and assumptions used in the analysis should be project specific and be accompanied by a clear explanation of how they were derived. The proposal should include:

- A high-level project description providing the installation location and overall system specifications;
- An explanation of the system's control configuration and sequence of operations that will allow for accurate peak demand dispatch and optimized off-peak charging schedules;
- An explanation of how energy storage interval data will be transferred to the Trust;
- The system's technical specifications and warranty guarantees;
- A description of how the system will be integrated into the existing facility's operations including an electrical diagram;
- A project site plan including the location and layout of the ESS components including, but not limited to batteries, inverters/chargers, pumps, management system disconnects, point of interconnection, and utility meter;
- A project cost breakdown including equipment, materials, labor, installation, construction, commissioning, and any additional requirements to install the system;
- Documentation showing that the project will satisfy all utility interconnection, permitting, and safety requirements;
- An estimate of the annual financial costs and benefits associated with summer peak dispatch including anticipated incentives from the Trust, and any monetary benefits associated with facility peak demand management outside of summer peak;
- Submission of 12-months of facility hourly electric consumption data; and
- A discussion of any other benefits including plans for also utilizing the ESS for backup emergency generation and whether it will offset the usage of an internal combustion engine emergency generator, if applicable.

The Trust reserves the right to adjust technical or financial calculations. In all cases, the Trust's determinations with regards to savings and other technical or operational items will be final. The Trust also reserves the right to request additional information from applicants.

4.2 Management and Resource Adequacy and Readiness

Please provide a description of the resources and planning in place that ensures project readiness. This section should be less than two pages. Relevant information may include:

1. **Project Approvals:** Applicants must provide evidence that the necessary internal approvals needed to proceed with the proposed project are in place. The Trust understands that these approvals may be conditional upon receiving the incentive.
2. **Costs and Financing:** Applicants must provide a letter on organizational letterhead signed by an authorized representative of the organization acknowledging the participant's commitment to contributing any up-front costs that ensure the participant's readiness for installation and operation of a ESS for the purposes of peak demand dispatch. If project viability is contingent on third-party financing, the applicant must identify the lending institution as well as the status of the financing. If a third party proposes to provide all or part of the required cost sharing, the applicant must include a letter from the third-party stating that it is committed to providing a specific minimum dollar amount and demonstrating its ability to do so. The letter should also identify the proposed cost-sharing arrangement. Letters must be signed by the person authorized to commit the expenditure of funds by the entity.
3. **Project Budget and Schedule:** Applicants must provide a detailed project budget and schedule, including a chart showing project milestones that include but are not limited to the following:
 - Planned equipment purchases, installation, and commissioning;
 - Other significant budget items and the funding schedule;
 - Any pending internal or external approvals that are necessary for the project to move forward and a date certain for obtaining them;
 - All interconnection and permit approvals required to proceed with the project; and,
 - Risk management strategies.
4. **Permitting and Interconnection:** Applicants must provide a brief explanation of permits and interconnection approvals necessary to proceed with the project and an explanation of the process and timeline required to receive them. If possible, the applicant should provide documentation from the relevant permitting authority confirming the applicant's understanding of their standing within the permitting and interconnection process.
5. **Project Management Organization and Qualifications:** Provide an organizational chart or explanation of roles and responsibilities of key project staff and partnership relationships. Include relevant corporate qualifications. Resumes may be included.
6. **Business and Financial Condition:** The applicant must be a business in good standing in the State of Maine. In addition to requiring evidence of management and resource adequacy and readiness to construct and operate the project, the Trust may consider other relevant information regarding the applicant's business and financial condition.

Section 5: APPLICATION REVIEW AND MILESTONE COMPLETION

5.1 Project Application Review

Once an application has been received by the Trust, the project will undergo a technical and financial review. The Trust or a third-party retained by the Trust will review all application materials for program requirements compliance. Based on this review, the Trust reserves the right to request additional

information. Once a satisfactory review is completed, the incentive will be conditionally reserved by the Trust and the project team will be required to demonstrate that the project is being installed in accordance with the design and system components as submitted in the application. It should be noted that the conditional incentive award does not guarantee that the system design, engineering, construction and/or installation of the ESS is proper or in compliance with any laws, regulations, codes, or industry standards. If the project requires modification based on the submitted application at any stage, the project team must submit documentation reporting these modifications and any anticipated impact on the system's demand impact performance. The project modification must be approved before the incentive payment is made. Upon inspection, if it is determined the system is not installed as approved, the incentive approval may be terminated.

5.2 Demonstrating Project Milestone Completion

Upon project approval, the incentive may be guaranteed for 730 days (2 years) should the applicant meet the milestones described in this section. The Trust may grant an extension as needed for circumstances outside of the control of the project team such as permitting or interconnection approval delays. All extension requests must be submitted prior to each milestone's respective due date. The following major project development milestones must be demonstrated to the Trust in order for incentive funds to continue to be reserved. Failure to provide evidence of meeting these milestones may result in incentive termination. A brief project update must be provided based on each milestone completion.

Milestone 1:

Within 60 days of project approval, the following must be submitted to the Trust. Projects that have not submitted these documents within 60 days may have incentives terminated unless a request for extension including the reason for the request has been submitted and approved by the Trust.

1. Copy of utility interconnection application and confirmation of receipt from the utility;
2. Letter of intent detailing applicant's financing plan for the system; and,
3. Copy of preliminary system design

Milestone 2:

Within 180-365 days of project approval, the following must be submitted to the Trust. Incentives for projects that have not submitted these documents within 180 days may be canceled unless a request for extension including the reason for the request has been submitted and approved by the Trust.

1. Proof of equipment purchase orders;
2. A completed building permit and electrical permit application;
3. A completed fire permit application (if applicable); and,
4. Proof of payment of the cost of interconnection upgrade costs (if applicable).

The project team must keep approved permits current and not expired.

Milestone 3:

To continue reserving incentive funds, the following required deliverables for the project must be submitted to the Trust within 365 to 730 days. Incentives for projects that have not submitted these documents within 730 days may be canceled unless a request for extension including the reason for the request has been submitted and approved by the Trust.

1. Local building department approval and electrical permit approval;
2. Fire department approval (if applicable);
3. Utility interconnect permission to operate letter;

4. Submission of the final as-built electrical drawing stamped by a Maine Professional Engineer (PE) and electrical inspection certificate;
5. The total installed project cost;
6. The decommissioning plan;
7. Evidence of applicable UL certifications for system equipment
8. All required safety certifications; and,
9. A commissioning report documenting the results of commissioning in accordance with manufacturer specifications.

The decommissioning plan should address the manner in which the ESS and its components will be recycled or safely disposed of at the end of life or following system damage or failure, including how the site will be restored to its original state, if necessary. The decommissioning plan must include disposal options that comply with all relevant local, State, and Federal laws and regulations.

Milestone 4:

Upon proof of installation, commissioning, and successful dispatch performance, the following is required after the first performance period:

1. A brief report documenting the successful dispatch of the system including a description of the times, magnitudes, and duration of system dispatch.
2. Provision of the required 15-minute interval data to the Trust required for performance validation and incentive calculation.

5.3 Project Cancellation or Modification

Requests to cancel or modify a project must be submitted to the program contact listed in [Section 1.3](#).

Section 6: SUBMITTAL INSTRUCTIONS

Applicants are encouraged to contact the Trust as they are developing their projects. To be considered for review, applications must adhere to the following specifications:

6.1 Submittal Format

Applications must be emailed to the point of contact outlined in Section 1.3 or Custom@efficiencymaine.com and referencing:

**PON-005-2024 v1
PROGRAM OPPORTUNITY NOTICE FOR
ENERGY STORAGE SYSTEM PROGRAM**

6.2 Accurate and Complete Information

By submitting an application or proposal, the Applicant is making a representation to the Trust that all information provided in connection with the application or proposal is complete and accurate at the time of submission. The intentional provision of any false or misleading information, or the intentional omission of material information, will result in the application or proposal being deemed ineligible and may result in the Applicant's suspension or debarment from participation in Trust programs.

Section 7: INCENTIVE AWARD

7.1 Award Decisions

Following the summer peak demand dispatch performance validation process, award decisions will be made by the Trust and communicated to the applicant in writing via email. Notwithstanding any statement or prior course of conduct to the contrary, no incentive shall be deemed awarded in the absence of a specific written notice of award from the Trust. Awards are conditioned on and subject to the terms and conditions of this PON.

7.2 Measurement and Verification (M&V) Requirements

All recipients must agree to independent verification of summer peak demand (kW) reductions. Actual award of an incentive will be conditional on applicant acceptance of these M&V requirements.

7.3 Limitations

This solicitation does not commit the Trust to make an award, to pay any costs incurred in preparing an application or provide oral or written clarification of its contents, or to procure or contract for services or supplies.

The Trust reserves the right to reject any application that in its sole determination does not meet the requirements and specifications of this PON, the Trust's rules, Maine law, or generally accepted business practices, or which contains inaccurate or incomplete information. The Trust may seek clarifications and supplementation of applications as it may deem reasonable.

This PON is a competitive solicitation. The Trust reserves the right to select project applications for award in its discretion, consistent with the Trust's rules, that most fully satisfy the criteria and objectives of this PON. The Trust will award funds for approved applications only if sufficient funding is available when the application is reviewed. The Trust may elect not to award all of the available funds through this PON and may issue another PON for the remaining funds. Additionally, the Trust reserves the right to award less than the amount requested by an applicant.

7.4 Publicity of Applicant's Participation

The Trust reserves the right to disclose certain information about the applicant's participation in the program, including, but not necessarily limited to, the applicant's name, the incentive amount, and projected demand impacts. Applicants may seek to have certain energy consumption and business sensitive information treated as confidential pursuant to Title 35-A MRSA §10106.

7.5 Reservation of Rights

The Trust reserves the right to cancel or extend the PON term at any time. The Trust also reserves the right to reject any and all submissions in response to this PON and to waive formalities if doing so is in the best interests of the Trust.

7.6 Request for Reconsideration

An aggrieved person may request a hearing for reconsideration of an award decision by filing a written petition with the Executive Director of the Trust within 14 calendar days of the notification of the contract award. Each petition to reconsider must meet the requirements specified in Efficiency Maine Trust Rule Chapter 1, Contracting Process for Service Providers and Grant Recipients, Section 5(B),

which can be found on the Efficiency Maine Trust website in the Policies section of the Library:
<http://www.energymaine.com/docs/Chapter-1-Contracting-Process-for-Service-Providers-and-Grant-Recipients.pdf>