



Small Battery Management Initiative

Updated: 1.25.24



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1. Initiative Summary

The Efficiency Maine Small Battery Management Initiative incentivizes participants to reduce their energy consumption when demand on the New England electric grid is forecasted to be at its system peak. This reduction of energy consumption in response to grid conditions is broadly called demand response. Participants are compensated on a pay-for-performance basis for the kilowatts of capacity (kW) they discharge from their battery during the demand response event. A participant’s battery will be enrolled in Efficiency Maine’s distributed energy resource management system (DERMS), an online platform run by a competitively selected third-party vendor called Virtual Peaker. The DERMS platform allows Efficiency Maine to message participants of impending demand response events, manage their batteries during the event period, track performance across all demand response events, and issue virtual performance incentives at the end of the summer capacity season.

It should be noted that Efficiency Maine only provides incentives for the enrollment and dispatch of these batteries, not for equipment purchase and installation. Participants will only be eligible for incentives for summer capacity seasons in which they are enrolled, and their participation meets the minimum requirements as outlined in this document.

Table 1. Summary of Initiative Offerings

Criteria	Detail
Open Access (also known as Bring-Your-Own-Device) Incentive	\$100 per kW discharged during demand response events
Eligible Participants	Residential participants and volumetric small commercial participants (SGS in CMP or B-1/C in Versant)
Permitted System Types	Both new installations and existing systems
	Both standalone and solar-tied systems
Demand Response Events per Year	Approximately 40 and no more than 60
Days Events Can Occur	Non-Holiday Weekdays from June 1 – September 30
Time Window Events Can Occur	1 pm to 8 pm
Duration of Events	No more than three hours



2. Participation Requirements

To be eligible to participate in the initiative, a participant must have a battery storage system made by an approved manufacturer with a nameplate inverter capacity no larger than 20kW. Both residential and volumetric small commercial participants (SGS or B1/C rate class) can participate in this initiative. The approved battery manufacturers can be found on Efficiency Maine’s [website](#). Virtual Peaker, through their respective partnerships with battery manufacturers, are responsible for communicating the need for a demand response event to participants, for controlling their batteries before the event to ensure the total state of charge (SOC) is as close as possible to 100%, and remotely controlling the battery systems during the event period. Virtual Peaker will provide Efficiency Maine with participant performance data, and will issue earned incentives to participants in accordance with the program terms. During the demand response event, the participant’s battery will be remotely discharged without the participant’s active participation. While enrolled in the initiative, the participant’s only obligation is to ensure that the battery remains operational and continues to be connected to Wi-Fi to allow communication with the DERMS platform.

Third-party device aggregators may be permitted to enroll portfolios of eligible participants, per the initiative rules outlined in this document and as budget permits, at the sole discretion of Efficiency Maine when their engagement in the program provides a least-cost alternative to full DERMS integration or allows the battery systems supported by that aggregator to participate where a direct integration with Virtual Peaker is not possible. More information on aggregation rules can be found in [Section 20](#).

3. Incentive Rates and Average Performance

The incentive rate for various participant types is described below in Table 2.

Table 2. Summary of Incentive Rates by Participant Type

Participant Type	Open Access (also known as Bring-Your-Own-Device) Incentive Rate
Residential (Self-enrolled)	\$100 per kW of discharge, up to 20kW
Residential (Aggregator-enrolled)	
Small Commercial (Self-enrolled)	
Small Commercial (Aggregator-enrolled)	

Incentives for the Small Battery Management Initiative are offered on a pay-for-performance basis. Device performance will be assessed on the average discharge capacity throughout the summer capacity season’s demand response events. Event performance is equivalent to the average discharge rate of the battery in kW-AC over the length of the called event. Battery systems are permitted to feed power onto the grid during these events.



Participant performance for an event may not be increased by curtailing solar production to increase the battery discharge rate. For example, if the total output of the solar system and battery system is limited by the inverter size, the solar system cannot be limited during demand response events so that the battery can discharge more. Doing this would not decrease the household load on the grid and would be against the goals of this program. Efficiency Maine reserves the right to evaluate participant utility data and remove participants who are curtailing solar output during demand response events.

The table below shows the results of a fictional participant’s curtailment performance over a capacity season with five demand response events. Many more events will likely be called throughout the summer, and the example below is purely hypothetical.

Table 3. Hypothetical Discharge Performance by Event

Event	Curtailment Amount
Event 1	4 kW
Event 2	5 kW
Event 3	0 kW
Event 4	2 kW
Event 5	3 kW

The participant’s average performance over the summer would be:

$$\text{Average Season Performance} = \frac{4 \text{ kW} + 5 \text{ kW} + 0 \text{ kW} + 2 \text{ kW} + 3 \text{ kW}}{5} = 2.8 \text{ kW}$$

The total incentive amount to be paid for this hypothetical scenario would be:

$$2.8 \text{ kW} * \frac{\$100}{\text{kW}} = \$280$$

4. Three-Year Incentive Lock

The participant’s per-kW incentive level is set for new installations for the first three consecutive years that the participant is enrolled in the program. New installations are any system in which the participant has submitted a completed interconnection application subsequently received and approved by the responsible utility partner. Even if the incentive rate for new participants in the program changes during the first three years of the participant’s participation, the incentive rate for that participant will remain the same. After the third year of participation,



the participant will receive the incentive rate (if any) Efficiency Maine offers at that point in time for the next three-year term, provided that the participant remains eligible and Efficiency Maine continues to operate the program. There is no upper limit to the number of successive terms that a participant can enroll their battery system in this program if the system continues to meet the minimum requirements set out in this document.

Participants are strictly prohibited from removing themselves from the program and re-enrolling to take advantage of a change in incentive rate before their initial three-year term has expired. Doing so will result in the immediate removal from the program, prohibition from future small battery management enrollment, and forfeiture of unpaid incentives.

Notwithstanding anything to the contrary herein, Efficiency Maine reserves the right to modify or discontinue the program at any time.

5. Incentive Payment Process

Incentive payments for the summer performance period (June 1 – September 30) will be issued in December on an annual basis. Incentive payments will be made to the individual participant or the aggregating party, depending on the enrollment type. Efficiency Maine will permit pre-approved aggregators to split participant incentives only if that split is made clear to potential participants before their enrollment in the aggregator’s portfolio. Efficiency Maine does not manage incentive negotiations between end-use participants and third-party device aggregators, as the agreement exists exclusively between these parties. Incentives earned under the program will be issued virtually to initiative participants via email per the calculation protocols outlined in [Section 3. Participants must remain enrolled in the program for the entire season to receive any incentive payments.](#)

6. Events

Demand response events are called to coincide with the ISO-NE (Independent Service Operator of New England) system peak hour. This is sometimes called the installed capacity, or ICAP, hour. Approximately 40 events will be called throughout the summer capacity season (June 1 – September 30) to mitigate the highest 10% of energy consumption hours. Events will occur between 1:00 PM and 8:00 PM when energy consumption is typically the highest. Events will last up to three hours. Notice of an impending demand response event will be provided to participants via text message or email at least four hours before an event occurs. Batteries will be managed by the Efficiency Maine DERMS platform: 1) in the day leading up to the event to ensure the highest state of charge possible, and 2) during the demand response event. Efficiency Maine will discharge up to 85% of the total battery capacity, leaving a 15% safety capacity margin for participants’ use.

7. Eligibility Requirements

To be eligible for this initiative, the participant must meet the following criteria:

- The battery must be sited in Maine and behind a properly interconnected meter;
- Self-enrolled residential participants must own the home in which the battery is sited;
- The participant must be on either a residential or volumetric small commercial (SGS, B-1, or C) rate;



- The total system inverter size must be no larger than 20kW; and,
- The battery system is made by one of the approved manufacturers listed on the Efficiency Maine website.

8. Enrollment Deadlines

For a participant to ensure they receive their full incentive for the summer capacity season, the participant's application must be received by Efficiency Maine by 11:59 p.m. on May 31 of that year. Participants can still enroll after May 31 for the summer season, as program budget allows. If a participant enrolls for the initiative after one or more demand response events for the season have been called, their performance for those events will be set to zero.

9. Enrollment Process

To enroll in the initiative, participants must meet the minimum criteria outlined in this document and complete the online enrollment process following the link on the Efficiency Maine website. Once registered in the initiative, participants will be automatically re-enrolled annually unless they choose to unenroll by providing written notice to info@efficiencymaine.com that they would no longer like to participate in the initiative. Efficiency Maine reserves the right to terminate a participant's automatic re-enrollment should the participant be found to 1) not meet the minimum enrollment criteria outlined in this document or 2) violate the program's Terms and Conditions.

10. Unsubscribing from the Initiative

Participants who enroll in the Small Battery Management Initiative will be automatically re-enrolled annually or until they provide written notice to info@efficiencymaine.com that they would no longer like to participate in the initiative. Once a season starts, the participant must stay enrolled for the entire season to receive any earned incentives. Participants will be notified of automatic re-enrollment in this program and given refresher program materials in the spring preceding the summer capacity season.

11. No Transfer of Enrollment

Enrollment in the Small Battery Management Initiative cannot be transferred from one participant to another. If a participant moves out of their residence/facility and the new occupant would like to participate in the initiative, they must submit a participant application and join at the incentive rate offered at that time.

12. Notification of Demand Response Events

Participants will be given at least four hours of advanced notice of a planned event as a courtesy should the participant want to opt out of this specific demand response event. Participants will be able to select their preferred means of event notification during the enrollment process. The participant typically does not need to take any action for their battery system to respond to a discharge event. If a participant opts out of an event, their curtailment performance for that event will be set at zero.



13. Battery System Maintenance, Internet Connection, and Durability

Participants or aggregators are responsible for maintaining the participant’s battery storage system to respond to demand response events. The incentives in this initiative are calculated using the verifiable performance of a battery based on its availability to be dispatched for a sustained period. If a battery system is not maintained correctly, the internet connection to the battery system is not supported, or any other aspect that would cause the battery system to discharge less or be unable to report performance properly, the incentive amount may be adversely affected.

14. Duration of Demand Response Events

Demand response events will last no longer than three hours. All events will take place between the hours of 1 pm and 8 pm. Discharge events may only be called on non-holiday weekdays. Events will not be called on the following holidays:

Table 4. Summer Capacity Season Holidays

Dispatch Season	Holiday	Typical Date
Summer	Juneteenth	June 19
Summer	Independence Day	July 4
Summer	Labor Day	First Monday of September

15. Demand Response and Large Storms

Many participants purchase battery storage systems partly for backup power during power outages. Most power outages in Maine happen during the winter. Efficiency Maine will not call a demand response event during a severe outage or for two days preceding predicted severe outages.

16. Co-Participation in Net Energy Billing (NEB)

Participants may co-participate in net energy billing (NEB) and the Small Battery Management Initiative.

Renewable Energy Plus Storage

Participants with interconnected renewable energy systems, such as solar PV (photovoltaic), wind turbines, and energy storage systems like batteries, may participate in the Small Battery Management Initiative. The investment tax credit (ITC), also known as the federal solar tax credit, may provide added incentives for energy storage systems that are charged by renewable energy systems. Additionally, participants may only export the power from energy storage systems to the electrical grid if applicable renewable energy systems charge the storage systems. The battery system’s performance is bound by what is established in its approved interconnection agreement.



Storage Only Systems (also known as Stand-alone Storage)

Participants who don't have a renewable energy system but do have an energy storage system that charges from the electricity grid may participate in the Small Battery Management Initiative. If the participant is discharging electricity to the grid, they must go through the normal interconnection process. The battery system's performance is bound by what is established in its approved interconnection agreement.

17. Loss of Connectivity

The goal of the Small Battery Management Initiative is to remove as much responsibility from the end participants as possible. In this spirit, a participant's only obligation to the initiative is maintaining battery operational status and connectivity throughout the enrollment to allow communication with the DERMS platform. Efficiency Maine will notify a participant when their battery has been disconnected for longer than 24 hours. Efficiency Maine reserves the right to remove the affected participants from the initiative if a battery has not been reconnected within seven days of this notice. If a participant is removed from the initiative, they forfeit their eligibility for an incentive payment for that calendar year.

18. Underperformance and Enrollment Adjustment

Efficiency Maine will manage enrolled batteries using the Virtual Peaker DERMS platform. Through this platform, Efficiency Maine will have direct insight into the actual battery performance of each enrolled system. Efficiency Maine will only issue incentives to participants based on their verified average performance throughout the summer capacity season. The participant can opt out of any event, with their performance for that event being set to zero. Efficiency Maine may contact participants who have opted out of several events to ensure that this is intentional and that their system works as anticipated.

19. Testing

A performance test event is planned for the first non-holiday weekday in June. Participants will be given notice at least 4 hours in advance. Efficiency Maine may elect to run performance and communication test events as needed to ensure all notification processes are functioning.

20. Aggregators

Efficiency Maine recognizes that there will be limited cases where aggregators may provide additional value to the Small Battery Management Initiative. Third-party device aggregators may be permitted to enroll portfolios of eligible participants, per the initiative rules outlined in this document and as budget allows, at the sole discretion of Efficiency Maine.

Approval will only be granted to aggregators if the total number of potential devices under their control is not sufficient to justify the fixed costs of full DERMS integration or if approval allows the battery systems supported by that aggregator to participate where a direct integration with Virtual Peaker is otherwise not possible.



To participate in the Trust’s Small Battery Management Initiative, aggregators must first be approved. The applicant must submit all the required documentation through the process outlined in [PON EM-016-2024](#).

For any questions regarding pre-approval, please contact:

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(207) 213-4147

The Trust will not grant allocations to parties that have not completed the application as outlined in [PON EM-016-2024](#) and received pre-approval.

21. Aggregator Incentive Rates

Approved aggregators will be provided incentives at the following rates:

Table 5. Summary of Incentive Rates by Participant Type

Participant Type	Incentive Rate
Aggregator	\$4.50 per verified kW of aggregated load reduction

The above rates are reflective of payments made directly to aggregating entities in exchange for verified curtailment of load. This incentive rate is not what is paid to a participant in exchange for curtailment performance; more information about participant performance incentives can be found above in [Section 3](#). Efficiency Maine will allow approved aggregators to split participant incentives when their portfolio is enrolled through the CSP pathway as described in [PON EM-016-2024](#). However, this incentive split must be made clear to a participant before their enrollment in an aggregator’s portfolio.

22. Aggregator Program Engagement

All rules and program design considerations around program aggregator engagement can be found in [PON EM-016-2024](#). Any additional questions should be directed to the point of contact named above.



23. Terms and Conditions

Participation in the Small Battery Management Initiative is subject to the Terms and Conditions in effect for participant applications at the time that the application is approved by Efficiency Maine. Participants will be required to review and accept the initiative Terms and Conditions during the online enrollment process.