



2024-2026 Program Guide  
**ConnectedSolutions** –  
Residential and Small Business Customers

# Battery Energy Storage

*2024-2026 **ConnectedSolutions** Program is subject to and pending regulatory approval*



**Rhode Island Energy**<sup>™</sup>

a PPL company



# 2024-2026 Program Guide ConnectedSolutions – Residential and Small Business Customers Battery Energy Storage

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## Summary

**ConnectedSolutions** incentivizes participants to reduce their energy use when demand on the New England electric grid is forecasted to be at its peak, known as Demand Response. Participants are rewarded for allowing Rhode Island Energy (“RIE”) to use the energy stored in the battery at times of high demand. Incentives for battery energy storage are based on the average kilowatt (kW) used per event, averaged over the summer season.

A summary of the program is given in the table below:

Rhode Island Energy Residential and Small Business Electric Customers	
Number of Events per Season	No more than 60 events
Performance Incentive <sup>1</sup>	\$225 per kW
Multiyear Rate <sup>2</sup>	5 Years
Length of Events	2 to 3 Hours
Time of Day	Between 3 pm and 8 pm
Events on Holidays	No
Season Dates	June 1 <sup>st</sup> – September 30 <sup>th</sup>

- Low-Income (A-60 rate) eligible customers can apply for a 0% financing loan for the cost of the battery system with no down payment and a \$25,000 lifetime cap per account number.
- Customers with battery inverter capacity of 50kW or less are eligible for the incentives in this table. Larger systems should enroll in the C&I Daily Dispatch Pathway.

## Participation through an Approved Battery Implementer

To participate in the program, the customer needs to have a battery energy storage system controlled by an approved battery implementer. The approved battery implementers are Enphase, Fortress Power, FranklinWH, Generac (formerly Pika Energy), Qcells, SolarEdge, Sol-Ark, Sonnen (paired with Outback inverter), SunPower, Sunrun, Panasonic, and Tesla.

The battery implementers are responsible for communicating the need for a demand response event and sending the participants’ battery energy storage systems discharge rate and state-of-charge to the participants’ Program Administrator Implementation Vendor (Energy Hub). During a demand response event, the battery will be remotely discharged without the participant’s active participation. The discharge will be barely noticeable, if at all, by participants.

<sup>1</sup> New participants enrolled prior to June 1<sup>st</sup>, 2024 will receive a \$400/kW incentive rate. Visit sections on [Incentive Levels](#) and [Multiyear Incentive Rates](#) for more information.

<sup>2</sup> This is the incentive rate for the 2024-2026 program years. It is Rhode Island Energy’s intention to uphold the Multiyear Incentive Rate for the first 5 consecutive seasons of participation. However, it is important to note that incentive levels are subject to regulatory review and approval.

## Eligibility Requirements

- ☑ Must be a Rhode Island Energy residential or small business electric customer<sup>3</sup>
- ☑ Have a battery energy storage system controlled by an approved battery implementer
- ☑ Have a battery energy storage system that is a behind-the-meter (BTM<sup>4</sup>) asset
- ☑ Customer agrees the battery energy storage system will receive a signal and instruct the batteries to be used for customer's site use and send the extra stored power to the grid during peak energy events

Customers in the C-06 rate class may participate in either the Residential and Small Business (RSB) or C&I track, but they may not participate in both tracks at the same time or switch to a different track midseason.

Customers in the Pascoag Utility District and the Block Island Power Company service territory are not able to participate.

## Enrollment

### Enrollment Process

To enroll in the program, the customer must complete a **ConnectedSolutions** application. This form is available on the Rhode Island Energy [website](#). The customer's battery manufacturer is responsible for submitting the customer's application to the customer's Program Administrator (Rhode Island Energy) and registering the battery implementer into the battery control platform, if any.

### Deadlines

For a customer to ensure they receive their full incentive for the summer season, the customer's application must be received by the customer's Program Administrator by 11:59 p.m. on May 31<sup>st</sup> of that year.

Customers may still enroll after May 31<sup>st</sup> for the summer season. However, the customer's performance will be set to zero (0 kW average) for any events called before the enrollment date that the customer missed.

### 0% HEAT Financing Loan for Low-Income (A-60 Rate) Eligible Participants

As of June 1<sup>st</sup>, 2024, the 0% HEAT Financing Loan is only available for low-income (A-60) customers. Customers who are interested in applying for a financing loan will need to complete an [EnergyWise no-cost home energy assessment](#) and [receive a 0% Financing Enrollment Form](#).

The customer is responsible for filling out the 0% Financing Enrollment Form and agreeing to terms and conditions. This form cannot be filled out by the customer's vendor.

By applying for the 0% Financing for a battery energy storage system, the customer is agreeing to enroll in **ConnectedSolutions** once the battery energy storage system is online and interconnected.

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3 Participants must be in rate classes A-16, A-60, or C-06; customers in other rate classes are ineligible to participate. For more information on Electric Service Rates, please visit: <https://www.rienergy.com/RI-Business/Rates/Service-Rates>. Customers in the C-06 rate class may participate in either the Residential and Small Business (RSB) track or Commercial and Industrial (C&I) track, but they may not participate in both tracks at the same time or switch to a different track midseason.

4 Behind-the-meter (BTM) means a facility that serves an on-site load other than parasitic load or station load utilized to operate the home or facility.

## No Transfer of Enrollment

Enrollment in **ConnectedSolutions** cannot be transferred from one customer to another. If a customer moves out of their residence/facility, and the new occupant would like to participate in **ConnectedSolutions**, they must submit a customer application and participate at the incentive rate offered at that time.

## Unenroll from the Program

Customers who enroll in the **ConnectedSolutions** program will remain in the program unless they unenroll. To unenroll from the program the customer will send an email with their name, address, and type of energy storage system to their battery implementer or [rienergy@energyhub.com](mailto:rienergy@energyhub.com) requesting to end their participation in the **ConnectedSolutions** program.

Once a season starts, the participant must stay enrolled for the entire season to receive the incentive. A participant cannot unenroll part way through a season and receive the performance incentive for fewer events than all the other program participants.

## Notification of Demand Response Events

Notification of discharge events will be sent directly to the customer's battery implementer which controls their battery energy storage system. The customer normally does not need to take any action for their battery system to respond to a discharge event.

## Battery System Maintenance, Internet Connection, and Durability

Customers, their battery implementer, or installer are responsible for maintaining the customer's battery energy storage system so that it can respond to dispatch events. The incentives in this program are calculated using the actual performance (average discharge rate in kW-AC over the duration of dispatch events) of the customer's battery system. If a battery system is not properly maintained, the internet connection to the battery system is not maintained, or any other aspect that would cause the battery system to discharge less or be unable to properly report performance, the incentive amount could be affected. Battery systems do degrade over time, causing them to be able to discharge less power and/or energy. This will also affect the incentive amount. Customers and their battery implementer or installer should consider the possibility of smaller than anticipated incentive due to poor performance of their battery systems before enrolling in the **ConnectedSolutions** program.

## Number of Events

Discharge events are called to coincide not only with the ISO-NE (Independent System Operator of New England) peak hour, but also with the highest daily peaks in July and August. Events will only be called in June and September if the annual peak is forecasted to be in those months. Events will be called in July and August to try to mitigate the highest 40 daily peaks in those months. No more than 60 events will be called in a summer.

## Length and Time of Demand Response Events

Discharge events can last two or three hours. All events happen between 3pm and 8pm. Discharge events can be scheduled for any day of the week except for holidays.

## Demand Response Event Holidays

Events will not be called on the following holidays.

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

## No Demand Response Events before Large Storms

We realize many customers purchase battery energy storage systems in part for backup power during power outages. We want to ensure that customers with solar batteries remain prepared if the lights go out. Most power outages in our region happen during the winter. The Program Administrator will not call a demand response event during an outage or for the two days preceding predicted severe outage events (Type 1 and Type 2 events as defined in the current Rhode Island Energy Emergency Response Plan)<sup>5</sup>. The Program Administrator will also make reasonable attempts to avoid calling events if large scale storms are forecasted (e.g., if a storage resource discharges all of its stored energy for purposes of serving peak demand, it must have enough time to recharge before providing backup power should outage conditions arise). Rhode Island Energy cannot account for outages resulting from isolated and/or localized storms. Customers should discuss the ability to opt out of an event with their battery manufacturer in this scenario.

## Incentive Payment Process

All effort will be made to provide incentive payments for summer performance by the end of each calendar year. Some payments may be provided in the first quarter of the following calendar year.

Incentive payments will be made to either the customer or other party depending on the selection made on the 'customer incentive payment options' section of the customer application. Some installers or other parties may offer their customers an upfront discount on the customer battery system in exchange for the customer selecting that their performance incentives are sent to that party. Such negotiations are between the customer and the installer or other party. For any customer that is provided an incentive directly and not through another party, RIE will send an incentive check via U.S. Postal service to the customer's address.

The income received for participation in the program is not subject to income tax. Participants will not receive a 1099 form from Rhode Island Energy.

## Incentive Rates Vary Dependent Upon Enrollment Date

Any customer who enrolls on or after June 1, 2024, will receive an incentive rate of \$225 per kW. The customer's per-kW incentive level is set for new installations for five consecutive summers.

Any customer who enrolls on or before May 31, 2024, will receive an incentive rate of \$400 per kW. The customer's per-kW incentive level is set for new installations for five consecutive summers.

Any customer who reaches their 5<sup>th</sup> summer of participation will receive the incentive rate (if any) offered at that point in time. For the 2024-2026 program years, the incentive rate is set at \$200 per kW.

<sup>5</sup> National Grid Rhode Island Electric Emergency Response Plan, May 2020. <https://ripuc.ri.gov/sites/g/files/xkqbur841/files/utilityinfo/2020-RI-Electric-ERP-Redacted.pdf>

Please note that for all customers, incentives will be set in three-year periods “2024-2026.” During the next three-year review, the incentives may be re-evaluated and adjusted based on market conditions for the Program Period 2027-2029. All incentives are subject to review and oversight. Even if the incentive rate for new customers in the program changes during the first 5 consecutive summers of the customer’s participation, the incentive rate for those customers will remain the same.

## **Incentive Rates and Average Performance (Participants Who Enrolled on or After June 1, 2024)**

*The incentive rate is shown in the table below.*

Performance Incentive	\$225 per kW
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The incentive rates refer to the average curtailment amount across all events of the dispatch season.

Performance per event is equal to the average discharge rate of the battery in kW-AC over the length of the event.

Performance for an event may not be increased by curtailing solar production to increase the battery discharge rate. For example, if the total production 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 load on the grid and would be against the goals of this program.

The table below shows the results of a fictional customer’s curtailment performance over a summer that had four demand response events over the whole summer. There are many more events over the course of a summer.

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

*The customers average performance over the summer would be:*

$$\text{Average Season Performance} = (2\text{kW}+3\text{kW}+3\text{kW}+0\text{kW}) \div (4 \text{ Events}) = 2.0\text{kW}$$

*The total incentive amount to be paid for this fictional customer would be:*

$$2.0\text{kW} \times \$225 \div \text{kW} = \$450$$

## **Incentive Rates and Average Performance (Participants Who Enrolled on or Before May 31, 2024)**

The table below, shows the eligible incentive rate for battery energy storage dispatch based on year of peak season program participation. This table includes the proposed honoring of the five-year rate lock and the proposed multiyear incentive rate for five years for any new participants, however incentive levels are subject to review and approval post-2026. To qualify for the \$400 incentive rate, participant(s) must successfully enroll with a newly installed battery on or before May 31, 2024.

To understand why an incentive rate may drop from \$400 to \$200, please reference [‘multiyear incentive rate’](#) section below.

The incentive rates refer to the average curtailment amount across all events of the dispatch season.

Performance per event is equal to the average discharge rate of the battery in kW-AC over the length of the event.

Performance for an event may not be increased by curtailing solar production to increase the battery discharge rate. For example, if the total production 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 load on the grid and would be against the goals of this program.

The table below shows the results of a fictional customer’s curtailment performance over a summer that had four demand response events over the whole summer. There are many more events over the course of a summer.

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

*The customers average performance over the summer would be:*

$$\text{Average Season Performance} = (2\text{kW}+3\text{kW}+3\text{kW}+0\text{kW}) \div (4 \text{ Events}) = 2.0\text{kW}$$

*The total incentive amount to be paid for this fictional customer would be:*

$$2.0\text{kW} \times \$400 \div \text{kW} = \$800$$

## Demand Response Performance

Performance per event is equal to the average discharge rate of the battery in kW-AC over the length of the event.

If a customer opts out of an event or has some communication or other issue that prevents them from discharging during an event, they will be given a 0 kW performance for that event. This will affect the customer’s average performance and incentive. Approved battery implementers must provide 24x7 15-minute interval, or more granular data, for the entire demand response season which performance is being calculated in order to receive fees or for their customers to receive performance-based incentives. This data is used to calculate performance and to evaluate the effectiveness of the baseline method.



## Multiyear Incentive Rate

It is Rhode Island Energy’s intention to honor any rate lock commitments made prior to the 2024 program year. Prior to 2024, program participants were offered a 5-year rate lock. Even if the incentive rate for new customers in the program changes during the first 5 consecutive summers of the customer’s participation, the incentive rate for that customers will remain the same. After the 5<sup>th</sup> summer of participation, the customer will receive the incentive rate (if any) offered by the Program Administrator at that point in time.

The customer’s per-kW incentive level is set for new installations for five consecutive summers. New installations are defined as any installations in which the customer has submitted a completed interconnection application.

Customer enrolled with a newly installed battery and begun peak season participation...	2019	2020	2021	2022	2023	2024	2025	2026	2027*	2028*
2019	\$400	\$400	\$400	\$400	\$400	\$200	\$200	\$200	TBD	TBD
2020	-	\$400	\$400	\$400	\$400	\$400	\$200	\$200	TBD	TBD
2021	-	-	\$400	\$400	\$400	\$400	\$400	\$200	TBD	TBD
2022	-	-	-	\$400	\$400	\$400	\$400	\$400	TBD	TBD
2023	-	-	-	-	\$400	\$400	\$400	\$400	\$400	TBD
2024 (Participants enrolled on or before May 31, 2024)	-	-	-	-	-	\$400	\$400	\$400	\$400	\$400

Notes: Each row represents the peak season in which a customer first enrolled with a newly installed battery and began peak season participation. Each column represents the year of the peak season. The contents of the cells indicate the eligible incentive level in dollars per average kW reduced per peak event across that year’s season. For example, a customer who enrolled with a newly installed battery and begun peak season participation in 2019 had been eligible to receive \$400/kW for average kW curtailed in years 2019 through 2023, and reduced to \$200/kW in years 2024-2026. If a customer’s enrollment commences mid-season, that system will receive 0 kW as performance for any events missed but will be allowed to earn performance on any remaining events of that season. Note that for all customers, incentives will be set in three-year periods “2024-2026”. It’s Rhode Island Energy’s intention to uphold the 5-year Multiyear Incentive Rate for all RSB customers, however, incentive rates are subject to regulatory review and approval.

\*During the next three-year review, the incentives for new participants may be re-evaluated and adjusted based on market conditions for the Program Period 2027-2029. All incentives are subject to review and oversight.

## Co-Participation in ISO-NE Demand Resource Programs

One of the benefits of the **ConnectedSolutions** program is the decrease in the long-term requirement for capacity (generation) in the ISO-NE markets, also known as the installed capacity requirement (ICR). Customers are not allowed to co-participate in **ConnectedSolutions** and any ISO-NE program that would cause the customer’s curtailment in the **ConnectedSolutions** program to be reconstituted in the ICR, because this would negate one of the core goals of **ConnectedSolutions**. The current structure of ISO- NE’s active forward capacity market does not systematically reconstitute **ConnectedSolutions** curtailment into the ICR, and any reconstitution that does occur is rare. So, there is no issue with customers co-participating in both the forward capacity market and **ConnectedSolutions**.

## Co-Participation in Net Metering

Customers may co-participate in Net Metering and **ConnectedSolutions**. Net Metering provides an incentive for electricity generated from renewable sources, like solar PV and wind turbines.

Net Metering customers can discharge their battery systems to respond to **ConnectedSolutions** events and earn incentives. As long as it is not restricted by the customer interconnection service agreement, customers can export their net battery system power to the grid during **ConnectedSolutions** events to earn incentives.

## Co-Participation in Renewable Energy Growth Program

Customers may co-participate in the Renewable Energy Growth (REG or RIE-Growth) and **ConnectedSolutions**. RE-Growth provides an incentive for electricity generated from renewable sources, like solar PV and wind turbines.

RE-Growth customers can discharge their battery systems to respond to **ConnectedSolutions** events and earn incentives. The battery system must be configured so that the battery discharge is not measured by the RE Growth production meter. However, as long as it is not restricted by the customer interconnection service agreement, customers can export their net battery system power to the grid during **ConnectedSolutions** events to earn incentives.

## Renewable Energy Plus Storage

Customers with interconnected renewable energy systems, such as solar PV and wind turbines, and energy storage systems, like batteries, may participate in **ConnectedSolutions**. Energy storage systems like batteries cannot be easily added to every solar PV installation. If you add a battery system to your existing solar PV system, your solar interconnection agreement will need to be updated. Please ask your installer or inverter manufacturer for more details.

The investment tax credit (ITC), also known as the federal solar tax credit, provides additional incentives for energy storage systems that are charged by renewable energy systems. However, the ITC may have restrictions on how much the battery system needs to be charged by a renewable source. Customers should consult with a tax professional for guidance.

## Storage Only Systems

Customers who don't have a renewable energy system (i.e. solar PV system) but do have an energy storage system that charges from the electricity grid may participate in **ConnectedSolutions**. If the customer will be discharging electricity to the grid, they must go through the normal interconnection process. The battery system's performance is bounded by what is established in their approved interconnection agreement.

## Testing

A performance test event is not planned in this program. However, the Program Administrators may elect to run communication tests to ensure all notification processes are functioning.

## Cancellation of the Program

Due to regulatory decisions, cost effectiveness, or other reasons, RIE may cancel their **ConnectedSolutions** Program or subsets of their program at any time.

## Terms and Conditions

These program materials and participation in **ConnectedSolutions** are pursuant to and subject to the Terms and Conditions in effect for customer applications at the time that the application is approved by the Program Administrator. See the **ConnectedSolutions** application for more details.

## FAQs

### What is battery storage?

A home battery storage system operates like a rechargeable AA or AAA battery, but at a much larger scale. Home battery systems can be discharged when needed, e.g. when the power goes out (if the system configuration supports this) or when there is a **ConnectedSolutions** event.

### How can I find a battery storage device?

To participate in the program, customers must work with one of the approved battery implementors listed above.

### Do I need to maintain an internet connection to my energy storage system?

Yes. If we cannot communicate with your energy storage system, or if your energy storage system cannot discharge when needed (due to a maintenance issue), the incentive paid to either the system owner or their battery implementer will be affected.

### Can I participate in **ConnectedSolutions** if I already have a solar PV system?

Yes. Customers with existing solar PV systems can add an energy storage system to their homes to participate. However, storage cannot be easily added to every solar PV installation. Please ask your solar installer or battery implementer for more details.

When you add a battery system to your existing solar PV system, your solar interconnection agreement will need to be updated. Please work with your solar PV or battery implementer to complete this update.

### Does **ConnectedSolutions** impact my electric bill?

You will not see any charges or credits related to the **ConnectedSolutions** program on your electric bill. Best of all, this program will not affect your solar generation or your, SREC, Net Metering, or ReGrowth incentives. While **ConnectedSolutions** allows for co-participation in other programs, you will need to confirm that there are no restrictions within your customer interconnection service agreement.



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