Energy Storage Solutions

PURA Technical Meeting –

Docket No. 26-08-05 Technical Meeting #1



August 7th, 2026

Agenda

Program Administrators (PAs) Joint Presentation

- Introduction
- (1) Enrollment incentive clawback;
- (2) Data Dashboard Overview;

(1) Enrollment incentive clawback

Program Objectives

Docket No. 17-12-03RE03

1. Produce positive net benefits to all ratepayers,
2. Provide electrical grid benefits including resilience, peak shaving and ancillary services,
3. Foster the sustained, orderly development of a state-based electric energy storage industry,
4. Provide resilience benefits to customers in environmental justice communities or experiencing economic hardships,
5. Reduce barriers to entry for storage deployment in Connecticut,
6. Maximize the long-term environmental benefits with respect to emissions reductions, and
7. Maximize benefits to ratepayers derived from the wholesale capacity market.

Current Enrollment Incentive Rates

Customer Category	Enrollment Incentive Rate*
Residential (Non-Grid Edge)	$30/kWh
Residential (Grid Edge)	$130/kWh

Customer Category	Enrollment Incentive Rate*
Commercial (Non-Priority)	N/A
Commercial (Priority)	$10/kWh

*Enrollment incentives are defined based on rated energy capacity (kWh)

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Standard Rate Example

System size:	**20 kW / 30 kWh**
Cost before incentives:	**$34,000**
Enrollment Incentive:	**$900 or $3,900***
10 Years of Performance Incentives:	**$19,969** (estimated)

The motivation to remain enrolled comes from the **Performance Incentive**, not **Enrollment Incentive**.

* indicates Grid-Edge.

Construct 5 Statistics

Residential	Total Approved Projects*	Total Capacity	Total Enrollment Incentives
Residential Standard	63	891 kW / 1,350 kWh	$40,493
Grid Edge	47	827 kW / 1,372 kWh	$178,360

Residential	Average System Size	Average Enrollment Incentive
Residential Standard	14.1 kW / 21.4 kWh	$642.74
Grid Edge	17.6 kW / 29.2 kWh	$3,794.89

Benefits & Drawbacks of Clawbacks

Benefits

- Protects ratepayers from bad actors

Drawbacks

- Costly to administer
- Adds additional program complexity
- Disregards legitimate unenrollment reasons (relocation, equipment failure, OEM bankruptcy, etc.)
- Could discourage participation, particularly among underserved customers
- Chilling effect on entire program
- Likelihood of customer re-payment is questionable

PA Recommendations



No universal clawbacks on Enrollment Incentives



Preserve Construct 5's streamlined performance-based framework



PAs can use discretion where abuse risk outweighs administrative burden

If Clawbacks are Implemented

- Consider applying only where clawback value outweighs administrative cost:
  - **Third-Party Owned Residential Systems**
    - Third Party Owners will enroll customers in large batches and collect incentives
    - High volume enrollment → risk of high volume unenrollment (worth the administrative cost of claw back to one large entity)
  - **C&I Priority Customers**
    - Enrollment incentives likely to be greater than $10,000 or more

(2) Data Dashboard Overview

SP1

Telemetry APIs and Data - 2025

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C&I INSTALLATIONS AND RESIDENTIAL INSTALLATIONS IN UNITED ILLUMINATING TERRITORY

OEMs

- Most Active OEMS: API/OpenADR integration, daily/real time delivery to DERMS

Uplight

- Collects and aggregates telemetry from OEMs

CTGB

- Shares with Green Bank

RESIDENTIAL INSTALLATIONS IN EVERSOURCE TERRITORY

OEMs

- Most Active OEMS: API/OpenADR integration, daily/real time delivery to DERMS

EnergyHub

- Collects and aggregates, prepares consolidated telemetry extracts.

Eversource

- Receives report from EnergyHub

CTGB

- Shares with Green Bank

Slide 12

SP1 Switch for updated version

Sara Pyne, 2026-07-29T00:33:07

Telemetry APIs and Data - 2026

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RESIDENTIAL INSTALLATIONS IN EVERSOURCE TERRITORY

OEMs

- Most Active OEMS: API/OpenADR integration, daily/real time delivery to DERMS
- Some OEMs: Manual data sharing, delayed delivery to DERMS

EnergyHub

- Collects and aggregates, prepares consolidated telemetry extracts in Snowflake data share – data available next day

CTGB

- Automation picks up uploaded file and processes into CTGB Data Warehouse. Data QC checks, Passive dispatch scoring, and Dispatch Event Metrics kicked off automatically. Data available for review in PowerBI

C&I INSTALLATIONS (All EDCs) AND RESIDENTIAL INSTALLATIONS IN UNITED ILLUMINATING TERRITORY

OEMs

- Most Active OEMS: API/OpenADR integration, daily/real time delivery to DERMS
- Some OEMs: Manual data sharing, delayed delivery to DERMS

Uplight

- Collects and aggregates telemetry from OEMs
- UI: API integration between CTGB and Uplight
- Eversource C&I: Prepares consolidated telemetry extracts and uploads to SFTP site (API planned for future)

CTGB

- SFTP/API integration adds/updates data into CTGB Data Warehouse. Data QC checks, Passive dispatch scoring, and Dispatch Event Metrics kicked off automatically. Data available for review in PowerBI

ESS Data QA/QC & Validation

Identify QA/QC Issues

- DERMS APIs, SFTPs and other data shares are queried on a daily basis with rolling backfills and compiled into a "Telemetry of Record"
- CGB and EM&V have developed various QA/QC event-level "Flags" to surface issues
  - "Has Telemetry"
  - "Sign Reversal"
  - "Expected Average Power"
  - "Null/Missing Stored Energy"
- Scoring Events on a rolling basis
- Identify which issues are related to device programming, enrollment, and data delivery

CGB Data Cleaning:

- Time zone inconsistencies, interval normalization, interval deduplication
- Aligning fields/formats across datasets from various sources

CGB Data Validation

- Project level Event scoring reports are shared with OEMs and BESS Operators on a weekly basis
- Some QA/QC issues cannot be cleaned and must be corrected at the source
- Issues are investigated with OEMs, DERMS and Program Administrators

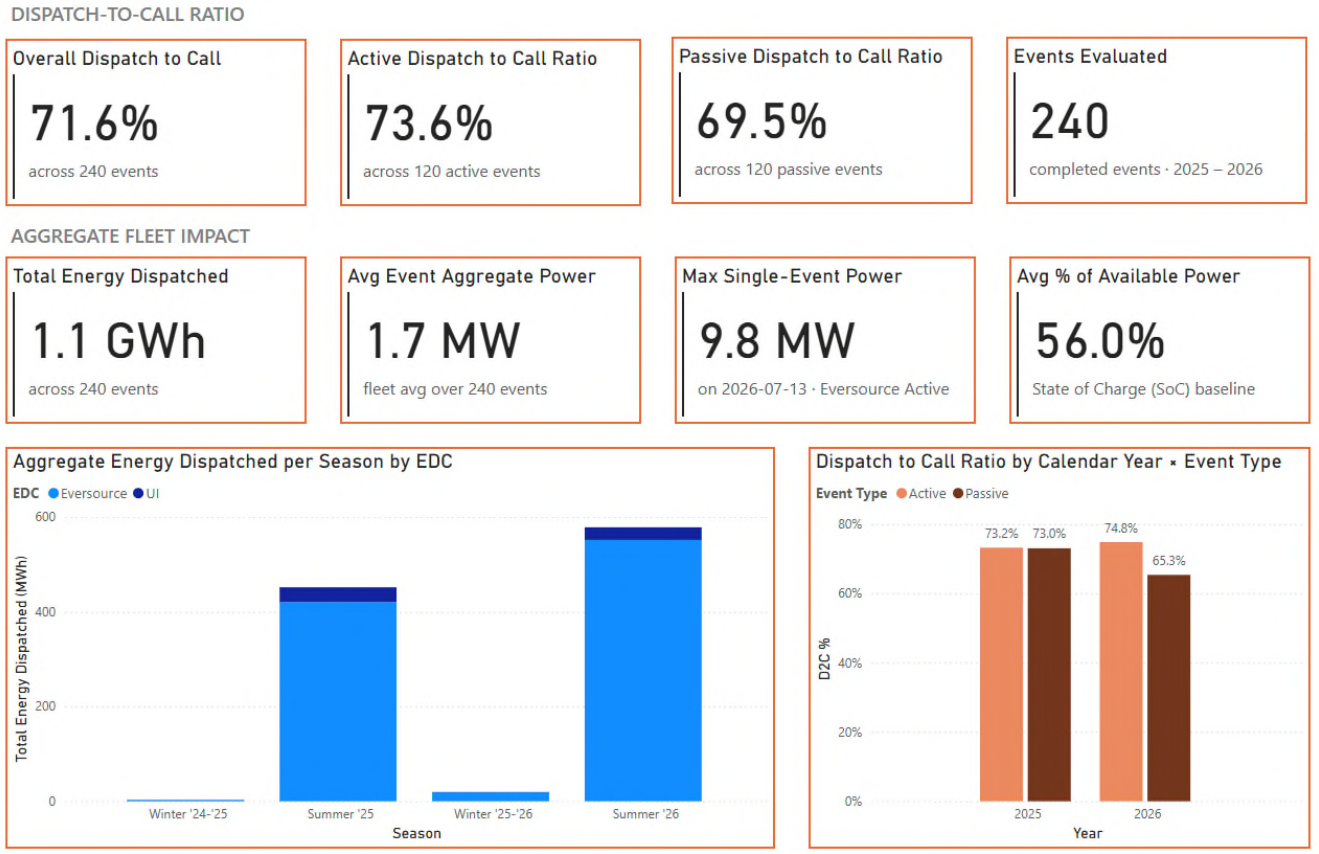
Data Dashboard

Live Demo – new Dispatch Event Metrics page

https://energystoragect.com/ess-performance-report/

"...the Program Administrators shall enhance the existing ESS data dashboard to display ESS dispatch event data at the most granular level and with the lowest possible latency available to the Program Administrators...the updated ESS dashboard must include the Program's dispatch response-to-call ratio, to provide stakeholders with a clear and consistent measure of Program performance..."

Docket No. 25-08-05, Order #24



Thank You!