# **C&I Demand Response and EV Charging Programs**

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## Agenda

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#### Electric C&I DR





#### Electric & Gas C&I DR





**C&I CT Energy Storage Solutions Program** 

## Setup and Participation Process

- ✓ We conduct a no-cost energy survey
- ✓ Identify equipment and/or processes for demand reduction
- ✓ Develop optimal action plan
- ✓ Participation is easy



## **Electric Incentive Payments**

- Determine optimal load reduction strategies
- Events: 2-3 hours
- Incentives are 100% performance-based

Performance Period	Timeframe	Max Events	Incentive per Reduced kW:
Summer	June to September	12	\$50.00
Winter	December to March	6	φ30.00

## **Gas Incentive Payments**

- Determine optimal load reduction strategies
- Event trigger points (New for 2024)
  - Stage 1: DAT 32° F Minimum Trigger Point Data Collection
  - Stage 2: DAT 25° F ISO-NE Days w/ Tight Supply Conditions
  - Stage 3: DAT 18° F SCG/CNG Distribution System Constraints

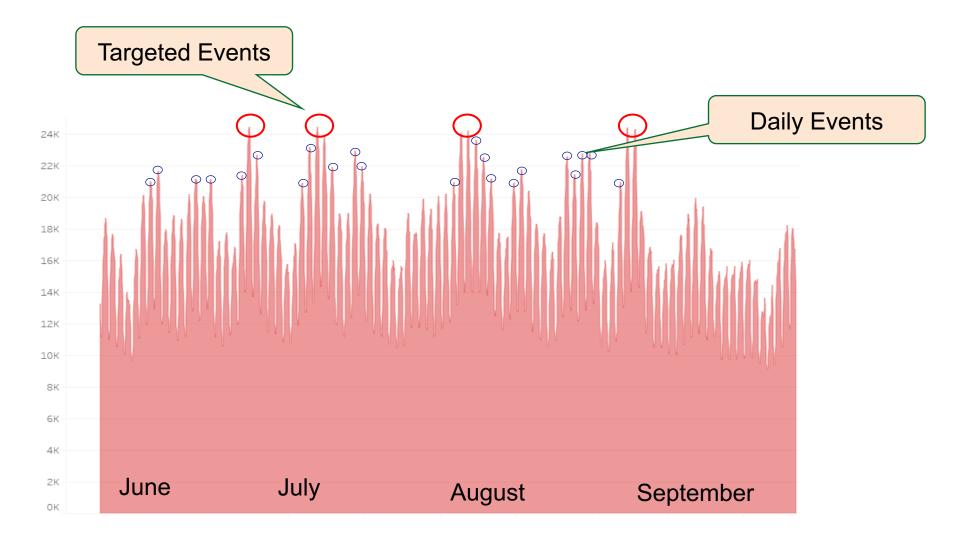
Performance Period	Timeframe	Duration	Max Events	Incentive per Reduced CCF:	
Winter	November through March	24 hours (10am – 10am next day)	6	\$10 per 24-hour event	



# Two ways to Participate in ConnectedSolutions

	Program Parameters
Targeted Dispatch	<ul> <li>3 - 8 events per summer</li> <li>3 hours per event</li> <li>\$35/kW - summer curtailment</li> <li>+\$10/kW weekend bonus</li> </ul>
Daily Dispatch	<ul> <li>30-60 events per summer</li> <li>2-3 hours per event</li> <li>Technology agnostic</li> <li>\$200/kW - summer C&amp;I</li> </ul>

## Commercial / Industrial Programs



**Typical Summer Daily ISO-NE Peaks** 

## **Strategies and Technologies Typical to Dispatch Scenarios**



#### **Usually Manual**

- Temperature setback ~3°F
- VFD speed limiting
- Early setback
- Process changes
- Rarely lighting
- Generation

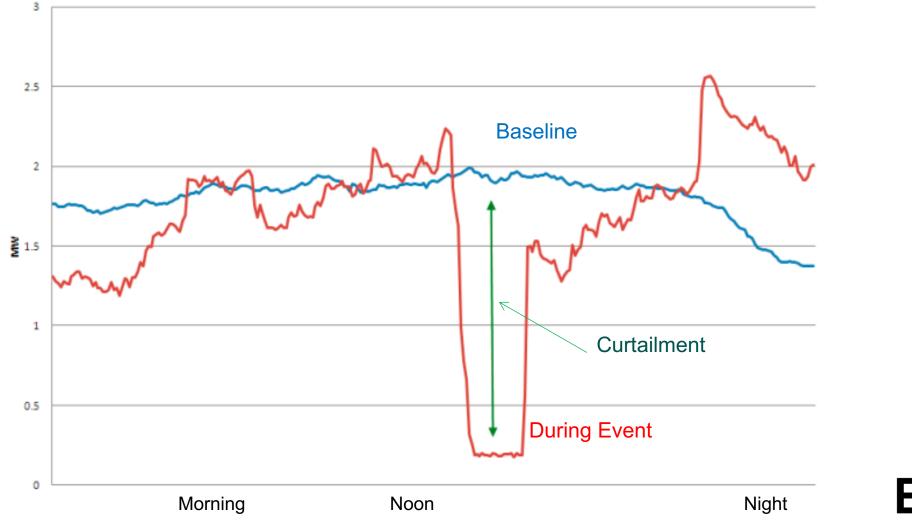


#### **Usually Automatic**

- NO BATTERIES
- Flywheels
- Thermal Storage
- Industrial Freezers

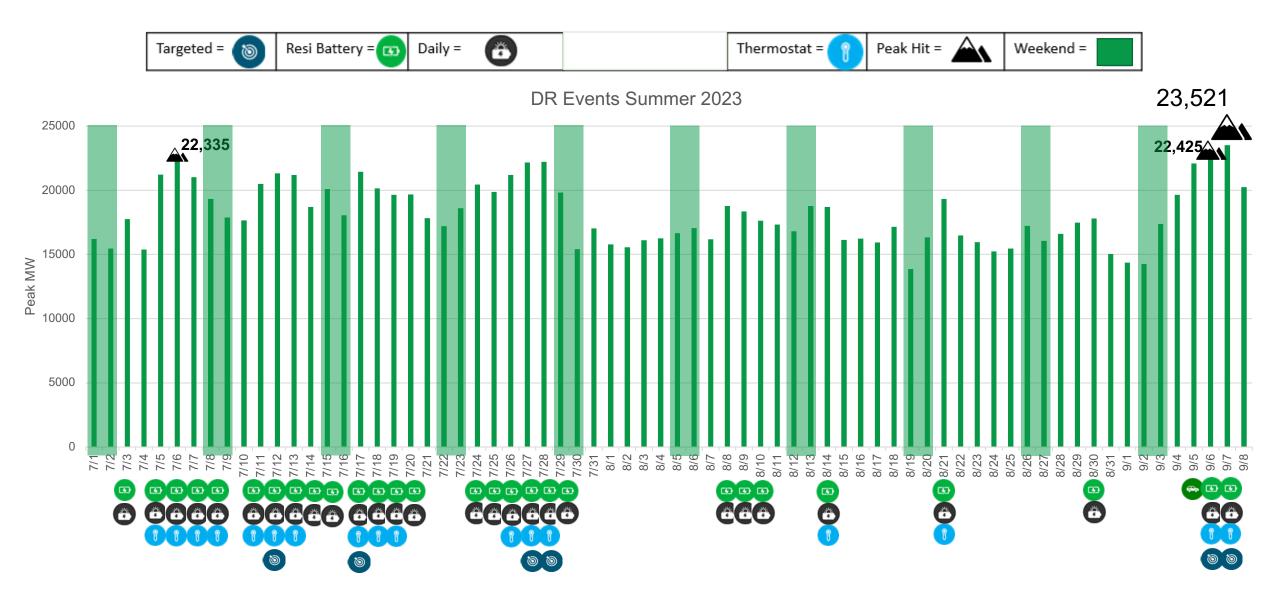


## How performance is calculated



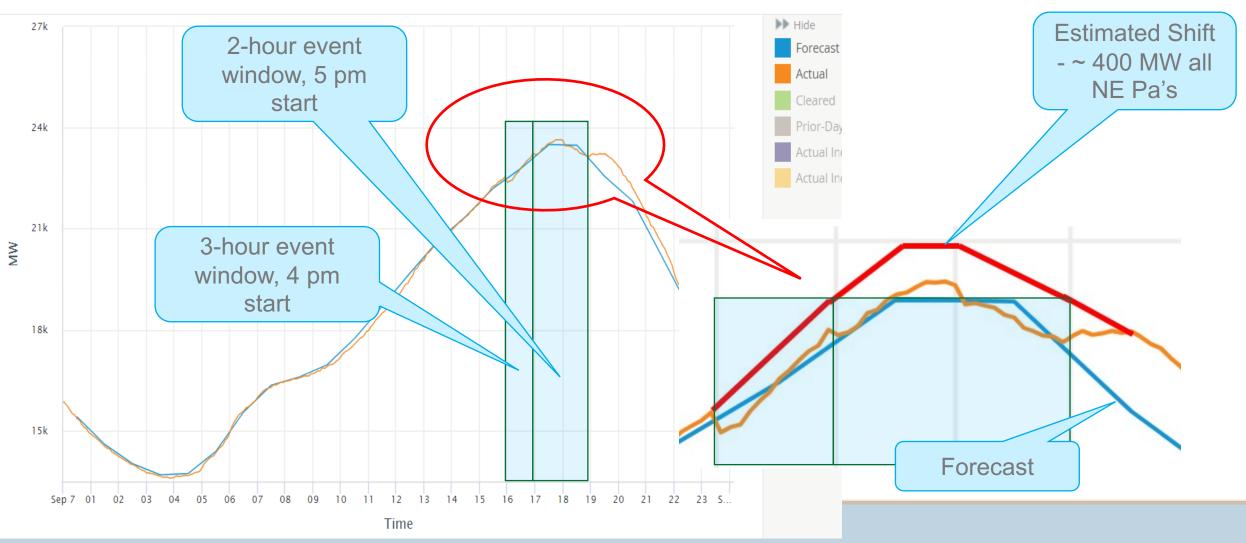


**Events Summer 2023** 



# Effect on the ISO-NE Grid on Summer Peak Day 9/7/2023

Date: 09/07/2023 🔻

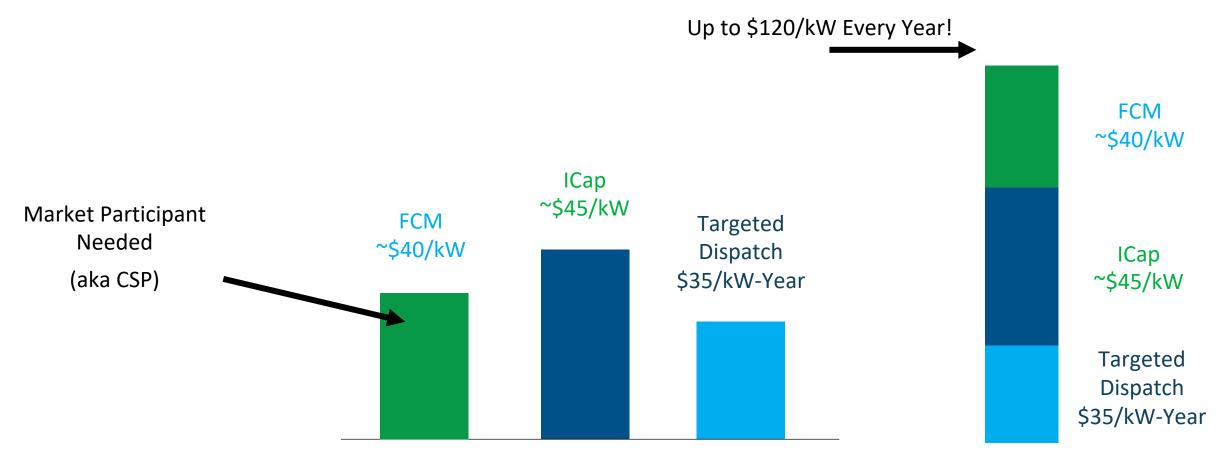


#### 2023 Summer Demand C&I – CT Results

СТ	Total Sites Enrolled	Total Customers
Targeted Curtailment	319	133
Targeted Thermal Storage	1	1
Daily Curtailment	22	9
Daily Battery Storage	6	3
Total	348	146
СТ	Total KW Curtailed	Incentives Paid
Targeted Curtailment	59975	\$ 2,099,116.60
Targeted Thermal Storage	1000	\$ 75000.00
Daily Curtailment	3422	\$ 684,368.00
Daily Battery Storage	670	\$ 134,220.00
Total	65067	\$ 2,917,704.60

## **EVERSURCE**

## **Revenue Stacking Potential**



Talk to your CSP about other opportunities

## **EVERSURCE**

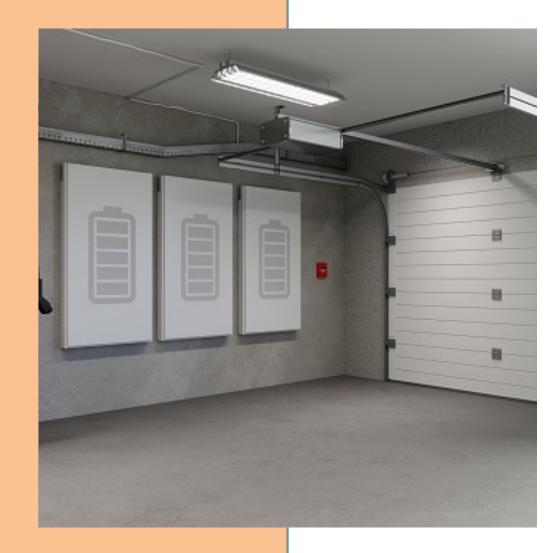
## **Energy Storage Solutions**

#### **Overview**

- 9-year program with a deployment goal of 580 MW
- **40% of projects are** in Low Income and Underserved Communities

#### **Requirements**

- Contractors and Third-Party Owners pre-approval
- Apply with Connecticut Green Bank and EDC
- Install approved technology (both Battery and Inverter) only



## **Upfront Incentive Structure**

Effective Upfront Incentive (\$/kWh)

Medium Commercial

200 kW - 500 kW

- Must enroll in Passive Dispatch\*
- Upfront incentive adders are available for "Priority Customers"
  - Small Businesses, Critical Facilities, Fossil fuel generator replacements, Grid Edge
- Inflation Reduction Act Solar Tax Credits\*\* ٠
  - 30% of qualified cost •

Peak Demand

Additional 10%-20% adder if project is in a designated low-income (distressed municipality) area

Small Commercial

<200 kW

#### Effective Upfront Incentive (2024-2025)\*

Tranche 2 Incentives (100 MW) \$200 \$175 Priority Customer Adder (if +25% +25% applicable)

\*Passive Dispatch: June thru August, 5-hour duration, 3pm-8pm, all non-holiday weekdays, 20% reserve

\*\*Disclaimer: This summary does not represent tax advice. Outside tax counsel may be required to consider tax credit project structure, and rules and guidance from the Federal government and the Massachusetts government are pending.

Remaining

MW Capacity Limit: 100.0 (+61.12%)

C&I MW Approved and Capacity

Large Commercial

>500 kW

\$100

+25%

## **Performance Incentive Structure**

- Active dispatch events are optional
- Battery owners can enroll in active only
- EDCs provide a 24-hour notice of event
- Incentive payments will be paid 2x per year

Residential / Commercial and Industrial End-Use Annual Performance Based Incentives (2024-2025)\*

	Years 1-5		Years 6-10		
	Summer Winter		Summer	Winter	
Maximum Season Incentive (\$/kW)*	\$200	\$25	\$115	\$15	
Maximum Annual Incentive (\$/kW)*	\$225 \$130			30	
*Based on average amount of kW exported to grid across number of called events within period					

## **EVERSURCE**

# Connecticut Electric Vehicle Charging Program

Jake Buckman

Program Manager

## **Benefits to You & Your Customers**

- Meet Sustainability Goals
- Provide Valuable Amenities
- Attract Employees and Visitors
- Increase Dwell Times

## **Eligible Customer Segments**



- Towns & Cities
- Multi-Unit/Multifamily Dwellings



- Retail Business
- Workplaces

## Commercial EV Charging Incentive Levels

Level 2: *Baseline:* \$20,000 *Underserved:* \$40,000

DCFC: Baseline: \$150,000 Underserved: \$250,000

Location	EV Charger Type	Per Site Maximum Rebate Amounts	Property Type	Port Installation Requirements
Baseline	Level 2	Up to \$20,000	Multifamily	2
			Public Ful Su	lly bscribed 2
			Workplace	4
	DCFC	Up to \$150,000	Any	2
Underserved	Level 2	Up to \$40,000	Multifamily	2
			Public Su	lly bscribed 2
			Workplace	4
	DCFC	Up to \$250,000	Any	2

## Eligibility





#### **Eligible Costs**

Rebate Capped At:

- Make-ready installation: up to 100%
- Futureproofing: up to 100%
- Chargers: up to 50%

## EV Charger Qualified Product List (QPL)

Charger & Network Provider
 must be on list

### What's Covered?

	Covered by in	Paid for by the customer	
	Infrastructure	Electric vehicle supply equipment (EVSE) hardware	Other soft costs
Examples	<ul> <li>Conduit &amp; trenching</li> <li>Oversized panels</li> <li>Futureproofing</li> <li>Cost paid to Eversource for new or upgraded electric service</li> <li>Pads</li> <li>Permitting, site design and engineering</li> </ul>	<ul> <li>Level 2 charging stations</li> <li>DCFC charging stations</li> </ul>	<ul> <li>Signs</li> <li>Bollard</li> <li>Network fees</li> <li>Maintenance fees</li> <li>Charger warranty</li> </ul>
Paid for by	Eversource reimburse up to 100%	Eversource reimburse up to 50%	Customer
	Customer responsible for any remainder above cap.	Customer responsible for the remainder	Customer

## **Project Examples**

Project Description	Measures	Proposed Total Cost	L2/DCFC Charger Cost	Make Ready Installation Cost	Proposed Rebate	Net Cost
Retail (Underserved)	2 Ports Level 2 charging station	\$34,324	\$6,618	\$27,706	\$31,015	\$3,309
Fleet (Underserved)	10 Ports level 2 charging stations	\$70,008	\$33,619	\$36,389	\$40,000	\$30,008
MUD (Baseline)	4 Ports Level 2 charging station	\$18,081	\$12,037	\$6,044	\$12,065	\$6,016
DCFC located at Dealership (Baseline)	2 Ports DCFC station	\$188,937	\$81,600	\$107,337	\$148,137	\$40,600



# Questions

## Thank You



#### For more program information:

#### **Demand Response:**

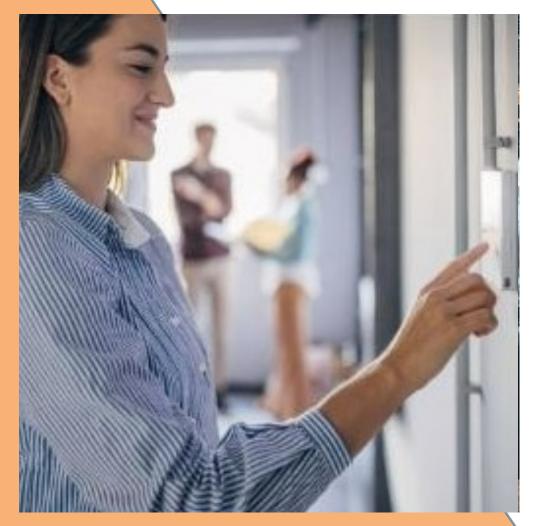
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#### For more program information:

#### **Energy Storage:**

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#### **CT EV Charging Program:**

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