



# Energy Storage Solutions

## Contractor Webinar

December 16, 2021



# Agenda



- Program Overview
- Residential Market
- Commercial & Industrial Market
- Program Rollout
- Questions





**PUBLIC UTILITIES REGULATORY AUTHORITY**

**EVERSOURCE**



# Energy Storage Solutions Overview



# Energy Storage Solutions Benefits

1. **Cost-Effectiveness** – ensure there is net benefit to electric customers
2. **Resilience** – maximize the deployment of battery storage to improve the overall resilience of the participants and the grid
3. **Serve Vulnerable Communities** – deploy no less than 40 percent of residential installations in vulnerable communities
4. **Economic Development** - foster the sustained orderly development of a local battery storage industry

This program is overseen by the Public Utilities Regulatory Authority (PURA), is paid for by ratepayers, and is administered by the Green Bank, Eversource, and UI

# Energy Storage Solutions Overview

- 9-year declining incentives – Goal of 580 MW behind-the-meter storage for residential and non-residential end-use customers
- Statewide goal of 1000 MW, including front-of-the-meter

CUSTOMER CLASS	2022-2024	2025-2027	2028-2030	TOTAL
Residential	50 MW	100 MW	140 MW	290 MW
Commercial and Industrial	50 MW	100 MW	140 MW	290 MW
<b>Total</b>	<b>100 MW</b>	<b>200 MW</b>	<b>280 MW</b>	<b>580 MW</b>

# Proposed Program Design

- Customer Classes:
  - Residential customer classes: Standard, Underserved, and Low-Income Households
  - Commercial/industrial customer classes: Small, Medium, Large
- Systems installed through this program will receive two incentives:

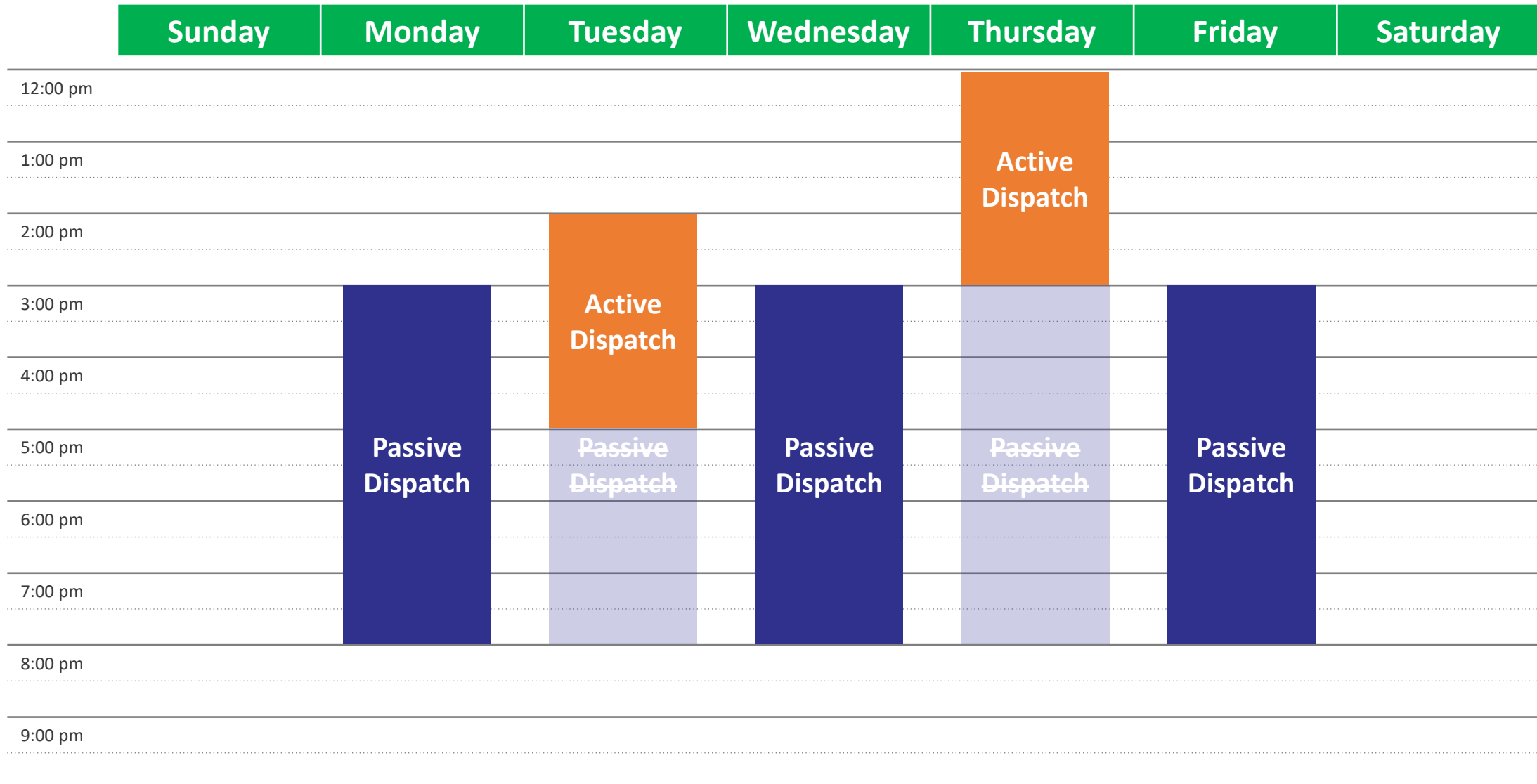
Program Element	Design Item	Summer	Winter
Upfront Incentive (Passive Dispatch)	Events per Season	All non-holiday weekdays (~60)	N/A
	Months	June, July & August	N/A
	Event Duration	5 Hours	N/A
	Anticipated Dispatch Window	3 PM to 8 PM	N/A
Performance-Based Incentive (Active Dispatch)	Events per Season	30 to 60	1 to 5
	Months	June through September	November through March
	Event Duration	1 - 3 hours	1 - 3 hours
	Anticipated Dispatch Window	Noon to 9 PM (All Days)	Noon to 9 PM (All Days)

# Passive Dispatch

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
12:00 pm							
1:00 pm							
2:00 pm							
3:00 pm		Passive Dispatch	Passive Dispatch	Passive Dispatch	Passive Dispatch	Passive Dispatch	
4:00 pm							
5:00 pm							
6:00 pm							
7:00 pm							
8:00 pm							
9:00 pm							



# Passive and Active Dispatch



Residential



# Residential Target Markets

## Customer Classes:

- Standard Rate
- Underserved Communities
- Low-Income Households

## Priority Customers:

- Grid edge
- Vulnerable communities

HES and HES-IE requirement

## Equipment Configurations:

- Paired with PV – existing and new
- Standalone – increasing energy efficiency of existing devices and loads



# Residential Upfront Incentive Levels

## Upfront Incentive Levels (Installed 2022-2024)

Capacity Block (MW) <i>Participation Level</i>	Standard <i>60%</i>	Underserved <i>30%</i>	Low-Income <i>10%</i>	Weighted Average
10	\$200/kWh	\$300/kWh	\$400/kWh	\$196.55/kWh
15	\$170/kWh	\$255/kWh	\$340/kWh	
25	\$130/kWh	\$195/kWh	\$260/kWh	

## Performance Incentive Levels (Installed 2022-2024)

Summer, Years 1-5	Winter, Years 1-5	Summer, Years 6-10	Winter, Years 6-10
\$200/kW	\$25/kW	\$115/kW	\$15/kW

# Illustrative Residential Incentive Values

## Effective Upfront Incentive Levels (installed 2022-2024) – 5kW/13.5 kWh BESS

Capacity Block (MW)	Standard	Underserved	Low-Income
10	\$2,700	\$4,050	\$5,400
15	\$2,295	\$3,443	\$4,590
25	\$1,755	\$2,633	\$3,510

## Maximum Value of Performance Incentive Levels

Nominal Value	Present Value*
\$8,875	\$7,720

*Note: Total incentive values do not include federal ITC, which can be applied to solar PV + storage projects.*

*\*Discount rate assumed is 10% for participants.*

Commercial & Industrial



# Commercial & Industrial Target Markets

## Customer Classes:

- Small C&I:  
Peak demand < 200 kW
- Medium C&I:  
 $200 \text{ kW} \leq \text{peak demand} < 500 \text{ kW}$
- Large C&I:  
Peak demand  $\geq 500 \text{ kW}$

## Priority Customers:

- Small C&I
- Critical Facilities
- Grid edge
- C&I customers replacing fossil fuel generators

## Equipment Configurations:

- Paired with PV – existing and new
- Standalone – increasing energy efficiency of existing devices and loads



# Commercial Incentive Levels

## Upfront Incentive Levels (installed 2022-2024)

Capacity Block (MW)	Small Commercial	Medium Commercial	Large Commercial
50	\$200/kWh	\$175/kWh	\$100/kWh

## Performance Incentive Levels (installed 2022-2024)

Summer, Years 1-5	Winter, Years 1-5	Summer, Years 6-10	Winter, Years 6-10
\$200/kW	\$25/kW	\$115/kW	\$15/kW



# Illustrative Commercial Incentive Values

## Effective Upfront Incentive Levels (installed 2022-2024)

	Small Commercial	Medium Commercial	Large Commercial
<i>Modeled BESS Size (kW/kWh)</i>	<i>10/27</i>	<i>250/675</i>	<i>1,000/2,700</i>
Effective Incentive	\$5,400	\$118,125	\$270,000

## Maximum Value of Performance Incentives

	Small Commercial	Medium Commercial	Large Commercial
Nominal Value	\$17,750	\$443,750	\$1,775,000
Present Value*	\$11,589	\$289,730	\$1,158,918

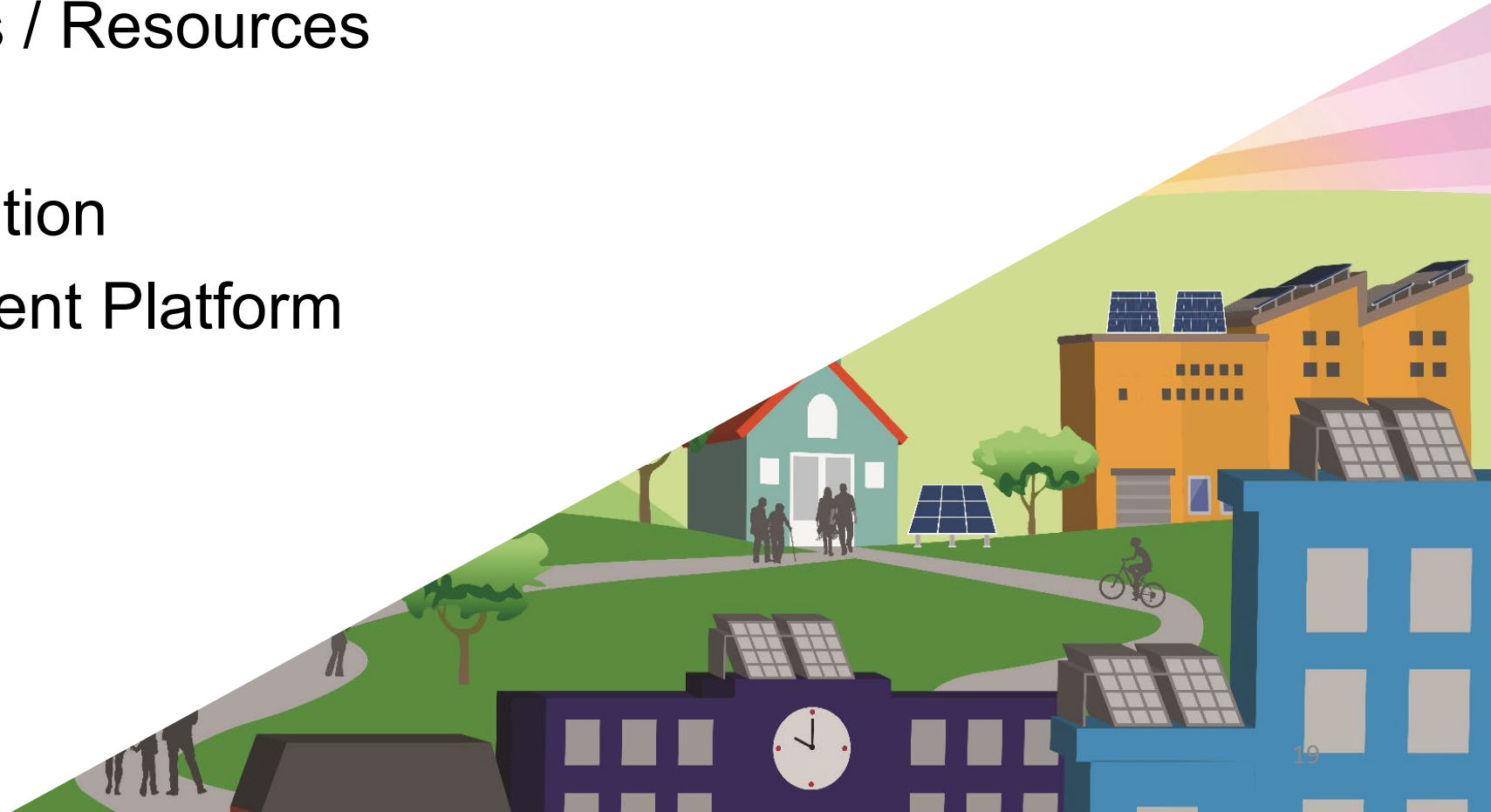
*\*Discount rate assumed is 10% for participants.*

# Energy Storage Solutions Rollout



# Coming Soon

- Program is expected to launch [January 2022](#)
- Program Websites / Resources
- Program Manual
- Contractor Application
- Customer Enrollment Platform



# How to Participate

## **As a Contractor / TPO**

- Stay tuned for Application availability
- Prepare docs for Application
  - Licensing – E1, HIC (if applicable)
  - Bank reference
  - Subcontracting agreements
  - Manufacturer certifications
  - References (for new contractors)
  - Sales agreement templates
- Do not energize prior to incentive approval
  - Existing systems can apply for Performance Incentive, but not Upfront

# Contractor Application Demo



# Customer Enrollment Demo



Questions?



Appendix





# Energy Storage Solutions Resources

- [www.ctgreenbank.com/energy-storage-solutions/](http://www.ctgreenbank.com/energy-storage-solutions/)
- [www.uinet.com/EnergyStorageSolutions](http://www.uinet.com/EnergyStorageSolutions)
- [www.eversource.com/](http://www.eversource.com/)
- [www.energizeCT.com](http://www.energizeCT.com)

Interested home & business owners should complete the Energy Storage Solutions interest forms to stay in the loop

Homeowners interested in learning more should complete the form below.

**Name (Required)**

**First Last**

**Address (Required)**

**Street Address**

**Address Line 2**

**City State**

**ZIP Code**

# Customer Classes

Customer Class	Passive Dispatch	Active Dispatch
<b>Residential</b>	<ul style="list-style-type: none"> <li>Will receive upfront incentives</li> <li>Must participate in all passive dispatch events</li> </ul>	<ul style="list-style-type: none"> <li>Will receive performance incentives</li> <li>Must participate in all active dispatch events</li> </ul>
<b>Commercial – Fully Enrolled</b>	<ul style="list-style-type: none"> <li>Will receive upfront incentives</li> <li>Must participate in all passive dispatch events</li> </ul>	<ul style="list-style-type: none"> <li>Will receive performance incentives</li> <li>Must participate in all active dispatch events</li> </ul>
<b>Commercial – Active Dispatch Only</b>	<ul style="list-style-type: none"> <li>Will not receive upfront incentives</li> <li>Will not participate in passive dispatch events</li> </ul>	<ul style="list-style-type: none"> <li>Will receive performance incentives</li> <li>May participate in active dispatch events</li> </ul>
<b>Priority Customers – Residential &amp; Commercial</b>	<ul style="list-style-type: none"> <li>Will receive upfront incentives</li> <li>Will participate in all passive dispatch events unless participating in ISO-NE market dispatches</li> </ul>	<ul style="list-style-type: none"> <li>Will receive performance incentives</li> <li>Will participate in all active dispatch events unless participating in ISO-NE market dispatches</li> </ul>
<b>Transfer Customers – Residential &amp; Commercial</b>	<ul style="list-style-type: none"> <li>Will not receive upfront incentives</li> <li>Will not participate in passive dispatch events</li> </ul>	<ul style="list-style-type: none"> <li>Will receive performance incentives</li> <li>Must participate in all active dispatch events</li> </ul>

<sup>[1]</sup> Customers eligible to participate in ISO-NE Markets as defined in Section 8

<sup>[2]</sup> Customers with BESS installed prior to January 1, 2022. Transfer Customer BESS must meet all Program requirements to be eligible.