Connecticut Progress Report

Sabrina Xie

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CT Department of Energy & Environmental Protection

December 5, 2023 ISO-NE Distributed Generation Forecasting Working Group ONNECTIC

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Presentation outline

PART 1	AT-CAPACITY PROGRAMS
PART 2	CURRENT PROGRAMS
	Residential Renewable Energy Solutions
	Non-residential Renewable Energy Solutions
	Shared Clean Energy Facility
	Energy Storage Solutions
PART 3	FORWARD-LOOKING POLICIES
	Upcoming Grid-scale Procurements
	Solar for All

Overview of at-capacity programs



Overview of current programs

P.A. 22-5: Connecticut is required by statute to have decarbonized electric supply by 2040



Residential Renewable Energy Solutions



As of November 2023



165 MW installed



- Program reviewed in Docket No. XX-08-02
- Netting or buy-all tariffs

Year 3 program tariff rates	Buy-all rate	Netting REC rate
Eversource	\$0.3189/kWh	\$0.000/kWh
United Illuminating	\$0.3189/kWh	\$0.000/kWh
Low-income customer adder	\$0.055/kWh	\$0.035/kWh
Distressed municipality adder	\$0.0275/kWh	\$0.0175/kWh

Non-residential Renewable Energy Solutions

- Program reviewed annually in Docket No. XX-08-03
- Year 2 solicitations were held in February (60%) and August (40% and rollover) of 2023
 - August 2023 solicitation bids were due October 16, 2023
 - Selections have not been finalized yet
- Considering a statewide joint solicitation in future years
- 65.97 MW with anticipated in-service dates in 2024
- 49 MW with anticipated in-service dates in 2023

Year 3 size category allocations	MW/year	Buy-all price caps	Year 2 (\$/MWh)	Year 3 (\$/MWh)
Small Zero Emission (≤200 kW)	30 MW	Small Zero Emission	\$200.97	\$199.82
Medium Zero Emission (200-1,000 kW)	33 MW	Medium Zero Emission	\$190	\$188.90
Large Zero Emission (1,000 kW-5,000 kW)	37 MW	Large Zero Emission	\$159	\$145.97
Low Emission (≤5,000 kW)	10 MW	Low Emission	\$159	\$159

As of September 2023







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Shared Clean Energy Facility

- Program reviewed annually in Docket No. XX-08-04
- Year 5 procurement RFP will be released January 2024
 - Capacity was increased to 50 MW/year in Years 4-6
 - Project size cap increased to 5 MW for Years 4-6
- Considering a statewide joint solicitation in future years

Year 4 procurement results		
Winning bidders were notified in April 2023		
Bids received	125 bids	
Selected bids	45 MW	
Earliest in-service date	12/2/2024	

Year 5 numbers are subject to approval by PURA in forthcoming final decision on December 6, 2023

Year 5 bid preferences		
Landfills and brownfields	20%	
Solar canopies	30%	
Year 5 price caps		
All technologies	\$133/MWh	
The cap applies after the bid preference is applied for 100% solar canopy projects, so they may bid up to \$190/MWh.		

As of August 2023





Energy Storage Solutions



As of November 2023



- Program reviewed annually in Docket No. XX-08-05
- Upfront incentive for installation and performance incentive for dispatching storage
- PA 21-53 established statewide goal to deploy 1,000 MW of energy storage by the end of 2030.

Deployment targets	2022- 2024	2025- 2027	2028- 2030	Total
Residential	50 MW	100 MW	140 MW	290 MW
Commercial & industrial	50 MW	100 MW	140 MW	290 MW
Total	100 MW	200 MW	280 MW	580 MW

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DEEP Upcoming Grid-scale Procurements



3.975 TWh of zero-carbon energy

Nameplate capacity must be equal to or greater than 5 MW. Eligible technologies include solar, storage, onshore & offshore wind, hydropower, and zero-carbon fuel cells.

RFP schedules	Offshore wind	Zero-carbon energy
DEEP releases final RFP	October 27, 2023	October 27, 2023
Bidder's Conference	November 16, 2023	November 14, 2023
Bids due	January 31, 2024	January 31, 2024
DEEP announces solicitation decision	Q2, 2024	Q2 2024
EDCs execute PPAs	Q3 2024	Q3 2024
Submit contracts for PURA approval	Q3, 2024	Q3 2024



DEEP will release a draft RFP for public comment later this year to procure energy storage to fulfill the statewide energy storage goal of 1,000 MW and meet the following policy objectives:

- 1. Displacing fossil fuel generation, particularly in Environmental Justice communities, while maintaining reliability
- 2. Interconnecting new large electrical loads such as electric fleet vehicle charging facilities
- 3. Supporting the integration of new intermittent renewable generation in areas of the grid that have known capacity constraints

EPA Solar for All Competition

- Connecticut Consortium has requested \$100 million of funding from EPA through Solar for All to stand up Project SunBridge
- The project has a priority focus on affordable housing rental units, by overcoming barriers to low-income and disadvantaged community access to solar, storage, and enabling upgrades
- Financial assistance and technical assistance from Solar for All will supplement the existing incentive programs in Connecticut

If funded, Project SunBridge is projected to achieve the following outcomes:

- \$124,906,040 household savings
- 37 MW of projected solar
- 53 MWh of projected storage

Project SunBridge

Connecting Communities to a Solar Future

The EPA's Solar for All is an opportunity to mitigate the energy burden experienced by low-income and disadvantaged communities. Through Project SunBridge, Connecticut will create a sustainable funding mechanism to enable the widespread adoption of solar energy, associated storage solutions, and essential infrastructure upgrades. Building upon the foundation of previous successful solar and storage initiatives, we will broaden access to clean energy technologies, contributing to a more equitable and sustainable energy future.

Solar for Single-Family & Multifamily Homes Through Financial Assistance







Connecticut Department of Energy & Environmental Protection

Contact

Sabrina Xie (sabrina.xie@ct.gov) CT Department of Energy & Environmental Protection Bureau of Energy & Technology Policy 10 Franklin Square New Britain, CT 06051

Appendix: Data referenced

Low- & Zero-Emission Renewable Energy Credits	Not filed publicly
Residential Solar Investment Program	CT Green Bank Residential Solar Investment Program webpage
ConnectedSolutions	Not filed publicly
Residential Renewable Energy Solutions	Docket No. 23-08-02 Order No. 6 Joint Compliance Filings Docket No. 23-08-02 Final Decision (.pdf) Docket No. 22-08-02 Eversource Order No. 12 Compliance Filing (.xlsx) Docket No. 22-08-02 UI Order No. 12 Compliance Filing (.xlsx)
Non-residential Renewable Energy Solutions	United Illuminating <u>Program Data</u> (.xlsx) Eversource <u>NRES Program Summary Data (</u> .xlsx) Docket No. 23-08-03 <u>Final Decision</u> (.pdf)
Shared Clean Energy Facilities	United Illuminating <u>Annual SCEF Summary Data (</u> .xlsx) Eversource <u>Annual SCEF Summary Data (</u> .xlsx)
Energy Storage Solutions	CT Green Bank Energy Storage Solutions Performance Report Docket No. 23-08-05 <u>Annual Evaluation Report</u> (.pdf)
DEEP Competitive Grid-scale Procurements	Requests for Proposals for Offshore Wind Facilities and Zero Carbon Energy