



NYSERDA

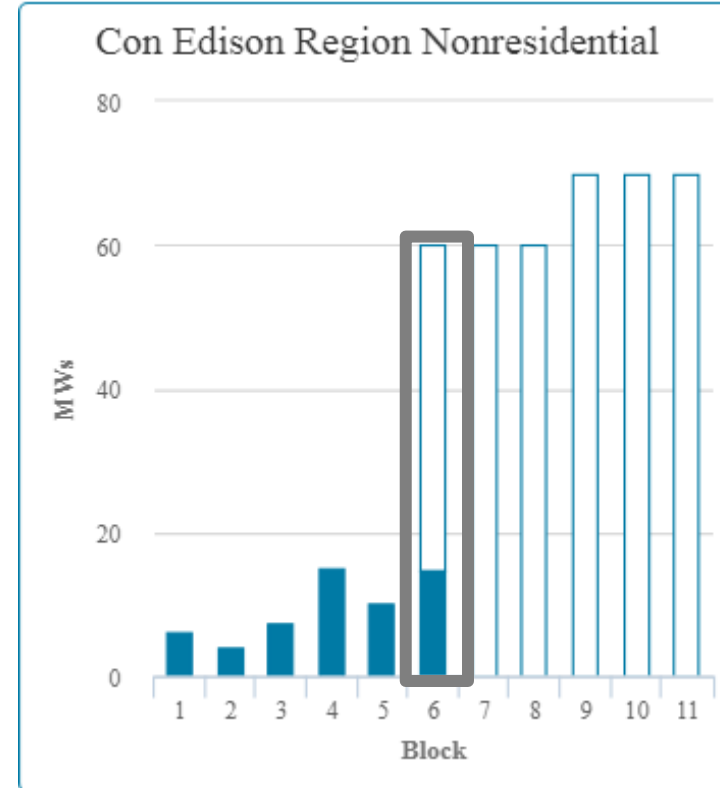
2019 NYC Solar Installer Workshop: Solar and Storage

March 18, 2019

ConEdison Activity Since MW Block Redesign

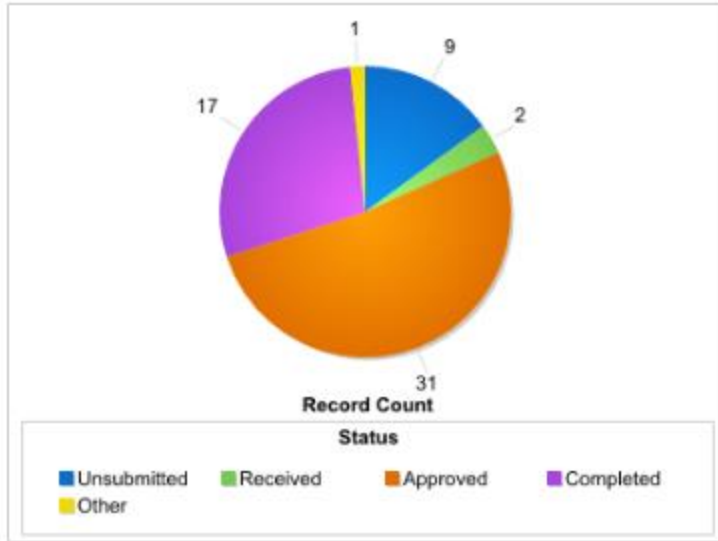
Commercial MW Block Activity

- 15 MW submitted since redesign - 6/17/2018
- 10 rooftop canopy projects totaling 136kW
- 32 affordable solar projects totaling 958kW



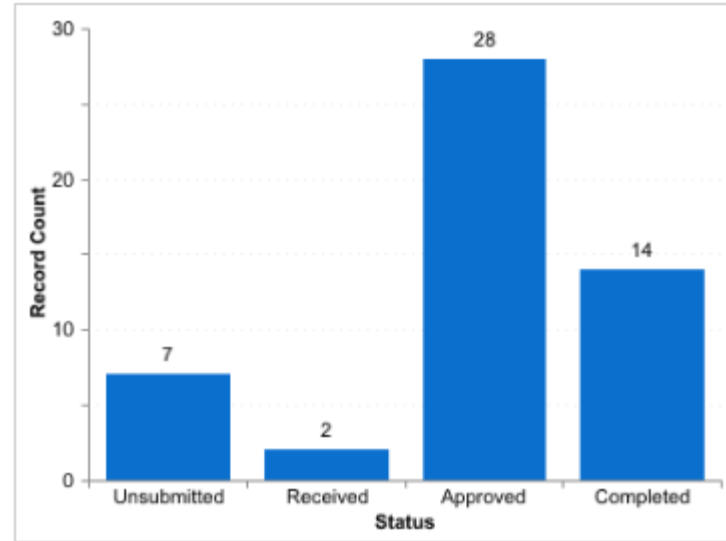
Community Solar in ConEdison

ConEdison territory-wide



Total completed 4.2MW
Total pipeline 15MW

NYC only



Total completed 1.7MW
Total pipeline 7.5MW

Value Stack Status

Value Stack White Paper update

Relevant dates (Case 15-E-0751)

July 26, 2018

- Draft Whitepaper Regarding VDER Compensation for Avoided Distribution Costs (Draft DVR Whitepaper) issued
- Whitepaper on Future Community Distributed Generation Compensation (CDG Whitepaper) issued

December 12-14, 2018

- *Whitepaper Regarding Future Value Stack Compensation Including for Avoided Distribution Costs issues, and DPS Staff VDER Capacity Value Compensation Whitepaper*

February 25, 2019

- Comment deadline for December Whitepapers

Value Stack White Paper update

*Expanded Eligibility for Phase One NEM**

Currently, Phase One NEM compensation is available only to Mass Market customers from now until 1/1/2020. DPS proposes to NEM make available to "smaller demand-metered non-residential customers". Specifically, it would be available for projects that (a) have a rated capacity of **750 kW AC** or lower; (b) are at the same location and behind the same meter as the electric customer whose usage they are designed to off-set; and (c) have an estimated annual output less than or equal to that customer's historic annual usage in kWh.

**Not for CDG or RNM projects*

Value Stack White Paper Update

DRV – more predictable

- Currently DRV payments are based on a resource's grid injections during the utility's peak 10 hours unknown till the following year.
- DPS proposed moving from 10 peak hours to 240-245 hours (summer weekday afternoons from 1-6PM, from mid-June to August). As an alternative to the 240-hour DRV offering, DERs may instead participate in their respective utility's Commercial System Relief Program (CSRP).

CDG - ConEd

- The remainder of Tranche 1 would be deemed Tranche 1.1, and would receive a higher MTC
- Subsequent tranches would be converted to the Community Credit + DRV model. Details will be determined if and when Tranche 1.1 fills.

Value Stack White Paper update

Capacity

Current rules: VDER projects receive compensation for the role in reducing their utility's NYISO capacity purchases. Projects with trackers or storage would likely choose Option 2:

- Alternative 2 pays a higher per-kWh rate for energy injected to the grid during a peak window (460 hours: 2-7PM, summer months). This option is attractive to projects using energy storage or solar trackers.
- White paper proposes changing Alternative 2 from 460 summer hours to 240 summer hours: 1-6PM, late June-August, no weekends or holidays.

NYSERDA Storage Incentives

NYSERDA Market Acceleration Incentives

\$400 million in total funding through 2025

- \$350M for IOU service territories, initial allocations:
 - \$130M retail incentives
 - \$150M bulk incentives
 - \$70M unallocated
 - Flexibility to adopt to market conditions and project economics
- \$53M in RGGI funds to enable deployment on Long Island
- Chemical, thermal and mechanical systems are eligible

*Reflects current expectations of program design and requirements.
Subject to change in the Implementation Plan submitted to DPS.*



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“Retail Storage Incentives”

Declining kWh incentive for customer-sited and value stack projects less than 5 MW



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Retail Incentive Design

- Standalone storage or paired with on-site generation
- Available to SBC ratepayers and LIPA customers
- Projects up to 5 MW, incentives up to 6 hours of duration
- Project maturity: (1) confirmed customer or site, (2) paid 25% of CESIR, (3) approved Special Use Permit and draft EIS if applicable
- Must participate in a utility load modification program or tariff
- Single incentive payment after system enters commercial operation and NYSERDA QA review is passed



Retail Commercial Incentive Initial Blocks

| | Rest of State IOUs | | | New York City | | |
|----------------|--------------------|---------------|-----------|---------------|------------------------|-----------|
| | Incentive | MWh/MW | \$ Budget | Incentive | MW/MWh | \$ Budget |
| Block 1 | \$350/kWh | 100 MWh/25 MW | \$35M | \$350/kWh | Included in ROS budget | |
| Block 2 | \$250/kWh | 125 MWh/30 MW | \$31.2M | \$300/kWh | 60 MWh/15 MW | \$18M |
| Block 3 | \$200/kWh | 150 MWh/40 MW | \$30M | \$240/kWh | 65 MWh/16 MW | \$15.6M |

| | Long Island | | |
|----------------|-------------|--------------|-----------|
| | Incentive | MWh/MW | \$ Budget |
| Block 1 | \$250/kWh | 40 MWh/10 MW | \$10M |
| Block 2 | \$200/kWh | 50 MWh/13 MW | \$10M |



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Residential PV + Storage

Long Island 2019 Q2 Launch

- Partnership between NYSERDA and PSEG LI- Great example of REV in action
- Demand Load Management tariff – Day ahead grid response
- Aggregation opportunities
- Customer acquisition (if I had a nickel...), Tangibility, Resilient assurance, gateway to smart home approach
- BOS cost reductions / customer education
- Retrofitting past projects

Rest of State to follow

- Rate design effective 2020 opens a new door to rooftop PV as smart home solution



Commercial Off-site PV + Storage

- Potential for CDG or RNM projects
- Value stack economics encourage storage and trackers
 - Capacity option 2 & 3
 - Option 2: currently 460 hours / whitepaper suggests 240 hours
 - Better monetize DRV: currently backward looking 10 hours / whitepaper suggests aligning with capacity 240 hours
 - LBMP arbitrage potential (non-summer months)
- Value Stack provides stronger price signals for down state projects
- 860MW pipeline of community solar projects
- Must overcome siting barriers to see market advancement

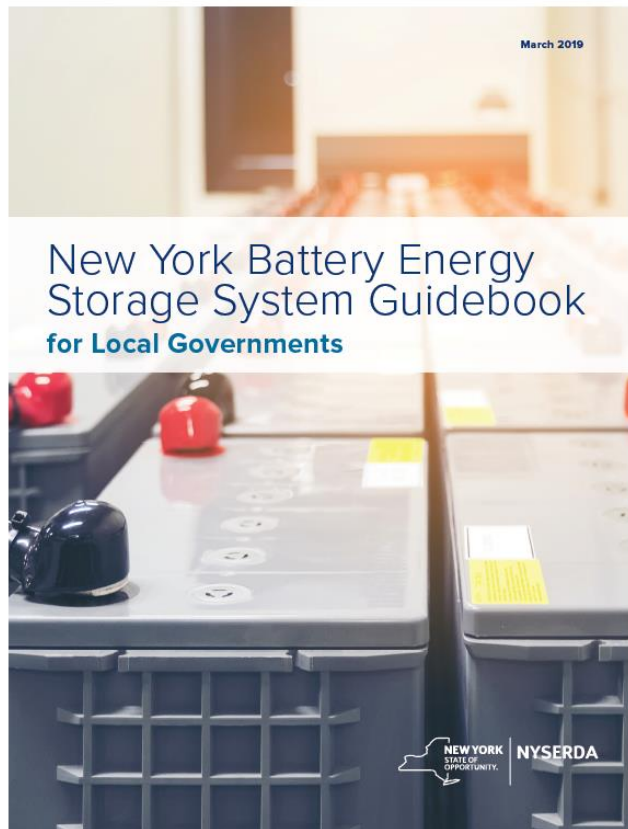
NY Battery Energy Storage Guidebook for Local Government



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NY Battery Energy Storage Guidebook for Local Government



Chapter 1 – Model Battery Energy Storage Local Law

Chapter 2 – Battery Energy Storage Model Permit

Chapter 3 – Battery Energy Storage Inspection Checklist

Technical Assistance for Local Governments

NYSERDA offers local governments free one-on-one assistance on:

1. Adopting a Payment-In-Lieu-Of-Taxes (PILOT) law and agreement
2. Completing the SEQR process
3. Planning and Zoning for Solar, Wind, Storage
 - Adopting a Model Solar Energy Law, Model Battery Energy Storage Law, Model Wind Energy Law
 - Siting PV in Agricultural Districts and agricultural areas
 - Updating master plans and zoning regulations
4. Municipal Solar Procurement
5. Permitting and Inspections
 - Adopting and implementing the Unified Solar Permit
 - Adopting and implementing the Battery Energy Storage Model Permit and Inspection Checklist
 - Technical consulting to relieve administrative burdens

Clean Energy Siting Homepage

The Battery Energy Storage Guidebook is available for download here

Clean Energy Siting for Local Governments

[Battery Energy Storage System Guidebook](#)

[Solar Guidebook](#)

[Wind Energy Guide](#)

[Article 10](#)

[Technical Assistance and Workshops](#)

[Clean Energy Siting Email List](#)

Clean Energy Siting for Local Governments

NYSERDA offers several resources to help local governments understand how to manage responsible clean energy development in their communities. These resources include step-by-step instructions and tools to guide the implementation of clean energy, including permitting processes, property taxes, siting, zoning, and more. If you have a question on clean energy siting in your community, or need help with a chapter of the Guidebook, email cleanenergyhelp@nyserda.ny.gov and we'll respond to you within 24 hours. For more hands-on support, learn more about our free [training and technical assistance opportunities](#).

Stay up-to-date with the latest about Clean Energy Siting. [Join our email list](#) for local government officials.

Ask the team any question by sending an email to cleanenergyhelp@nyserda.ny.gov

Municipalities can request technical assistance here



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**But Wait There's
More...**

NY-Sun is Expanding