PSEG LONG ISLAND

Solar Plus Energy Storage

NY-SUN INCENTIVE ADDER &

DLM PROGRAM



Roadmap to 1.5GW by 2025

The **New York Energy Storage Roadmap** recommendations will jumpstart the market toward the Governor's storage target of 1,500 megawatts by 2025.

- Recommends market acceleration incentives: \$55 million in PSEG
 Long Island
- Regulatory changes to utility rates, VDER, non-wire alternative solicitations, and differentiating carbon intensity value (E) to reflect the system benefits and values of storage
- Address soft costs
- Recommends modifications to wholesale market rules
- Goal of 3,000MW by 2030



The Power of Synergy: Solar Plus Energy Storage

Pairing Solar with energy storage holds significant benefits:

- Leverage the NY-Sun momentum
- For the 1st time in New York, storage is compensated through the value stack for grid benefits where it is the most valuable (commercial)
- Captures the federal Investment Tax Credit for Solar before it sunsets
- Uses the NY-Sun approach by providing local government support with zoning and permitting (stay tuned for Technical Conference for contractors and code official)
- Captures cost savings associated with combined siting/permitting and tax equity financing of paired systems



NY-Sun Solar Plus Energy Storage Incentive Program Rules



Storage Incentive now available through the NY-Sun Incentive Program

- Residential and commercial projects, regardless of customer sector, may qualify for the NY-Sun Energy Storage incentive adder
- Eligible energy storage projects will receive \$250 per kWh of installed energy storage capacity (AC)
 - Low-to-moderate income residential customers can receive an additional \$150/kWh
- All projects seeking energy storage incentives must be submitted by a NYSERDA-approved contractor
- Project must follow all NY-Sun Program rules and requirements as well as Solar Plus Energy Storage requirements, as detailed in the <u>NY-Sun Program</u> <u>Manual</u>. Non-residential storage project requirements are in the <u>Retail Energy</u> <u>Storage Program Manual</u>.



Funding is tracked through a dashboard on the NYSERDA energy storage website

Long Island - Commercial Storage Incentives

Block	Incentive	MWh	Allocated Budget	Committed Budget	Available Budget
1	\$250/kWh	40 MWh	\$10,000,000	\$0	\$10,000,000

Long Island - Single-Family Residential Storage Incentives

Block	Incentive	MWh	Allocated Budget	Committed Budget	Available Budget
1	\$250/kWh	10 MWh	\$2,500,000	\$0	\$2,500,000
2	\$200/kWh	12 MWh	\$2,400,000	\$0	\$2,400,000



Solar Plus Energy Storage Eligibility

Projects Eligible

- New Residential, Commercial & Industrial NY-Sun projects
- Community Generation and Remote solar under VDER
- Existing NY-Sun project applications in Approved status (submit a change order)
- Non-residential storage projects not paired with PV (standalone storage)

Projects Not Eligible

- Already-interconnected PV projects
- Residential storage not paired with PV

Contractor Eligibility

- Residential projects: Contractors and builders must be registered with the NY-Sun program: if already registered, no further action needed.
- Non-residential projects: <u>must register through the NYSERDA Energy Storage Program</u>.



Solar Plus Energy Storage Equipment Requirements

Equipment Must:

- Be permanently installed
- Be new and commercially available
- Be certified to UL 1973 and 9540 by the time of installation
- Meet all AHJ requirements
- Be warrantied for at least 10 years
- Maintain a minimum 70% round-trip efficiency during the system life



Solar Plus Energy Storage System Sizing

- The maximum eligible capacity of an energy storage system:
 - Residential 25kWh
 - Commercial 15MWh
- To avoid inappropriate over-sizing of energy storage capacity, the capacity (kWh AC) eligible for incentive is limited to four times the rating (kW AC) of the associated inverter (i.e. a 4-hour battery)
 - Example: If an inverter of 5 kW is needed for the function of the storage, incentives will be limited to 20 kWh (AC) of storage Capacity
- Projects requiring a storage capacity greater than four times the inverter capacity may submit justification that the larger storage capacity is appropriate and the incentive on the additional capacity may be granted at NYSERDA's discretion



Dynamic Load Management

PSEG-LI launched a new battery energy storage demand response program for residential and commercial customers in order to allow customers with behind-the-meter battery energy storage systems to participate in the Commercial System Relief Program and Distribution Load Relief Program.

Under the Program, third party Aggregators will recruit PSEG-LI customers with behind-themeter energy storage systems, enroll these customers in the program, and interface with the customer/energy storage system during demand response curtailment events.

EnergyHub will provide the electronic platform allowing PSEG-LI to manage the Program.

Dynamic Load Management

The primary objective of a Dynamic Load Management program is to reduce peak demand and to compensate participants for reducing electricity drawn from the grid on hot summer days.

The energy storage system charges when excess electricity is available and can reduce the amount of electricity pulled from the grid during high demand hours by discharging the storage system.

During the five month Capability Period, May 1st through September 30th, participants may be asked to export energy from their storage systems which will either be consumed in their home or business or exported to the grid when the daily forecasted system-wide electric load is expected to reach 94% of the forecasted summer peak.



Dynamic Load Management

New qualifying battery storage projects will be eligible to receive reservation payments available under the CSRP and DLRP tariffs in effect at the time of their interconnection for a period of ten years, to promote market stability and provide additional price certainty to reduce the upfront investment needed for the installation of battery storage projects.

Net metering and VDER customers will also be allowed to participate in the CSRP and DLRP programs.

The CSRP and DLRP will also include a new customer baseline (CBL) methodology called the "10-day weather adjusted CBL." The purpose of the new methodology is to improve the accuracy of load relief verification for customers with distributed generation and will be used to verify the load relief of participating customers who are enrolled in net metering or the Value of Distributed Energy Resources (VDER) program.



Dynamic Load Management

Aggregators will receive a Reservation Payment for each month during the Capability Period in which they are enrolled, a maximum of five payments per calendar year.

Reservation Payment rates per kW are based on the number of cumulative Planned Events for which the Direct Participant or Aggregator was asked to provide Load Relief during the Capability Period, as follows:

Participating customers will receive a reservation payment based on the amount of energy they have pledged to reduce upon request. This payment will be made whether or not you're asked to reduce energy use. Performance payments will also be made for the average kWh verified during the curtailment event.



Interconnection Procedures

LIPA's Smart Grid Small Generator Interconnection procedures ("SGIP") provide a framework for processing applications to LIPA's Distribution System for Interconnection of new or modified distributed generation facilities with a nameplate rating 10 MW or less aggregated on the customer side of the point of common coupling (PCC). PSEG Long Island has implemented and maintained a web-based system for Smart Grid SGIP application process.

The process requirements to add a distributed resource to our system are to ensure the addition has no adverse impacts on safety, reliability and power quality. It begins with the planning and application stage, continues through the installation of equipment and completes with inspections, testing and signoff. Generation neither designed to operate, nor operating, in parallel with our electrical system is not subject to these requirements.



APPENDIX J

Revised Jan 2019

<u>Appendix J – Energy Storage System (Ess) Application Requirements</u>

Energy Storage System (ESS) Application Requirements / System Operating
Characteristics / Market Participation

Application Requirements:

https://www.psegliny.com/aboutpseglongisland/ratesandtariffs/sgip/documents



Interconnection Procedures

If you have questions please email or call your PSEG Long Island Generator Interconnection Contact representative:

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