CEO Report

September 25, 2019
FOR BOARD DISCUSSION:
• Briefing on the Implementation of the Management Audit Recommendations

FOR COMMITTEE DISCUSSION:
• Annual Review of Board Policy on Enterprise Risk Management
• Annual Review of Board Policy on the Power Supply Hedging Program
• Annual Review of Board Policy on the Construction of Transmission and Distribution Projects
• Discussion of Independent Auditor’s 2019 Audit Plan
• Briefing on Execution of 2019 Plan of Finance
• Briefing on PSEG Long Island’s 2020 Energy Efficiency and Renewable Filing (2020 Budget)
AT A GLANCE

01  Clean Energy Update

02  A Sustainable Solar Industry
NEW YORK’S ELECTRIC POWER GOALS

100% X 2040
New York’s power grid will be 100% carbon neutral by 2040

70% X 2030
70 percent of electricity generated in New York to come from renewable energy by 2030

6,000 MW X 2025
Deploy 6,000 MW of distributed solar by 2025

9,000 MW X 2035
New York aims to develop 9,000 MW of offshore wind by 2035

3,000 MW X 2030
Energy storage target of 3,000 megawatts by 2030 to store clean & renewable energy
ENGAGING LONG ISLAND CUSTOMERS

NEW YORK OFFSHORE WIND UPDATE

Join us for an open house.

- 9/9 Staten Island, NYC
- 9/12 Albany, Capital Region
- 9/17 Brookhaven, LI
- 9/18 Southampton, LI
- 9/19 Long Beach, LI
- 9/23 Rockaways, NYC
- 9/25 Sunset Park, NYC

More at wind.ny.gov

• Hundreds visited NYSERDA’s Offshore Wind open houses last week
LONG ISLAND WELCOMES TWO NEW UTILITY-SCALE SOLAR FARMS

LIPA has 160 MW utility-scale solar online and 80MW under development, as well as 385MW of distributed solar

Kings Park Solar Project:
- 4MW Solar Farm
- NextEra
- Kings Parks, NY
- Re-uses former landfill
- Ribbon Cutting: June 19, 2019

Riverhead Solar Project:
- 20MW Solar Farm
- sPower (AES and AIMCo)
- Calverton, NY
- Ribbon Cutting: July 23, 2019

Long Island has the most vibrant rooftop solar market in New York with approx. 60 MWs of distributed solar added to the grid each year
LIPA ranked 6 of 211 utilities in battery storage by the Smart Electric Power Alliance in 2018

- PSEG Long Island interconnected New York’s first utility scale energy storage system, a 5 MW, 40 MWh battery in East Hampton *shown to the right*

- The project was the first of two energy storage projects on the East End that will help meet peak energy demand, integrate renewable energy, and replace temporary generators
LEADING NEW YORK IN ELECTRIC VEHICLES

✓ Residential Charging Rebate Program
✓ DC Fast Charging Incentive  New!
✓ Off Peak Charging Incentive  Coming Soon!
NEW PROGRAMS FOR ELECTRIFICATION OF HEATING

• Typical $2,000 rebate for all-electric customers to install an air-source heat pump

• PSEG Long Island’s 2020 Energy Efficiency filing contains a significant ramp up of heat pump programs for 2020

• LIPA is exploring on-bill financing options (see 2020 Utility 2.0 filing)

• Customers can lower energy bills and help to reduce Long Island’s carbon footprint
AT A GLANCE

01 Clean Energy Update

02 A Sustainable Solar Industry
THE VALUE OF DISTRIBUTED ENERGY RESOURCES

- VDER is New York’s plan to set fair compensation for distributed energy resources (like solar)

- Distributed energy resource projects that help the grid earn more $ than projects that don’t
Central concept:

The value stack is the total value a distributed energy resource provides to the grid

- Market Value of Energy on Long Island
- Market Value of Capacity on Long Island
- Value of Renewable Energy Credits
- Long Island Systemwide Distribution Savings
- Value of Distribution Savings in Load Pockets
- NEW: Community Credit
  (for community distributed generation only)
LIPA OFFERS AN EXTRA INCENTIVE FOR COMMUNITY SOLAR PROJECTS

Approx. 19% Community Credit Incentive

Long Island market price of clean energy

Community Credit
Locational
Avoided Demand
Environmental
Capacity
Energy

($)

Value Stack
Value Stack + Community Credit
REFORMING THE ENERGY VISION
KEY MILESTONES

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>April 2014</td>
<td>New York REV is launched</td>
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<tr>
<td>December 2015</td>
<td>Proceeding launched on successor to net metering</td>
</tr>
<tr>
<td>May 2016</td>
<td>Track Two order outlines utility business model modernization</td>
</tr>
<tr>
<td>August 2016</td>
<td>PSC adopts Clean Energy Standard</td>
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<tr>
<td>March 2017</td>
<td>PSC issues VDER Phase 1</td>
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<tr>
<td>December 2017</td>
<td>LIPA adopts VDER Phase 1</td>
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<tr>
<td>June 2018</td>
<td>Energy Storage Roadmap</td>
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<tr>
<td>September 2018</td>
<td>PSC issues Value Stack Eligibility Order</td>
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<tr>
<td>December 2018</td>
<td>PSC issues Hybrid Energy Storage System Order</td>
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<tr>
<td>April 2019</td>
<td>PSC issues Value Stack Compensation Order</td>
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<tr>
<td>July 2019</td>
<td>LIPA adopts PSC updates to VDER</td>
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PSC HAS UPDATED AND IMPROVED VDER IN RESPONSE TO STAKEHOLDER COMMENTS

- **Increased certainty and predictability** of distribution value compensation
  - Locked in the Demand Reduction Value compensation rate for ten years and set **pre-defined peak hours**
  - Moved to **call system for Location Specific Relief Value**

- **Encouraged** Community Distributed Generation projects with added **Community Credit**

- **Standardized capacity payment approach** across utilities

- **Extended Phase One Net Metering** availability to small and midsized (under 750 kW) onsite projects for demand-metered commercial customers

- **Expanded eligibility** to additional clean energy technologies, energy storage, and electric vehicle-to-grid
OUR PROCESS
New York’s REV Proceedings

Topics identified by DPS or stakeholders
Stakeholder technical working groups
DPS staff issues whitepaper
Stakeholders comment
PSC issues order with statewide policy
LIPA implements statewide policy

LIPA oversees Service Provider participation
SOLAR PROJECT DEVELOPERS HAVE OPTIONS

Program eligibility by project size

- **Net Metering**: Up to 750 kW (on-site)
- **Value of DER**: Up to 5 MW (on-site, community, and remote)
- **Feed-in Tariffs**: 200 kW to 1 MW
- **Utility RFPs**: 1 MW and Larger

(kilowatts)