

EDC Energy Storage Roles in New Jersey

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MANAGER SOLAR 4 ALL &
ENERGY STORAGE

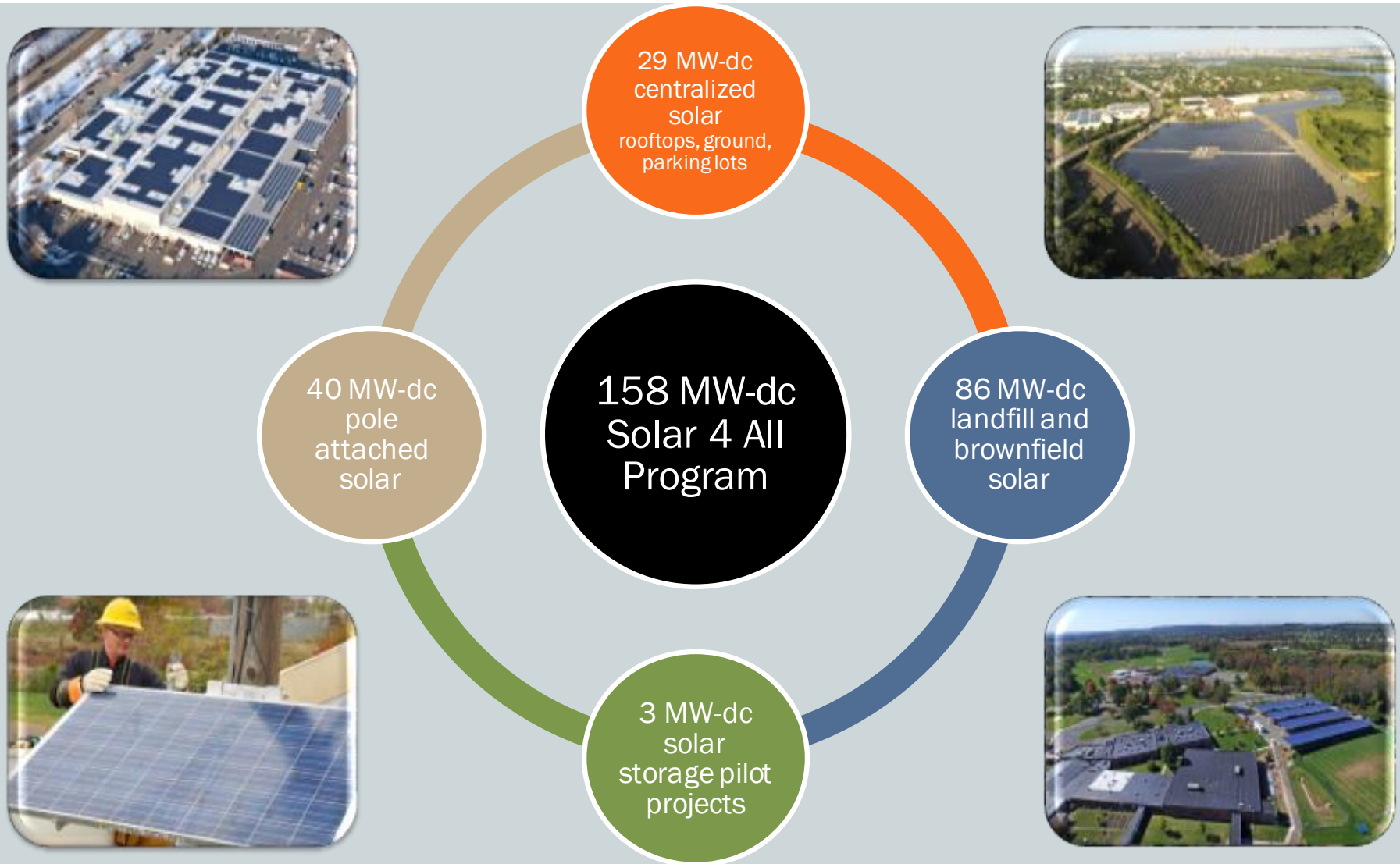
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PSEG

We make things work for you.

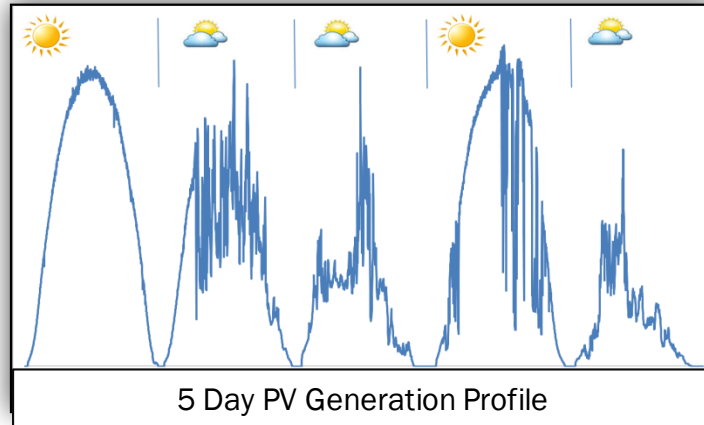
PSE&G Solar 4 All[®] Program Built 158 megawatts-dc (MW-dc) of Solar



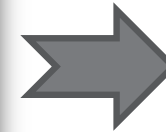
Solar 4 All[®] – Solar + Storage Pilot Program

High PV Penetration

Develop projects that integrate solar with other technologies to reduce the impact solar has on the grid

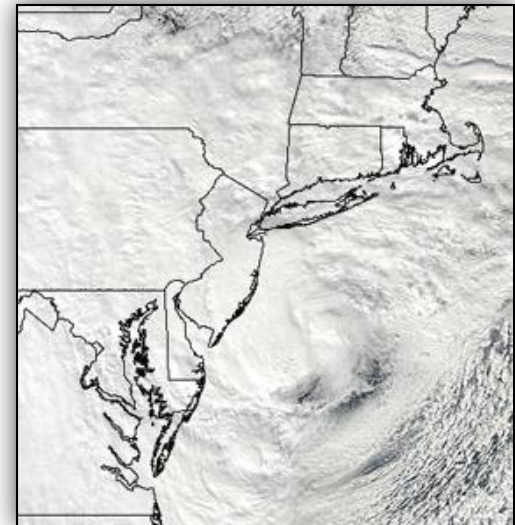


Light Flicker



AND/OR

Develop projects that integrate solar with other storage technologies to demonstrate reliability and grid resiliency for critical facilities during prolonged power outages



BPU Order Docket No. E012080721

Solar 4 All[®] – Solar + Storage Projects

Hopewell Valley Central High School
Microgrid - Community Warming Center
Solar Facility: 876 kW-dc
Li Ion Battery: 580 kWh

Cooper University Hospital
Microgrid - Supports Pediatric Medicines
Solar Facility: 220 kW-dc
Li Ion Battery: 200 kWh

Caldwell Wastewater Treatment Facility
Microgrid - Supports Plant Operations
Solar Facility: 902 kW-dc
EOS Zinc Hybrid Battery: 1,000 kWh

Pennington Dept. of Public Works Building
Microgrid - Supports DPW Operations
Solar Facility: 400 kW-dc
Li Ion Battery: 580 kWh

Highland Park
Mitigate Solar Impact On Grid
Solar Facility: 604 kW-dc
Li Ion Battery: 2,000 kWh



PSE&G's Clean Energy Future Energy Storage Program



Deploy **35 MW** of energy storage to optimize electricity costs for customers, support grid operations and facilitate the integration of renewables.

Subprograms

1. Solar Smoothing
2. Distribution Deferral
3. Outage Management
4. Microgrids for Critical Facilities
5. Peak Reduction for Municipal Facilities

Energy Storage Benefits



Support NJ clean energy goals of **2,000 MW** energy storage by 2030

Optimize Grid

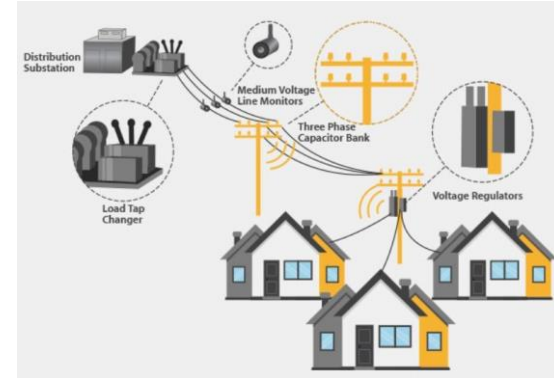
Facilitate solar and renewable resource integration

300 clean energy jobs

Build resiliency during outages

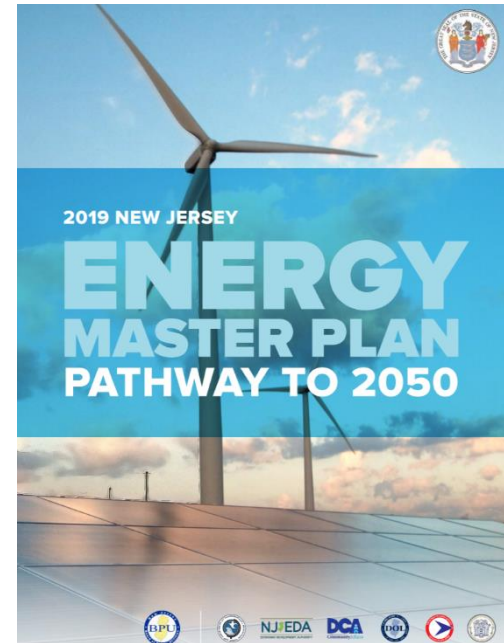
PSE&G's Energy Storage Program Goals

- Help to inform future state, federal and RTO policy
- Contribute to the establishment of Company and industry standards for energy storage
- Enable New Jersey to become a national leader in energy storage technology and deployment
- Help the utility to better serve the energy storage industry and markets
- Enable the utility to integrate this versatile technology into their operations to support unrestricted access for Distributed Energy Resources (DERs)



EDC Role for Energy Storage

- Provide safe, resilient, reliable, and clean energy
- Support public policies and goals
- Consult with merchant developers, PJM, State and Federal Agencies
- Define interconnection methods to facilitate adoption and deployment of energy storage systems in an efficient and cost-effective manner
- Provide signals that are beneficial for the distribution system and all customers
- Help create an ecosystem for the energy storage industry



EDC Role for Energy Storage cont'd

- Full Electrification and Energy Storage
- Unrestricted system access for DERs
- Distribution system operator & distribution generation desk
- Transmission-Level Storage
- Distribution-Level Storage
- New Protection Standards
- Data Science
- Analysis and planning for energy storage
- DER penetration forecast & impact on system
- Identify and define system constraints
- Conduct reliability/load impact analysis and 30-year projection

