The Solar Market in New Jersey

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New Jersey’s Renewable Portfolio Standard

Electric Discount and Energy Competition Act – 1999

- Established a Renewable Portfolio Standard (RPS)
  - Required that by 2021, electricity suppliers must procure 22.5% of the electricity they sell in NJ from qualified renewable energy resources

BPU modified the RPS to include a solar carve-out – 2004

- Solar requirement was 2.1% by 2021

Solar Energy Advancement and Fair Competition Act – 2010

- Increased solar requirement and defined it in terms of energy – 2,518 GWh by 2021

Solar Bill – 2012

- Increased the near term solar requirement again; 3.47% by 2021
- Lowered the Solar Alternative Compliance Payment (SAPC)
  - From $641 in Energy Year 2013 to $339 in EY14
- Added a limited aggregate net metering provision
Renewable Portfolio Standard

Class 1 Renewables

- Energy derived from solar, wind, wave or tidal, geothermal, landfill gas, anaerobic digestion and fuel cells using renewable fuels
- RPS is 20% by 2021
- Solar generation must be located in NJ; all other must be within PJM
- Behind the meter projects eligible for net metering over an annualized period with excess generation compensated at avoided cost, but project size cannot exceed expected annual load

Class 2 Renewables

- Energy generated by hydropower (<30 MW) and resource recovery facilities
- RPS is 2.5% by 2021
- Resource recovery facilities must be located in NJ
Solar Renewable Energy Credits (SRECs)

- Issued to solar generators (1 SREC = 1,000 kWh)
- Must be purchased by Load Serving Entities (LSEs) to meet annual RPS requirement
- Program is managed by the NJ BPU Office of Clean Energy
- SREC are traded on several exchanges
  - Flett Exchange
  - SRECTrade
- Utilities hold auctions several times a year
NJ Solar Installed Capacity by Year

- Installed Capacity (MW dc)
- Capacity Added
- Total Installed Capacity

- Old RPS Requirement for EY12
New Solar RPS under the Solar Bill

Prior RPS vs. Solar Bill RPS

Current Solar Obligation

Prior Solar Obligation

GWhrs

Prior Solar Obligation

Current Solar Obligation

EY '12  EY '13  EY '14  EY '15  EY '16  EY '17  EY '18  EY '19  EY '20  EY '21  EY '22  EY '23  EY '24  EY '25  EY '26  EY '27  EY '28
On July 31, PSE&G filed 2 new solar programs with the NJ Board of Public Utilities

Solar 4 All Extension
- Grid connected projects
- 136 MW & up to $690 million investment

Solar Loan III
- Loans for net-metered projects
- 97.5 MW & up to $193 million in loans
Landfills, brownfields and underutilized governmental properties

- 90 MW – expect 10 to 20 projects

Warehouse roofs

- 20 MW – expect 6 to 10 projects

Parking lots

- 25 MW – expect 5 to 15 projects

Demo / Pilot projects

- 1 MW – expect 5 to 10 small projects
Solar 4 All Extension

- PSE&G will finance, own & operate the solar systems
- PSE&G will hire solar firms for engineering, permitting, procurement and construction services
- Minimum project size will be 500 kW
- All projects will employ union labor or require prevailing wage rates
- Construction will occur end of 2013 through 2018
- All revenues from the systems will be returned to customers
Solar Loan III

- Provides a 10 yr project loan that is repaid with SRECs
- Loan will be competitive and commercial borrowers will bid their required SREC price
- 24 MW set aside for residential & small commercial (< 150 kW)
- 43.5 MW for large commercial projects up to 2 MW
- All projects must be located in PSE&G territory
- For Solar Loan I & II, average commercial project size is about 840 kW
- Applications will be accepted over a 3 year period – 2013 through 2015
- Construction will occur end of 2013 through 2017
Open Issues

Solar bill also requires the Board to undertake the following:

- Investigation of SREC price volatility and methods to mitigate
- Assessment of SREC incentives for solar projects sited on brownfield/landfills
- Detailed rules for the limited net metering aggregation provision
- Assessment of incentives for solar projects larger than 3MW