Program Highlights

- New Jersey is the first state to establish an SREC trading program and platform
- New Jersey's SREC Program is the first state solar program to transition away from reliance on rebates.
- Seven megawatts have been intalled and 39 megawatts of solar capacity are to be completed under this program by the end of 2009.
- The SREC Program is an efficient, market-based financing approach.

New Jersey Board of Public Utilities Office of Clean Energy

SOLAR RENEWABLE ENERGY CERTIFICATE PROGRAM

New Jersey has made a significant long-term commitment to solar energy and the Solar Renewable Energy Certificate (SREC) Program is an innovative way to help the state meet that commitment. The Board of Public Utilities (BPU) first instituted SRECs in 2004. Three years later, after successfully developing a market for SRECs, the BPU established an SREC-Only Pilot Program as an efficient, more market-based approach to providing solar developers and building owners with financial incentives to install solar electricity systems without reliance on rebates. The program has 39 MW of solar capacity in the pipeline, and 7 MW installed, demonstrating the effectiveness of this approach. This pioneering program followed an in-depth stakeholder process ensuring market acceptance and broad public benefit.

Origins of the SREC Program

Unlike most other renewable portfolio standards (RPS), the one in New Jersey specifies that a certain share of electricity must come specifically from solar-powered generation. This solar set-aside was established in 2003 because New Jersey wanted to grow a local solar industry and be a national leader in implementing solar, and the state recognized that solar systems are currently more expensive per installed kilowatt than some other clean energy technologies. The state's RPS requires that 2.12% of the state's electricity come from solar by 2021.

New Jersey BPU established the SREC to facilitate compliance with the RPS's solar set-aside and to help provide financial assistance for the installation of solar systems. In 2004, the BPU established an SREC trading platform to facilitate SREC trading between solar generators and electricity suppliers and demonstrate retirement of SRECs toward RPS compliance. Along with state rebates, federal tax credits, and net metering, the SREC helped spur the growth of New Jersey's solar market. The total installed capacity at the end of 2008 exceeded 65 MW.

The BPU then began to look for a more efficient, more sustainable method than a conventional rebate program to incentivize electricity customers to install solar systems. After an

The Atlantic City Convention Center is one of the largest roof-mounted solar PV systems in North America, rated at 2.36MW of dc capacity. Higher valued SRECs enable profitable investments in solar without large rebates.

Ortho McNeil Pharmaceutical, a Johnson & Johnson company, installed a 510-kilowatt solar electric system at its campus in Raritan. The installation produces enough electricity to power about 45 average homes.

extensive stakeholder process and considerable analysis, in December 2007 the BPU established the SREC-Only Pilot Program. Rebates were continued for installations smaller than 50 kW through 2012, at which time the need for continued rebates will be evaluated.

How the SREC Program Works

SRECs represent the renewable attributes (clean energy benefits) of power generated from a solar electric system, and they can be bought or sold separately from the electricity, thus providing the system owner with a source of revenue to help offset the cost of the system. An SREC is issued to a solar facility for each megawatt hour of solar energy it generates. Each facility qualifies for SRECs for 15 years.

Solar electricity system owners can choose to sell their SRECs to a broker or directly to an electricity supplier that must buy SRECs to comply with the state RPS. Some solar installers or project developers offer to buy the SRECs as part of the project financing, thereby reducing the amount of capital needed up front by the system owner to finance a project.

The market determines the SREC value with the supply of SRECs being provided by installed capacity and with demand set by the current required RPS percentage. The price is effectively capped by the level established by the BPU for Solar Alternative Compliance Payments (SACP) in a particular year. The SACP enables electricity suppliers to comply with the RPS even when there is an insufficient supply of SRECs.

The BPU has set the SACP level at $711 per MW-hour for 2009 and established a schedule of 3% annual decline in the SACP level for eight years. Each year, the BPU will set the level for a "new" eighth SACP amount. SREC's high potential value makes it unnecessary for the BPU to offer upfront rebates to every customer wishing to install a solar system.

Advantages of the SREC Program

By avoiding upfront rebates and instead spreading out the public subsidy of solar systems over time, the SREC Program lowers the annual financial impact on ratepayers of installing large quantities of solar electricity. And as the cost of solar technologies declines, the workings of the marketplace will ensure that SREC values (and public subsidies) will also decline. A structure that allows incentive levels to adjust quickly to changes in the market helps to ensure that the cost of the incentive is close to the minimum needed.

Potential for Other States

New Jersey's SREC-Only Pilot Program is the nation's first program to switch from rebates to a market-based system relying on SRECs. Other states, including Maryland, Pennsylvania, and Delaware, are closely monitoring the SREC-Only Pilot Program.

Judges' Comments

New Jersey is successfully building a large-scale market for solar energy and the SREC Program is an important component of that effort. Considerable analysis and stakeholder input went into developing the innovative program.

New Jersey Clean Energy PROGRAM

About New Jersey's Clean Energy Program

The New Jersey Clean Energy Program promotes increased energy efficiency, supports installation of renewable energy sources, provides information to help reduce energy use, endorses climate change solutions, and offers financial incentives, programs, and services for electricity customers to save energy, money, and the environment. The program is administered by the New Jersey Board of Public Utilities (BPU).

For more information

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