

Solar Transition workgroup
Solar Transition - Next Steps
EDC SREC Programs – Revised Solar RPS
OCE Staff Straw
March 6, 2012

As directed by the Board, staff has initiated a stakeholder process to determine the next steps in the electric distribution companies (EDC) solar renewable energy certificates (SREC) programs. The Board has directed staff to develop recommendations for next steps in the EDC SREC programs. These programs, as previously approved by the Board, include the following:

1. JCPL/ACE/RECO SREC Solicitation
2. PSEG Solar Loan
3. PSEG Solar for all

This process has been informed by the Rutgers Center for Economics, Energy and Environmental Policy (CEEPP) data analysis of the EDC SREC programs. This data analysis has been completed by CEEPP and the results have been presented to the Solar Transition work group.

The stakeholder process has been further informed by the requirements of the Solar Energy Advancement and Fair Competition Act (Solar Advancement Act or SEAFCA) and the goals of the Christie Administration as described in the Governor's 2011 Energy Master Plan (EMP). Based on the Governor's policy direction as set forth in the EMP, this stakeholder process has been expanded to include an evaluation of the options to accelerate the solar renewable energy portfolio standards (RPS).

OCE staff had developed two options in order to initiate and assist in the process. The options in summary were to accelerate the solar RPS or to just increase the EDC SREC Programs. These options must also meet the goals set forth in this Governor's EMP.

1. Lower the SACP or total future costs for the SREC programs.
2. Maximize the dual economic and environmental benefit of solar.
3. No subsidies for solar grid supply facilities on preserved and/or productive farmland and open space.
4. Support the extension of the EDC – SREC Programs.
5. Accelerate the near term solar RPS and reduce the outlier years in the Solar RPS.
6. Promote the use of solar on brownfields and landfills.

Based on the Board's direction for the EDC – SREC program, the Legislative discussion for amendments to the Solar Advancement Act and the solar policies set forth in the Governor's 2011 EMP, staff considered the following points in drafting the straw proposal:

1. The Legislative mandate, as set forth in the 1999 Electric Discount and Energy Competition Act (EDECA), are to transition all renewable energy (RE) and energy

- efficiency (EE) programs through market transformation mechanisms to a point where they can be supported in the market without direct incentives.
2. This transition has initially occurred with solar by reducing and then eliminating upfront rebates and replacing that incentive structure with an SREC structure to support the long term financing of solar facilities.
 3. New Jersey's Solar RPS is one of the most aggressive solar requirements in the country.
 4. New Jersey solar program is second in size only to California.
 5. New Jersey's solar program helps to shape the national and global solar marketplace.
 6. New Jersey's solar RPS has been developed over the years through a variety of statutory, regulatory and policy provisions and procedures.
 7. New Jersey's initial goal for solar set in 2003 was for the installation of 90 MW of solar by Energy Year (EY) 2008. This goal was achieved.
 8. In January 2012 New Jersey installed 84 MW of solar in one month.
 9. The New Jersey solar RPS was established by regulation in 2006 as 2.12% of total retail electric sales by EY 2021, and increased to 5,316 GWH by 2027 in the Solar Advancement Act in 2010 or approximately 5%.
 10. New Jersey will meet the solar RPS for this EY and will be significantly long in terms of the number of SREC generated.
 11. SRECs in the New Jersey solar RPS have a 3 year trading life.
 12. Conservative estimates are that the installed solar capacity will exceed the solar RPS through at least EY 2014. Depending on the near term installation rate, the solar capacity may exceed the NJ solar RPS through EY 2016.
 13. New Jersey went from installing 1 – 10 projects per month for installed capacity of 100s of kW per month in 2007 to 400 to 500 projects per month for installed capacity of 20 to 40 MW per month in 2011.
 14. In 2007 the largest size solar facility was less than 1 MW. New Jersey solar developers are now installing solar grid supply projects between 5-20 MW in size.
 15. Through a legislative amendment to the net metering provisions in 2008, SRECs were extended to all solar projects including both grid supply and net metered projects. Prior to this the Board's regulations limited SREC to net metered projects only.
 16. There are several locations on the EDC systems that currently can not have any additional solar added to the specific distribution line without significant upgrades to those lines. There are several dozen locations on the EDC systems which have limits on the size of the solar system that can be added within a specific feeder.
 17. PJM has listed several GW of solar in its queue for interconnection.
 18. In the recent EYs New Jersey solar projects were receiving at least \$600 per MWh in the spot market. Those SREC prices combined with the federal and other state incentives resulted in solar projects that had simple paybacks of approximately 4 years with ROI of over 25 percent.
 19. The overall goal of the SREC program was a 7 to 10 year simple payback with an IRR of 12%.
 20. SREC are now in the \$200 per MWh range with the last EDC central auction at \$170 per MWh.
 21. The pace of construction, installation and operations in the New Jersey solar market is not sustainable within the current solar RPS.

Based on the staff's initial options there have been several proposals from the Solar Transition work group members. Staff has reviewed all the comments, proposals, discussion points and CEEEP data analysis. Based on this review staff proposes the following straw to be finalized as a recommendation to the Board for Next Steps in the New Jersey Solar Transition – Next Steps:

1. The total capacity of the extended EDC SREC programs would be 120 MW over 3 years.
2. The total capacity would be divided up among the 4 EDC based on retail sales.
3. EDCs will be requested to submit a new filing.
4. EDCs can file for a loan program, solicitation or both.
5. The timeframe of the loan or solicitation shall be 10 years decreasing in years over the 3 year program.
6. The loan or solicitation process shall be developed to provide for the lowest achievable and available cost within the market segments on a "competitive" basis that tracks the market rate and not a set floor price.
7. Any capacity not requested by an EDC can be allocated to the remaining EDC if requested.
8. The extended EDC SREC programs are for net metered projects except for a set aside for grid supply projects for landfills or brownfields.
9. All grid supply projects on landfill or brownfields shall be in areas that can be supported by the distribution system.
10. The limit on the size of the projects would be based on the net metering limit.
11. The extended EDC SREC programs can be filed by the EDCs for different market segments or allocated based on size.
12. There would be a set aside for residential and small businesses market segments.
13. All EDC costs for developing, implementing and managing the extended EDC SREC program including all SREC transition fees, all loan serving fees, any fees associated with the EDC weighed average cost of capital, and all administrative fees would be paid for by the solar developer or the generation customer.
14. The SREC generated by the extended EDC SREC program will be available for sale in a centralized auction in EY 2016.
15. The sale of these additional SRECs will be timed to minimize the additional impact in the market and will be addressed through a solar RPS rule amendment.
16. The additional capacity of the extended EDC SREC programs will be reflected in the solar RPS regulatory amendments that will be effective in EY 2016.
17. The solar RPS rule revisions will include a reduction of the SREC qualification life to 10 years for new projects and establish a decreasing trend for the qualification life through EY 2027.
18. Board staff with CEEEP will develop a revised SACP schedule for EY 2017 to EY 2026 to reflect lower solar installation costs.

The EY dates may change based on when the Extended EDC SREC programs are filed and if and when they are approved by the Board.