



MID-ATLANTIC SOLAR ENERGY INDUSTRIES ASSOCIATION

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May 18, 2018

Ms. Aida Camacho-Welch
Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue
3rd Floor, Suite 314
CN 350
Trenton, New Jersey 08625

Re: Docket No. QX18040466 – In the Matter of Offshore Wind Renewable Energy Certificate (OREC) Funding Mechanism

Dear Ms. Camacho-Welch:

The Mid-Atlantic Solar Energy Industries Association (MSEIA) is pleased to present these comments in regard to the above-referenced matter.

MSEIA is a trade organization that has represented solar energy companies in New Jersey, Pennsylvania, and Delaware since 1997. During that 20-year+ period, the organization has spearheaded efforts in the Mid-Atlantic region to make solar energy a major contributor to the region's energy future.

MSEIA's preliminary review of the straw proposal outline contained in the BPU Notice for this matter indicates that the straw proposal is innovative, and appears to contain several features that could be useful for renewable energy development.

Although the matter referenced here has to do with a funding mechanism with offshore wind, not solar energy, MSEIA believes that a form of funding mechanism similar to the one described in the BPU's OREC straw proposal may also be an advantageous funding mechanism for solar energy. When we say advantageous, we mean that we believe it may help form the basis of a solar incentive program that can grow solar energy rapidly and sustainably, at the lowest possible cost to ratepayers. Those two qualities constitute two of the three fundamental policy principles that MSEIA has sought to achieve throughout its existence (see MSEIA's fundamental policy principles at <https://mseia.net/fundamental-principles/>).

In offering these comments, MSEIA's intent is to provoke thought rather than jump to conclusions. Before a funding mechanism such as the one outlined in the BPU's straw proposal could be used for future solar energy growth, its details would need to be fleshed out and adapted for the unique characteristics of the solar energy market. In addition, the details of a

solar incentive (other than funding mechanism details) need to be defined in a way that can accomplish the policy goals. Moreover, a consensus-building process would be needed within the solar industry, and among other stakeholders interested in the renewable energy future envisioned by Governor Murphy.

MSEIA has been studying some elements of the funding mechanism described in the BPU's straw proposal for several years. It has also been studying the roots of the challenges that have hindered the advancement of MSEIA's policy goals for the past dozen years or so. Those challenges came to a head recently during the process of passing a clean energy bill through the legislature. During that process, the current and future cost incurred by the current SREC solar incentive system became a matter of substantial concern. The bill the legislature passed, S2314/A3723, has not been signed by the governor at the time of this writing. If it does become law, though, it will require that the current incentive program be brought to an end, so if the growth of solar energy is to continue a new program must be devised to take its place. The bill also imposes a cap on the overall cost of renewable energy in the state.

What follows is an analysis of the challenges for solar energy and how they relate to the funding mechanism in the present straw proposal.

Challenges requiring solutions:

Challenge: High costs caused by high uncertainty

A fundamental MSEIA goal, shared by many other stakeholders, is to grow solar energy at the lowest possible cost to ratepayers. However, it has become clear over the past few years that the New Jersey solar incentive program has been far more expensive than other successful solar programs in the Northeast. The reasons for this are simple.

The New Jersey solar incentive was designed in such a way that incentive revenue is extremely uncertain. Solar energy systems are long-term investments (whether direct or third-party owned). Investors don't invest when risks are very high unless the returns are also very high. Investors are also conservative in assessing revenue when there is great uncertainty.

In solar investments, a highly uncertain incentive revenue stream has two effects. One is that high returns are needed in order to drive investment. Since internal rate of return (IRR) is an exponential function, a modest increase in IRR will result in a large increase in cost. Second, and even more importantly, the incentive revenue (SREC revenue) is highly discounted by investors when they assess a project. The greater the uncertainty, the greater the discounting.

The incentive level must rise enough to overcome both effects. Hence the very high costs that have been, and continue to be, experienced in the state.

Potential solution: reduce uncertainty

In order to achieve the lowest possible rate impact, then, it is necessary to design the solar incentive with the lowest possible uncertainty. The BPU's proposed OREC funding mechanism lowers revenue uncertainty by specifying a long-term (20-year) incentive level via board order, and specifying that the incentive level will not be subject to reduction during that term. The latter requirement is also contained in a clause in the Offshore Wind Development Act, further reducing uncertainty. A new solar incentive, whether referred to as a new SREC or by another name, could adopt this method in order to reduce costs.

Challenge: Boom and bust cycles

The New Jersey SREC program has experience repeated boom-and-bust cycles brought on by unrestrained solar construction that has been substantially above the levels provided for in the enabling legislation.

Potential solution: match the rate of growth to the legislatively-defined levels

The BPU's proposed OREC funding mechanism contains a methodology for approving projects in specific amounts. Details are lacking, however, regarding the process and schedule for selecting and approving offshore wind projects.

The process could be, for example, a periodic reverse auction (essentially competitive bidding, lowest cost wins) where projects compete for approval. Presumably such auctions would follow a schedule in which specific capacities are offered periodically.

In solar energy, legislation has included multi-year schedules, effectively specifying a capacity target for each year. If a funding mechanism similar to the BPU straw proposal were adapted to solar energy growth, such a legislated year-by-year schedule could be used as a basis for periodic offerings through an auction or other procedure, matching the rate of construction to legislative intent.

Taken together, steady, sustainable growth rates along with low ratepayer impacts will give solar companies the confidence to build a future in New Jersey and create local jobs.

Challenge: Near-term risk of exceeding proposed cost caps

As discussed before, the pending clean energy bill, if signed by the governor, will require that the cost of renewable energy, including the legacy cost of the current SREC program, Class I RECs (except offshore wind), and any new program to continue solar energy growth, shall be less than 9% of total electric costs in the state. In Reporting Year 2022 this cap will drop to 7%. MSEIA's projections indicate that the requirement, as specified in the bill, to stop accepting SREC applications may occur by about mid-year next year.

The projected legacy costs for the existing SREC program are expected to peak in 2021 and then gradually decline, reaching zero after 2033. During the first five to eight years after 2020, the legacy SREC cost, together with Class I REC costs, leave little room under the cap for continued solar growth.

Potential solution: long-term incentive structure

If near term costs are of particular concern, then an incentive structure that minimizes the near-term costs by spreading the costs over a longer period of time can help. A funding mechanism such as that proposed by the BPU for ORECs, if applied to solar energy, would spread the cost of new solar growth over 20 years, thus helping ease the cost burden during the critical first 5 to 8 years after 2020.

We thank you for considering these comments, and look forward to exploring these potential measures further.

Sincerely,



Lyle K. Rawlings, P.E.
President