

CAES Response to Strawman Proposal

Overall, the Strawman Proposal seeks to modify or replace the current SREC program by 6/1/21. The new program seeks to:

- 1. Provide benefits at the lowest cost
- 2. Support growth for solar industry
- 3. Investments made prior to change retain value
- 50% Class I Renewable Energy Certificates by 2030
 100% Clean Energy by 2050
- 5. Design a clear step by step plan for stakeholders
- 6. Follow the legislation, adhere to cost cap
- 7. Update organizations involved regularly

In response to the questions proposed by the Board, Rutgers Center for Advanced Energy Systems submits the following comments.

Comments

- Currently, it is unclear that the goal of 5.1% of the actual kilowatt-hours sold in the state to come from solar electric power generators has been achieved.
 Several speakers at the stakeholder meeting in January 2018 questioned whether the goal was achieved as of December 2018 or yet to be achieved.
 - CAES is requesting clarification of the data with clear baseline assumptions and projections with the understanding that Retail sales and Solar production vary year to year. Solar irradiance can fluctuate as much 7% year to year. As such, it is important to define the baseline and the corresponding metrics of having achieved 5.1%. A methodology for how the attainment levels will be confirmed should be made available to the stakeholders.
- 2. Stepping down of SREC: There is a question about how to fairly treat Pipeline SRECs because they have not entered into commercial operation prior to the attainment of the 5.1% trigger. The options are to develop a separate program for Pipeline SRECs or to allow Pipeline SRECs to join into the SREC Successor Program. However, if Pipeline SRECs have already filed an SRP Registration which indicates a certain level of commitment, then it might be reasonable to treat Pipeline SRECs like Legacies.



Our view is that developing an intermediate SREC program may require additional administration cost and may not be economical or necessary depending up on the volume of the projects that fall into this category. It would be more prudent to work out the Successor program details while the pipeline projects are process by the legacy program. If however, the consensus indicates that a intermediate program is necessary, then a step down of 10-20% of the SREC value as suggested in the stakeholder meeting would be reasonable.

- 3. The current SREC system in this state does not have a price cap. In consideration of the SREC Successor Program principles, the following factors should be considered:
 - a. Given the ITC is stepping down in 2019, perhaps a fixed price SREC value that compensate for the stepping down of the ITC to make project economics viable.
 - b. SREC values should also be tailored for specific market segments. Projects under 2MW have higher cost profile than project that are 2 MW to 10 MW. The economy of scale from >10 MW is even greater. Instead of a market determined price that treat SRECs from all projects the same, perhaps a tiered SREC price that takes into account, the cost, complexity and impact to grid(i.e. grid congestion, loss factors) should be defined per segment. This gives better certainty for project economics similar to Wind PTC.
 - c. According to the EIA, in New Jersey "the commercial sector uses half of all electricity consumed in the state, and the residential sector consumes almost two-fifths". Segmenting by Utility scale, C&I and Residential, capacity targets should be defined by segment based on the RPS goals for the state. Given that PJM is an energy and capacity market, a methodology could be derived that ties energy and Capacity (i.e ~20% of Installed nameplate of the installations) together to determine the capacity cap on each of the segments.
 - d. Finally, Energy storage will start to play a meaningful role in Utility Scale/ Grid Supply Solar and residential segment and should be integrated into how the successor program will be defined. KWH lost due to Round trip efficiencies of the battery should be factored in to the SREC accounting.