Comments of the Solar Energy Industries Association on the Draft 2019 New Jersey Energy Master Plan 9.16.19

INTRODUCTION

The Solar Energy Industries Association (SEIA) submits these brief comments in response to the Draft 2019 Energy Master Plan (EMP) notice published on June 10, 2019. Part I of these comments explains several near-term asks of the Board of Public Utilities (BPU) on behalf of SEIA's members. Part II responds briefly to several proposed strategies listed in the Draft EMP.

Thank you for the opportunity to comment. Failure to comment on any specific item in the plan or section does not signal our agreement or disagreement with that strategy or set of proposals.

SEIA is the national trade association for the United States solar industry. With more than 1,000 member companies nationwide, SEIA represents all segments of the solar market including residential rooftop solar companies, firms that provide solar solutions to commercial and industrial customers, community shared solar companies, solar companies that supply power directly into the wholesale energy markets across the country, and firms that manufacture and distribute a range of solar products.

SEIA has approximately 45 member companies with an operating address in New Jersey. In addition, SEIA member companies based all over the country are doing business in New Jersey and have a direct interest in the future of clean energy in the state.

PART I – THE IMPORTANCE OF NEAR-TERM DECISIONS & GOALS

A. The Draft State Energy Plan objectives are aggressive but achievable

SEIA strongly supports the long-term goal of having 100 percent of the state's electricity come from clean energy resources by 2050. At nearly 5 percent of the state's energy mix today, distributed solar power already plays a vital role in meeting the state's energy needs. New Jersey will need considerably more solar (distributed and large scale) in the coming years to meet the 100 percent goal.

1. Set short & medium-term goals such as installing 10 GW of solar by 2030

As we have stated in previous comments to the Board, SEIA recommends New Jersey should explicitly set a solar goal of installing 10 gigawatts (GW) of solar by the year 2030. With nearly 3 GW of solar installed and operating based on the state's early leadership, New Jersey is already well on the way to meeting this long-term milestone.[1]

As an interim measure, SEIA recommends the Board sets a goal of installing another 3 GW of new solar power by the year 2025 or reaching 6 GW of total solar capacity by that year. This 3

[1] Wood Mackenzie/SEIA, "U.S. Solar Market Insight Report Q1, 2019." Accessed 2019. https://www.seia.org/state-solar-policy/new-jersey-solar

GW interim target should guide the development of the next incentive program for solar and should be considered as discussions ramp up around successor incentive program design.

Alongside the distributed goal, New Jersey should also implement the statutory language of the RPS to ensure solar in the PJM territory can qualify as a Class I resource. Furthermore, as New York and Massachusetts show with their solar programs, energy storage deployment rates are closely tied to solar deployment. Encouraging the growth in solar installations will support New Jersey's statutory energy storage mandates.

B. Near-term decisions on solar will help New Jersey hit the long-term goal or fall short

Critical near-term decisions by the Board will help determine whether New Jersey will be on track to meeting the long-term objectives or will fall short. For instance, decisions the BPU is currently facing about compensation levels for the transition incentive program and structure of the successor incentive program will determine market stability and solar industry growth.

1. Don't set the solar transition incentives too low

SEIA strongly encourages the Board to keep the overall goal of the solar transition in the forefront of their thinking. The entire point of the transition incentive is to support conditionally approved projects in the pipeline that could not qualify for Solar Renewable Energy Credits (SRECs) before the Legacy SREC program closes. As part of the SREC Registration Program (SRP) requirements, solar projects must have signed contracts between the developer/investor and the customer, lock in financing, and be ready to continue engineering and construction.

Recognizing firms have already submitted SRP applications with financing secured based on the regulations and dynamics of the Legacy SREC program, the Transition program design and incentive values need to be implemented in a way that can minimally disrupt those signed contracts. The Transition Principles, as stated in the Solar Transition Staff Straw Proposal from April 2019, articulate the criteria the solar transition must achieve to be successful.

PART II – COMMENTS ON SPECIFIC STRATEGIES GUIDING THE ENERGY MASTER PLAN

Strategy 1 – Reduce energy consumption and emissions from the transportation sector

SEIA strongly supports the recommendation to almost entirely electrify the vehicle fleet and accelerate aspects of electrical vehicle deployment. SEIA also encourages New Jersey Transit to more aggressively electrify its bus fleet and use clean energy to power its operations where feasible. Public transit agencies in New Jersey should deploy solar on its properties in order to reduce their reliability on the electric grid. For example, electric rail infrastructure can serve as the interconnecting grid for solar at NJ Transit stations. This solar could be sited on station rooftops, surface parking lots, and/or parking garages. Energy storage could also be deployed with solar for resiliency purposes, such as at rail yards. The solar and storage infrastructure could also serve electric vehicle charging infrastructure for commuters driving to the station.

Regulators should also be requiring Electric Distribution Companies (EDCs) to account for more aggressive electrification of the vehicle fleet as part of their load forecasts as soon as possible, as well as making more information about the operations of their systems available to allow solar firms to help meet system needs.

SEIA further recommends that regulators begin planning for a future where large scale renewable resources and distributed energy resources are seamlessly integrated into the electric grid with improved interconnection procedures to meet the projected increase in load. The challenge of the climate crisis is considerable, but early actions such as these will help the EDCs begin to reshape their delivery networks accordingly.

1.3.3. – Support community solar developments on Port Authority property

SEIA supports further solar development on Port Authority and municipal property. Efforts like this can offset public sector electric consumption and provide the benefits of clean energy to neighboring customers. Warehouses, open lands and parking lots that are not associated with high electric load can be utilized for community solar, providing opportunities for these entities to pass on clean energy benefits directly to local communities. Public entities such as the Port Authority should regularly solicit private firms to develop, construct and manage large distributed solar facilities to meet facility needs and the need of the surrounding community.

Strategy 2 – Accelerate deployment of renewable energy and distributed energy resources

SEIA strongly supports the EMP's recommendations to maximize the use of distributed energy resources (DER) including solar. DER provides clean energy where it is needed most; contributes to electric system resiliency; helps reduce electric system distribution infrastructure cost; and creates good paying local jobs. The solar industry itself employed more than 6,500 workers in New Jersey in 2019. Aggressively promoting DER will result in considerable increases in solar employment. In the long term, promoting streamlined interconnection policies can aid in grid modernization, reliability, and help lower solar installation costs.

As we stated earlier in these comments, resolution of the solar Transition program incentive level values, and eventually setting the size of the successor incentive program are both near term steps that will produce many benefits. We greatly appreciate the Board Staff's ongoing work in these areas.

2.1.6. – Develop a mechanism to compensate DER for its full value stack at the regional and federal level

While SEIA supports eventually moving to an improved "value based" framework for solar compensation, this should be a long-term objective and should not distract from the need to finalize the Transition incentives and establish a solar successor program within the next year.

Once a long-term successor SREC program is put into place, regulators should turn attention to value-based analysis and improving compensation frameworks. But based on our experience in other jurisdictions such as New York, determining these values involves time-intensive discussions that must be informed by EDC data first.

Electric distribution planning exercises (as proposed later in the plan) should be conducted first instead of relying on imperfect proxy values to develop compensation for clean energy projects. In short, the secret to establishing appropriate compensation for all DER is opening the "black box" of EDC distribution planning. Once regulators and stakeholders have better data, then the Board should turn its attention to improving DER compensation and phasing out incentives over time.

2.3.1. – Establish and grow a community solar program

Many residents of New Jersey do not have the ability to install solar on their roof for a number of reasons. Community solar will allow these people, including renters, low-and moderate-income residents and those with shaded roofs, to participate in the financial benefits that solar can provide.

SEIA, along with our colleagues at the Coalition for Community Solar Access, strongly support growing the state's community solar program to expand solar access to every resident. We recommend the BPU expands the size of the community solar pilot program in the second year to at least 150 MWs and align this expansion with the market expectations that inform the successor solar incentive program. Based on the BPU's review of the Year 1 applications, additional, targeted MWs may be justified based on the Year 1 experience, especially if certain regions or customer groups are underserved.

We also encourage the Board to begin development of the permanent community solar program by the end of the year two of the Pilot Program to ensure a seamless transition between the end of the pilot phase and the beginning of the permanent program. Community solar provides many benefits to all the ratepayers of New Jersey in the form of avoided pollution, grid support and resiliency, and suppression of electric rate increases.

2.3.4. – Mandate non-wires solutions on state funded projects, including new construction and rehabilitations

Beyond the use of non-wires-alternatives for state funded projects, which we support, SEIA strongly encourages the EDCs to identify load pockets on their systems where DER such as solar can meet projected system needs (see also recommendation 5.1.1).

As a precursor to this proposal, New Jersey should develop, publish and regularly update distribution system plans with forecasts of system needs. Following the publication of this information, the BPU should require the EDCs to seek bids for DER solutions to be compared with traditional utility investments with up to 24 months lead time to allow developers to respond to such a solicitation. Non-wires alternatives have been used in New York to help reduce system costs and meet infrastructure needs with clean energy, but lessons can be learned from New York to make these solicitations more useful for solar firms.

2.3.5 Develop mechanism for achieving 600 MW of energy storage by 2021 and 2,000 MW of energy storage by 2030

SEIA supports the storage targets explained in the EMP. We further recommend developing the successor solar incentive program to incentivize the development of solar + storage. A storage adder or additional incentive of some type would significantly increase storage deployment and offer more functionality to the grid itself.

Strategy 3 – Maximize energy efficiency & conservation & reduce peak demand

No comments at this time.

Strategy 4 – Reduce energy use and emissions from the building sector

SEIA recommends the Board considers establishing a solar mandate on new home construction similar to a mandate recently adopted in California. Requiring any new home to include solar in

its design would accelerate clean energy adoption and result in major decreases in the cost of solar components and equipment. California's mandate also allows builders to pursue community solar in place of the onsite mandate and the details of this option are currently under development.

SEIA further recommends the Board considers the adoption of solar heating and cooling technologies as another strategy for reducing building emissions. Solar heating and cooling systems are an increasingly cost-effective technology for meeting total building energy needs. Strategies for encouraging solar heating and cooling should be developed with other DER deployment measures in the final EMP.

Strategy 5 – Modernize the grid and utility infrastructure

5.1.1 – Require utilities to establish Integrated Distribution Plans (IDPs) to expand and enhance the location and amount of DER and EVs on the electric distribution grid

SEIA strongly supports recommendations for improved utility distribution system planning and the development of "integrated plans." These activities are the foundation of providing better compensation for all DER providers over the long term and should be prioritized. This improved planning process has been underway in New York State for several years and regulators should look critically at their experience for lessons learned. Publishing more detailed EDC system information and developing detailed "hosting capacity maps" will allow firms to understand where solar is ideally suited on the grid today and set the stage for future discussions about compensation.

SEIA cautions regulators to scrutinize IDPs to prevent against "gold plating" and redundant investments made under the guise of system improvements. In other jurisdictions, capital investments have been advanced as critical grid modernization initiatives, when these upgrades have been advanced to allow EDC's to generate a return on investment for their shareholders. A great deal of improved grid functionality regulators seek can be provided by independent DER.

5.1.4. – Instruct utilities to propose and adopt non-wires solutions that encourage complementary private sector investments when seeking expansion or upgrade of the distribution and transmission system or generation sources

SEIA encourages the Board to require utilities to identify load pockets on their systems where DER such as solar can meet projected system needs. As a precursor to this proposal, New Jersey should develop, publish and regularly update distribution system plans with forecasts of system needs. Following the publication of this information, the BPU should require utilities to seek bids for DER solutions to be compared with traditional utility investments with up to 24 months lead time to allow developers to respond to such a solicitation. Non-wires alternatives have been used in New York to help meet reduce system costs and meet infrastructure needs with clean energy.

5.2.1 -- Exercise regulatory jurisdiction to review and approve the need for transmission projects

SEIA supports the Board's interest in reviewing the need for transmission projects and reminds regulators that, in some cases, increased reliance on DER may obviate the need for expensive new bulk transmission projects that can be costly to all ratepayers. Projects should be reviewed

on a case by case basis and Board Staff should carefully evaluate the cost of new transmission against DER.

5.3.1 Strategic and coordinate rollout of Advanced Metering Infrastructure

SEIA supports efforts to roll out Advanced Metering Infrastructure (AMI) and allow DER providers meaningful access to these data. AMI enables grid modernization and the development of innovative rate designs that help better compensation DER owners for the electricity they are providing to the grid.

As part of the AMI rollout, SEIA also supports developing standards to ensure customers have control of and access to energy management data. The lack of this information has inhibited grid modernization efforts in other jurisdictions.

Strategy 6 – Support community energy planning and action in low-and moderate-income and environmental justice communities

SEIA strongly recommends the Board begins to design an initiative for replacing peaking plants and emergency generators with clean distributed generation. Solar and storage facilities can provide emissions free power during periods of high and peak demand. An initiative such as this would result in significant air pollution benefits to environmental justice communities already burdened with unacceptable levels of pollution. Installations of clean energy facilities in these communities would also create local jobs.

Strategy 7 -- Expand the clean energy innovation economy

No comments at this time.

Thank you for considering these recommendations. Please refer any questions about these comments to:

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