

March 1, 2019

Ms. Aida Camacho-Welch, Secretary New Jersey Board of Public Utilities Post Office Box 350 Trenton, New Jersey 08625

Re: New Jersey Solar Transition Staff Straw Proposal

Ms. Camacho-Welch:

New Jersey Resources (NJR) appreciates the opportunity to offer comments in response to the request for stakeholder input on the staff straw proposal for New Jersey's Solar Transition.

Over the past 10 years, NJR, through its Clean Energy Ventures subsidiary, has invested over \$725 million to construct more than 250 megawatts of solar capacity in New Jersey, with additional projects currently under construction. As an active participant in the state's solar market, we appreciate the efforts put forth to develop this proposal and the commitment to long-term solar growth and the role it can contribute toward New Jersey's clean energy goals.

We look forward to continued dialogue and a collaborative relationship on the solar transition.

Sincerely,

LB

Lawrence Barth

CC: Mark Valori, Vice President, NJR Clean Energy Ventures Chris Savastano, Managing Director – Development, NJR Clean Energy Ventures Katie Feery, Manager – Corporate Strategy, New Jersey Resources

### 1) In your direct experience, how has the current SREC program functioned over the past 5 years?

Since inception as the primary incentive mechanism for New Jersey solar projects, the SREC program has supported the growth of a vibrant solar market in New Jersey. It has attracted an estimated \$11 billion in private capital, contributed more than \$600 million annually to the state's economy and currently supports approximately 7,000 jobs. With close to 3 gigawatts (GW) of solar capacity installed, solar plays an essential role in developing a more distributed, resilient and clean energy future for the state. New Jersey is one of the national leaders in solar installations, and this industry can to be scaled and leveraged to meet the state's aggressive clean energy and economic development goals.

In the past five years, the SREC market was heavily influenced by supportive legislation. The implementation of the Solar Act of 2012, reinforced by the Clean Energy Act, involved necessary legislative interventions. These increased the RPS, and restored both market supply-demand balance and market confidence in response to oversupply conditions. SREC prices responded reasonably, with gradual increases from the low of \$70 experienced in October 2012, to the low-\$200 levels experienced today.

While retaining positive attributes from the current SREC program, a primary objective in the design of the successor program should be to prevent the recurring issues associated with market oversupply, and the need for emergency legislative actions. The current policy paradigm is not sustainable since emergency responses to oversupply that increase the RPS are coupled with cuts to SACP. This practice also undermines the integrity of the market. To avoid these issues going forward, structural changes to the market will be required, along with an expanded role for the clean energy team at the BPU and ongoing collaboration with the solar industry and other stakeholders.

- 2) How should any proposed SREC Successor Program be organized in conformance with the Clean Energy Act and Staff's SREC Transition Principles? Please provide detailed quantitative and qualitative responses as to the perceived pros and cons of each of the following options:
  - a. a fixed price SREC;
  - b. a market-determined SREC; and
  - c. any other option(s).

In support of staff's support for long-term growth in the solar market, the successor program should retain some important attributes of the current SREC program, which have contributed to growth for the state's robust solar market. These include:

• Stable Incentive Funding Source: The RPS compliance structure has insulated the market from relying on societal benefit funding, which has been used by past administrations to balance the state budget, and reduced funds available for clean energy projects.

- <u>Promote In-State Market</u>: The BPU's exercise of its authority to designate only projects "connected to distribution" as eligible for SRECs has enabled New Jersey to develop a thriving in-state industry contributing to jobs and economic development.
- <u>Performance-Based Incentive</u>: As a performance-based incentive, the SREC has encouraged high-quality installations, and incented system owners to maintain system output. This approach is preferable to rebates or other front-end loaded incentive mechanisms.

To support staff's objectives to reduce costs to ratepayers, the successor program should adopt goals and controls to reduce regulatory and market risk and the cost of capital. With changes implemented to better specify the RPS, control supply and maintain market balance, the differences in market risk between a market-based and fixed SREC can be minimized. These improvements can also serve to reduce regulatory risk premiums, which continue to increase as ongoing regulatory interventions and cuts to SACP are built into market expectations.

As discussed in responses to subsequent questions and specified in Attachment A, NJR recommends that market-based SRECs must continue in the interim program until a successor program is studied, approved, designed and implemented. This provides an opportunity to implement the new program and determine if the improvements mentioned above can be effective and compatible in reducing oversupply and mitigating risk through a new market-based approach.

The fixed-price SREC can also potentially reduce regulatory risk further than the market-based approach, to the extent that SREC purchase-sale transactions are backed by long-term contracts or tariffs and supported by credit worthy counterparties such as Electric Distribution Companies (EDCs). The Offshore Wind Energy Certificate (OREC) market provides a possible model that could be deployed for larger scale solar projects in the state. In this model, developers can bid for long-term contracts from EDCs seeking to procure a certain quantity of SRECs. The SMART tariff recently employed in Massachusetts provides a structure with some similarity that could be applied to the broader market.

Further analysis in this proceeding is required to better understand these structures and their potential for reducing risk, as well as the time-to-market and administrative implications.

3) Based on your response to question 2 above, provide precise quantitative and qualitative recommendations as to how your preferred SREC Successor Program model would be implemented, keeping in mind the necessity of satisfying the "SREC Transition Principles" set forth above.

The design of any successor program should include the following elements:

• Provide a long-term goal for solar installations commensurate with the 2030 clean energy goals, and with annual goals to increase jobs and economic activity.

- Include controls and active management by the BPU to avoid oversupply and match supply with demand.
- Reduce regulatory risk and the cost of capital while providing incentives sufficient to attract capital to fund the state's clean energy future.
- Secure incentives with long-term, stable sources of funding.
- Encourage in-state development consistent with economic development goals and build a more independent, distributed and cleaner energy future.
- Retain a performance-based incentive approach.
- Provide differentiated incentives for segments of the solar market.

With reduced regulatory risk and improved market confidence, incentive payments should be extended to better match the useful economic life of solar assets. Installed solar system are estimated to be operational for 25 to 30 years; yet, the current SREC program now covers just 10 years of this useful life. Without the benefit of a continued incentive payment, the reduced cash flows paired with unanticipated maintenance expenses may cause an owner to cease operation of the project rather than invest in a repair. Such decisions could have negative consequences for grid reliability and advancement of the state's clean energy goals.

A number of stakeholders have advocated for major changes to the tradable SREC market structure, including the Massachusetts SMART fixed price tariff model, and the NY-Sun performance-based rebate. As part of this stakeholder process, these different approaches should be given full consideration for fit with New Jersey with a focus on ratepayer cost, administrative requirements, time to market and lessons learned from other states. NJR believes the study conducted by Massachusetts in 2016 on the various incentive options provides a good foundation for the objective, thoughtful work that needs to be performed in New Jersey.<sup>1</sup>

Reflecting on the transition effort in Massachusetts, we also believe that the adoption of a new incentive structure can take several years to implement. As part of this stakeholder process, a fact-based approach on time-to-market for all prospective incentive programs should be understood. Accordingly, it will be necessary to make continuous improvements to the current SREC market structure to support solar development in the state while reflecting the design objectives recommended above. This will need to occur in parallel with efforts to study, develop and launch any new program structure.

<sup>&</sup>lt;sup>1</sup> Developing a Post-1,600 MW Solar Incentive Program: Evaluating Needed Incentive Levels and Potential Policy Alternatives, Massachusetts Department of Energy Resources, https://www.mass.gov/files/documents/2016/10/nf/developing-a-post-1600-mw-solar-incentive-program.pdf

## 4) How should Legacy SRECs be valued? Should these Legacy SRECs be valued under the SREC Successor Program or valued separately?

Legacy SRECs should remain separate from the SREC Successor Program, with the legacy market closed and sunset at the Solar Alternative Compliance Payment (SACP) levels specified in the Clean Energy Act. Staff is to be commended for recognizing the importance of protecting the value of past investments as an essential design principle in the solar transition, and as necessary to achieve the state's clean energy goals.

NJR has previously shared analysis with stakeholders and BPU staff which indicates that on average legacy projects are earning below program design targets of 12 percent, with projects installed between 2010 and 2013 (representing approximately \$6 billion in capital investment) earning well below design targets. This is due to reductions in the SACP implemented by the Solar Act of 2012 and the recent Clean Energy Act, as a response to market oversupply conditions.

Massachusetts provides a useful example in transitioning from their SREC I to SREC II program, and most recently from SREC II program into the current SMART program. The closed SREC programs are maintained with balance between supply and demand, with RPS requirements reduced as projects roll off SREC eligibility, while maintaining the SACP at previously established levels. In adopting this approach, Massachusetts appropriately recognized the need to preserve investor confidence, and to avoid imposing financial harm on the many municipalities, schools and homeowners that participated in the market.

In the Clean Energy Act, the RPS schedule begins to decline in 2023, and will completely phase-out by 2033, as projects with 10- to 15-year SRECs roll off. SREC costs for the legacy program will decline accordingly and will reach zero by 2033.<sup>2</sup>

To facilitate a reduction in costs before the gradual RPS decline, the state could offer project owners voluntary buyouts or offer to stretch out payment terms on their remaining incentives.

- 5) How should Pipeline SRECs be valued? Should these Pipeline SRECs be valued under the SREC Successor Program or valued separately?
  - a. Should the Board continue the current SREC program as a separate program? If so, how?
  - b. Should the Board include the current SREC program within the SREC Successor Program? If so, how?

While we believe the March 2020 target date is adequate for developing the successor program, it is essential to develop an interim program to support continuity in project development from now until the successor program is launched. Maintaining program continuity will allow the market to take advantage of higher federal Investment Tax Credits (ITC) before gradual step downs begin in subsequent years. The ITC falls to 26 percent as of January 1, 2020, 22 percent

<sup>&</sup>lt;sup>2</sup> Projects rolling off SREC eligibility may have 15-20 year useful lives remaining, and remain eligible for Class 1 RECs.

as of January 1, 2021 and 10 percent thereafter. Projects that receive a higher value ITC can help the state meet its clean energy goals at lower costs to ratepayers. A delay in program implementation will impact projects looking to meet the qualification criteria for higher ITC value and ultimately translate into lost value and opportunity for the state. Given the urgent need for implementation, the interim program needs to be designed with the following parameters:

- No changes to market structure or operations
- Within authority of Executive Branch and BPU to implement
- Target ratepayer savings reflecting lower incentive needs for new projects
- RPS increase commensurate with current level of activity
- Respect the cost cap

Please see Attachment A for a detailed proposal, submitted on January 31, 2019 that reflects the views of NJR and other solar stakeholders on recommendations for the design of this program.

6) For any solar transition, should the Board set a megawatt ("MW") target for annual new solar construction? If so, should those targets be defined as percentage of retail sales or a set MW cap? Under what circumstances and/or assumptions is this target achievable?

MW targets are recommended to guide the market and the BPU's active management of supply. These targets should include a long-term target for 2030, supported with program targets for the interim and successor programs, and annual targets. As the state's clean energy goals are now reflected in the RPS, which is based on the percentage of retail sales, MW goals will need to remain consistent with the RPS.

7) In any SREC Successor Program, should the Board seek to set annual MW capacity caps for new solar construction or percentages of retail sales? Why or why not? If yes, what should be the value through 2030 and why? If yes, should the Board seek to set differentiated capacity caps under the solar RPS based on project type?

Please see the previous response for question 6 for NJR's views on the benefit of using MW annual caps.

To make progress on the state's clean energy goals and maintain market continuity for the solar industry, the Board should set aggressive targets for new solar construction through the year 2030, if there are no penalties for underperformance.

In the attached Exhibit 1, we indicate that with two percent annual energy efficiency, the installation of 3500 MW of offshore wind and ongoing operation of the existing installed solar fleet, the state could accommodate up to 9.5 GW of new solar construction by 2030. A goal to add even half that capacity (about four GW total) in the next 10 years, could support 400 MW of annual additions, commensurate with activity in recent years, supporting the current base of jobs and economic development.

Goals to support large-scale project development must also be supported by additional actions to address closed or constrained EDC circuits, interconnection costs and timelines and land use constraints.

Incentive levels must be structured appropriately to avoid financial bias between project types or market segments; however, there may be times when market demand causes over penetration of certain project types. To correct for any imbalances, the BPU should exercise discretion to appropriately cap capacity by project type.

8) In the SREC Successor Program, should the Board provide differentiated SREC or solar value incentives to different types of projects? Should such differentiated SREC compensation be created through SREC multipliers, through an add-on valuation, or through some other method? Based on what factor(s) should any SREC compensation be differentiated?

SREC incentives should be structured based on market segments and project types with multipliers and discounts off a benchmark incentive rate to enable administrative and operational efficiency. In the successor program, factors can include market segment, project size and project location.

9) How should the cost cap be measured? Should any "head space" under the cost cap in the first years be "banked"? Why or why not?

The focus on costs is an important principle of the SREC Transition, and NJR fully supports a structure that provides for industry growth while achieving ratepayer savings.

The cost caps implemented by the Clean Energy Act are not at risk of being exceeded in the short-term; however, they will need to be addressed going forward to achieve the 50 percent by 2030 goal.

The BPU will need to exercise its discretion and authority in ensuring that the cost caps do not undermine the clean energy and economic development goals of the state. Cost caps must consider banking and borrowing between years and the value and benefits of in-state solar. Cost caps should also be reconciled with existing alternative compliance payment (ACP) caps on Class 1 renewable resources, and the structure, goals and incentive caps designed for the successor program.

10) Can and should the cost cap be determined based on net costs that include some type of valuation of associated benefits? If so, what should those qualitative and quantitative benefits be and how should they be assigned a value? If the Board can and should consider a net benefits test, should other cost impacts be included? Which ones? Why? If other cost impacts should not be included, why not?

Just as other programs approved by the BPU are offered the opportunity for evaluation based on their benefits to ratepayers and society as a whole, cost caps for renewable energy should be

afforded the same opportunity. NJR believes that a net benefits test used for other programs, including energy efficiency, is a fair way to accomplish this.

The other benefits should include:

- Environmental benefits from the emissions offset by displaced fossil fuel generation
- Economic benefits from the construction and maintenance of solar facilities, as well as lower electric costs to local business through low-cost power purchase agreements
- Impacts to the state's electric transmission and distribution systems

The Board is familiar with the tests used by the California Public Utilities Commission in the California Standard Practice Manual for Economic Analysis of Demand-Side Programs and Projects; therefore, we recommend the same set of tests used within be used to evaluate the cost caps.

11) What steps should the Board take to implement the cost cap? In particular, please discuss the pros and cons of decreasing the Class I REC Renewable Portfolio Standards. Should any measures implemented differentiate among the different type of Class I renewable energy technologies? Should these measures differentiate among the different market sectors (e.g. utility-scale grid supply versus small residential systems)? Should these measures be technology neutral? Why or why not?

NJR believes the cost cap level of seven percent per year starting in energy year 2022 is not well aligned with the 2050 clean energy goals.

As indicated in Exhibit 2, starting in 2022, the current cost caps will support approximately \$700 million per year in clean energy spend. By 2030 (assuming flat retail sales), the state will need to procure approximately 37 million megawatt hours (MWh) from renewable resources. With the \$700 million cap, this implies an incentive of approximately \$30 per MWh can be supported. The only renewable resource which can be acquired at less than \$30 per MWh, is an out-of-state Class 1 REC, that would not contribute to the state's economic development goals.

Based on analysis using the Jobs and Economic Development model developed by the National Renewable Energy Laboratory, solar installations generate an average of \$630 million per year in economic activity, as referenced in Exhibit 3. Therefore, NJR recommends that any actions taken to implement the cost cap encourage the development of in-state resources. As an alternative, a reduction in the out-of-state Class I REC incentive or the out-of-state RPS compliance should be first steps. This would avoid any financial detriment to those who have chosen to invest in New Jersey.

12) Should the solar industry transition into a true, incentive-free market as the costs of solar begin to approach "grid parity" be a goal, or even a consideration, of the SREC Successor Program? If so, how can a SREC Successor Program assist that transition? Should a transition also encompass changes to the net metering program (cf. ongoing FERC/PJM review of DER aggregation)?

Grid parity is being experienced in regions of the world and the U.S. in areas with abundant sunlight and low-cost land that supports large-scale project development. These areas also allow reasonable interconnection costs by being close in proximity to population centers, access to low-cost labor markets and these areas have high energy costs.

The successor program should focus on ways to reduce solar installation costs in New Jersey and associated incentives over time. Reductions in solar installation costs can include previously discussed options to reduce regulatory risk and capital costs associated with incentives, and any actions the state can implement to reduce permitting and interconnection costs.

To meet the aggressive clean energy goals of the Clean Energy Act, the state must also recognize the importance of large-scale solar project development, which benefits from economies of scale. Rules that support large-scale, offsite solar development, and provide for virtual net metering for these facilities which is closer to the retail than wholesale rate, can also reduce reliance on the direct incentives to support project development.

Staff should also consider the rise and adoption of new digital technology like blockchain, which will allow near instantaneous, decentralized peer-to-peer energy transactions between market participants. As the cost of solar continues to decline, these new models can potentially support a greater role for solar and storage in New Jersey's distributed energy future, where EDCs are compensated for the use of their distribution systems, and with less need for direct incentives from other ratepayers.

Reduced reliance on incentives must also reflect new mindsets about the benefits of solar, which extend beyond the costs, with any compensation to solar owners reflecting the energy, environmental and economic benefits of the resource. These benefits may not be well reflected in current electric utility rate structures.

# 13) Please provide comments on any significant issues not specifically addressed in the questions above, making specific reference to their applicability in the New Jersey context. Please do not reiterate previously made comments.

NJR would like to reiterate that the effort put forth in this straw proposal is a welcome demonstration of the Board's long-term commitment to solar growth as part of New Jersey's clean energy future. It represents closer collaboration with the industry, which we believe will result in a comprehensive and well-informed process to develop both the SREC transition and the SREC successor programs.

#### **Attachment A**

New Jersey Solar Market Transition
Suggested Key Terms Supplementing the Staff Straw Proposal
Submitted January 31, 2019

## New Jersey Solar Market Transition <u>Suggested Key Terms Supplementing the Staff Straw Proposal</u> January 31, 2019

At the January 18 stakeholder meeting, stakeholders from the solar industry expressed similar views that current levels of industry supply will require some near-term actions which supplement the staff straw proposal in order to ensure a stable, orderly transition of the solar market. The undersigned wish to build upon comments presented at that meeting through the presentation of the following recommendations. We are aware that some colleagues in the industry will be recommending some variations to this proposal. We welcome the opportunity to discuss these and believe that the industry position will quickly align upon further policy guidance by agency staff. Our suggestions are:

General recommendations presented on January 18 included:

- 1) Grandfather projects with existing SREC Registration Program (SRP) approvals under terms and conditions consistent with the current ("legacy") SREC program. This approach is fair, minimizes disruption to contractual obligations within the industry supply chain, and reduces regulatory risk which undermines long-term cost reduction goals.
- 2) Provide notice through an immediate announcement that new project approvals will likely be subject to lower incentives than are available in the current legacy SREC program and specify what the new incentives and solar installation goals will be for new approvals going forward ("pipeline program"). Prompt notice will serve to reduce the eligible pool for grandfathering consideration, while providing market continuity at reduced cost to ratepayers. To build on these general recommendations, the straw proposal supplement below is offered by the identified companies and organizations representing a cross section of the solar industry. This supplement provides for additional linkages between the legacy and pipeline programs as the bridge to the long-term successor program. Our recommendations include:
- In order to expedite ratepayer savings, as soon as possible, all new projects will receive a "fractional SREC" equivalent to 0.8 of an SREC (equivalent to 1 SREC = 1.2 MWh).
- As soon as possible, presumably on or before the next scheduled meeting of the BPU on February 27, 2019, SRP approval letters should be modified to indicate that, given market supply conditions, SREC registrants should expect to receive a lower incentive than is currently available in the legacy SREC program. The date that the revised letter is first issued is defined as the "SREC Transition Date".
- All projects with an existing SRP approval before the Transition Date will be grandfathered at 1.0 SREC factor (1 SREC = 1 MWh).

- In addition to notification of lower incentives, SRP approval letters to new projects issued on or after the SREC Transition Date should also note that these projects will not be eligible for grandfathering.
- The BPU should provide guidance to the solar community of the potential scope of the reduction in the incentive. Ideally this should be offered at the same time as the SREC Transition Date. The risks that uncertainty poses to market continuity, jobs, investment, and to achieving long-term clean energy goals were expressed as major industry concerns at the stakeholder meeting.
- This would be accomplished by the BPU issuing a proposal for stakeholder comment that proposes an incentive value during the transition. (As noted above, we recommend the 0.8 fractional SREC.)
  - Coincident with the issuance of the proposal to reduce the incentive during the transition, the revised SRP approval letter should contain an explicit statement to the effect that all new projects going forward will, consistent with the provisions of a proposal by the Board issued for stakeholder comment, receive a fractional SREC. If the fractional level cannot be specified on the SREC Transition Date, upon the Board issuing an Order officially approving the fractional SREC, the SRP approval letters should be further revised for approved projects after the Transition date and for all new projects to expressly state that the project will receive the new fractional SREC value.
- Notices should be sent to all project owners that obtained SRP approvals before the SREC Transition Date confirming the project's status as a Grandfathered project.
- Grandfathered projects receiving a PTO before the 5.1% is reached will be assigned to the legacy program, while Grandfathered projects receiving PTO after the 5.1% is reached will be assigned to the pipeline program. Grandfathered projects will receive a 1.0 SREC regardless of what program they are credited to. Projects receiving SRP approval on or after the SREC Transition Date will be assigned to the pipeline program and will receive the to-be-determined fractional SREC, proposed here at 0.8.
- Both grandfathered and new projects, encompassing distinct RPS goals defined in the legacy and pipeline programs, will operate as a single SREC compliance market. The SACP schedule approved in the Clean Energy Act will remain, with LSEs required to meet the aggregate RPS requirement defined by the legacy and pipeline program RPS schedules. This will enable market operations to continue as-is for LSEs and SREC owners, without adding administrative burdens associated with operating two distinct markets.

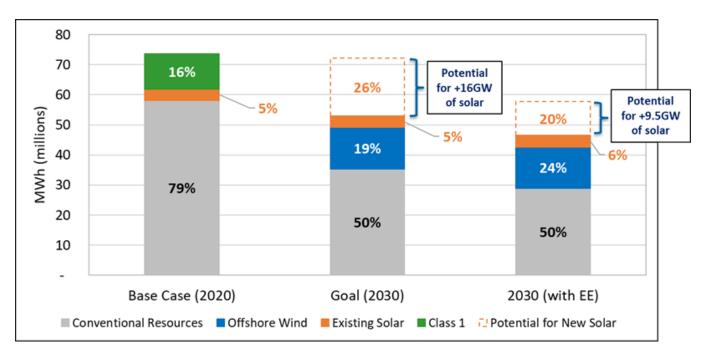
- The 5.1% threshold for the legacy program will not be increased. The legacy program will continue to remain open until the point when 5.1% of retail sales can be achieved.
  - If 5.1% is not reached at the time that there are no remaining grandfathered projects, the BPU can either a) close the program at less than 5.1% with corresponding adjustments to the RPS or b) allocate the remaining program capacity to projects that meet program and policy criteria established by the BPU.
- The pipeline program will provide an RPS compliance home for the SRECs generated from new projects or grandfathered projects which were not included in the legacy program.
- The pipeline RPS should be designed to accommodate up to 450 MW of annual project cap commensurate with historical run rates and new projects provided for in the Clean Energy Act including community solar, Section R grid, and remote net metered.
  - The 450 MW target can be extended or shortened as necessary by the BPU depending on the timing of the launch of the successor program. The MW target would be translated to annual RPS goal reflecting the 0.8 fractional SREC (i.e. [450 MW \* 1200 MWh/MW \* .8 SREC]/ 73,667,000 MWh) = 0.58%.
  - As the RPS requirement for grandfathered projects cannot be estimated until after the legacy program is closed, the BPU should increase the 0.58% RPS, at a factor of 1 MWh per SREC, after the legacy program is closed, and it is known if the grandfathered projects will either install or cancel.
  - The pipeline RPS schedule would sunset the program to 0% after all projects have exhausted 10 years of SREC eligibility.
- o In the pipeline program, the BPU may include special SREC factors or multipliers for projects representing special policy priorities, such as landfills and brownfields or parking canopies, that may need more than 0.8 of a SREC to be economically viable. Additionally, the BPU may want to consider dedicating specific portions of the pipeline capacity for certain market segments, such as residential.
- NJCEP will track progress towards the legacy program and pipeline program RPS requirements and take required actions to close these programs when a sufficient level

of capacity necessary to achieve RPS goals has been installed, and in coordination with the rollout of the successor program.

We look forward to having the opportunity to discuss this proposal, along with other approaches that will be submitted by our colleagues in the solar industry. We believe that continued active engagement between the industry and the BPU staff will promptly result in an alignment of the industry with the BPU policy priorities. We appreciate the staff's ongoing availability, especially in recognition of all the competing demands for the staff's time.

Scott A. Weiner, Esq., on behalf of NextEra Energy Resources
Larry Barth, New Jersey Resources
Thomas Lynch, KDC Solar
Lyle Rawlings, Advanced Solar Products

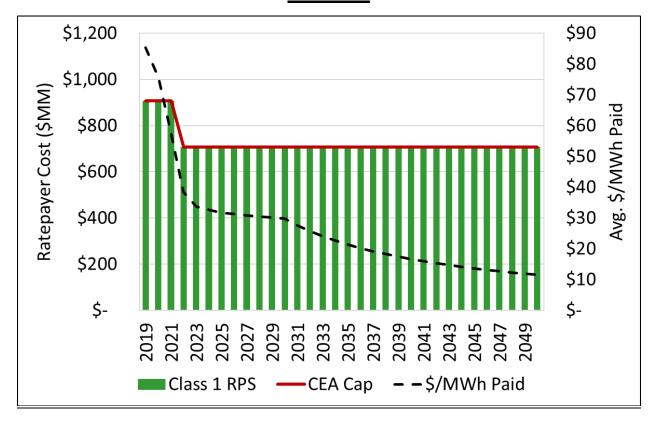
### Exhibit 1



Note: Base case retail sales equate to 73,667,951 MWh (NJCEP - 2018).

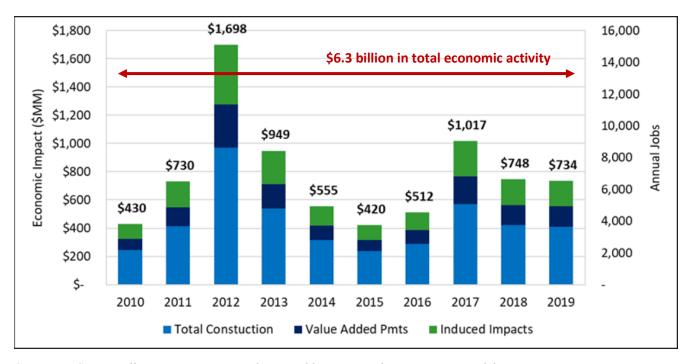
Based on the goals of the Clean Energy Act of 2018, the current New Jersey RPS can support approximately 16 GW of new solar to meet the 2030 RPS, assuming retail load remains constant. Should energy efficiency play a larger part in our clean energy future (with approximately reduction of two percent annually), the market can support about 9.5 GW of new solar, a threefold increase from currently installed capacity. All modeling assumes 3.5 GW of offshore wind in operation and 3.1 GW of solar are installed to meet the 5.1 percent solar RPS target.

#### Exhibit 2



The chart above calculates the implied renewable incentive as dictated by the cost caps in the Clean Energy Act of 2018. Beginning in 2022, the current cost cap levels tighten and will only support approximately \$700 million per year in clean energy spend. By 2030 (assuming flat retail sales), the state will need to procure approximately 37 million megawatt hours (MWh) from renewable resources to meets its compliance obligation. With a \$700 million cap, this implies an incentive of approximately \$30 per MWh can be supported. This trend continues and by the 100 percent RPS goal in 2050, the implied incentive drops to ~\$10 per MWh. Such restrictions push New Jersey ratepayer funds away from the state to support jobs in cheaper, out-of-state wind resources in the Midwest.

### Exhibit 3



Source: NJCEP installation reports, National Renewable Energy Laboratory JEDI Model

Based on analysis using the Jobs and Economic Development Impact (JEDI) model from the National Renewable Energy Laboratory (NREL), solar has generated \$6.3 billion in local economic activity, or an average of \$630 million per year. This includes direct construction spending and the multiplier effects on that spending.