



June 29, 2017

New Jersey Board of Public Utilities  
Office of Clean Energy  
44 South Clinton Avenue  
Trenton, New Jersey 08625

**Re: EY18 Subsection R Comments**

To whom it may concern:

New Jersey Resources (NJR) appreciates the opportunity to offer comments in response to staff's request for stakeholder input on the energy year 2018 capacity solicited under Subsection R of the Solar Act.

Through its Clean Energy Ventures subsidiary, NJR has invested over \$500 million dollars in New Jersey solar and currently owns and operates approximately 150MW of projects in New Jersey, including over 80MW of grid-connected projects, with another 27MW of additional projects under construction.

NJR recommends that no additional Section R capacity be approved in energy year 2018. With the near record levels of installations in energy year 2017 (including 2016 restatements), a robust pipeline of over 400MW, and the decline in the incremental RPS to .09% per year starting in energy year 2019, our assessment is that approving additional grid projects would have a detrimental impact on the SREC market and increase solar market volatility, counter to the policy objectives of the Solar Act.

Please let us know if you have any questions or would like to discuss.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lawrence M. Barth', is written over a horizontal line.

Lawrence M. Barth  
Director, Corporate Strategy

**REQUEST FOR COMMENTS**  
**Subsection r Capacity and Other Factors for Consideration in Energy Year 2018**  
**Issued June 15, 2017**

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Submitted by: Justin Michael Murphy, Esq – Business Development Attorney, Millennium Land Development

Contact Information: 20 WORRELL ROAD TABERNACLE, NJ 08088

JUSTINMICHAELMURPHY@VERIZON.NET

June 28, 2017

**1) Total capacity:** What should be the maximum amount of aggregate capacity the Board should make available via Subsection r in EY18? Please support your recommendation.

Comment: Reference FERC Docket Nos. EL10-64-001 and EL10-66-001 – FERC Order addressing State Utility Commission Feed-in-Tariff authority within the framework of PURPA and The Federal Power Act (FPA).

Given capacity is constrained by the SREC market's ability to absorb new Photovoltaic generation projects (the concern being excess production will crash the SREC market, thereby removing the SREC as an economic incentive, since they would lose any value they held), I submit it is time to shift the entire PV debate in New Jersey, at least regarding the large-scale grid connect projects. The BPU should reorient its regulatory focus, and examine all possible ways to implement a limited, clearly defined Feed-in Tariff, as prescribed in the FERC Order referenced above. The basis would be to construct a Feed-in Tariff with an appropriate 'utility avoided cost' component. This would replace the SREC market in New Jersey.

Replacing the SREC market in NJ will inject stability and more importantly, predictability, into the large-scale PV sector of the solar industry. The SREC market is vulnerable to regulatory 'adjustments' to its compliance price, etc. Revisions in the SREC market either increase or decrease the demand for them, invariably affecting the long-term planning of grid-connect solar developers. These revisions are effectuated by political calculations; e.g. support for solar development, as opposed to curtailing grid supply projects, as the Christie administration has expounded during the last seven and a half years.

A Feed-in Tariff, in full compliance with the FERC Order of July 2010, coupled with an abolition of the SREC market will result in the following:

- A streamlined system of economic incentive for PV development in New Jersey
- Complete removal of reliance on the SREC price for grid connect projects, thereby removing the unpredictable nature of the SREC price (price stability is evident, however, it comes at the expense of PV development, by restricting the number of Megawatts that

can be brought on line).

-Replacing SREC pricing fluctuation with a standard Feed-in-Tariff rate that is not subject

to price fluctuation, notwithstanding program design, or 'avoided cost' structuring.

-Removing from the public discourse on solar power the criticism that the SREC market forces rate-payers to directly subsidize one class of electric consumers, at the expense of other electric consumers.

-With SREC and capacity restraints removed, PV grid-connect developers will be able to install more PV generation sources, thereby injecting more diversity into generation sources in NJ, and also increase the depth of Distributed Generation throughout New Jersey.

The amount of PV generated power is tightly controlled by the BPU – through the Solar Act provisions of each Energy Year allotment of approved PV projects. A Feed-in-Tariff, with the required 'avoided cost component', would more accurately establish solar power's position in the generation portfolio. Setting the RPS at pre-determined levels actually serves as a ceiling (potential) on PV generated power. This occurs when the SREC market reaches a diminishing return, wherein it no longer provides incentive for the purchase of PV grid-connect power (this the result of RPS requirements being met). If solar has the capacity to meet the prescribed RPS, then exceeding that level should be welcomed. A Feed-in-Tariff can serve to promote more solar power production, IF, that is the public policy objective. In other words, no minimum should be established for generation portfolio consideration. Establish an attractive Feed-in-Tariff, then let the developers who seek to build and bid in power, do so. RPS standards are artificial and should also be abolished. This would result in a more natural and market based solar niche in the energy portfolio of NJ. I believe a Feed-in-Tariff would drive more solar development, as much as an increase in RPS would require, however, it would accomplish the growth without artificial benchmarks established by the RPS, which, similar to the SREC penalty price, can be easily manipulated by politicians.

## **2) Individual System Capacity:**

Comment: Constraints imposed on system size, approximating 2 MWdc of capacity, severely limit the economics of a project. Interacting with suppliers is much more fruitful for solar developers when they leverage, for example, a 10 MWdc system, as opposed to a much smaller 2 MW system. The ability to negotiate for better prices for equipment, panels, labor, etc, is enhanced when larger systems are pursued. In addition, an imposed ceiling on system capacity does not take in to account that certain areas may be conducive to larger systems, and some being conducive to smaller systems; i.e. EDC infrastructure capacity, available land area,

municipal zoning requirements, potential net metering opportunities., etc. A mandated limit on system capacity is not warranted, given the numerous factors cited herein function to determine system size.

**3) Other factors:**

a) In addition to a PJM interconnection queue number or equivalent documentation from an EDC demonstrating status of interconnection planning and demarcation of an established interconnection point, what if any additional information should be required to support a determination that no adverse impact on the EDC distribution system would accrue from an individual solar electric generation facility receiving a Subsection r approval?

Comment: No additional information is necessary. The PJM process is sufficiently thorough and competent, as is the EDC Interconnection Process, and Net Metering process. BPU review, in conjunction with, or subsequent to, the PJM and EDC processes, is duplicative and a waste of time and resources.

b) In addition to a PJM interconnection queue number, what if any additional information should be required to demonstrate a reasonable likelihood that a project might satisfy the requirement to commence commercial operations within two years of the Board-approved designation date?

Comment: Documentation that would support the likelihood of commercial operations commencing include the following:

- Documentation of land/site control – land sale agreement; land lease agreement
- Municipal Resolution stating approvals for a solar system have been secured – Use Variance, Site Plan approval (preliminary of final)
- Financing Commitment

The Board should be made aware that the PJM process – Feasibility, Impact, Facility, then Interconnection (with EDC), is earmarked for a minimum of eighteen months.



June 29, 2017

**Re: Subsection r Capacity and Other Factors for Consideration in Energy Year 018**

Dear Mr. Hunter,

Thank you for the opportunity to provide input on the maximum number of megawatts the Board should conditionally approve in EY18.

SEIA believes that robust policies to support all market segments – grid-supply (also referred to as utility scale within these comments), commercial, and residential – play an important role in meeting New Jersey’s solar targets. Each of these segments provide unique benefits and, when taken as a whole, create a robust solar industry to benefit New Jersey ratepayers and citizens.

In this specific instance, we do not believe that – absent a major change in the SREC market – circumstances warrant the Board to conditionally approve any additional Subsection r capacity for EY18.

Subsection r (2) provides four tests that the BPU must use in deciding whether to approve additional capacity including: ‘the SRECs forecasted to be produced by the facility do not have a detrimental impact on the SREC market or on the appropriate development of solar power in the State.

Given the current status of the SREC market and development trajectories, SEIA submits that the approval of any additional MWs under this Subsection for EY18 would have a detrimental impact on the SREC market and on appropriate development of solar in the State.

The below chart shows the estimated amount of installed capacity needed each Energy Year to generate enough SRECs to meet that year’s requirement.

	% requirement	Estimated SRECs required	Estimated Installed Capacity to generate required SRECs (MW)
EY18	3.200%	2,464,000	2053
EY19	3.290%	2,533,300	2111
EY20	3.380%	2,602,600	2169
EY21	3.470%	2,671,900	2227
EY22	3.560%	2,741,200	2284
EY23	3.650%	2,810,500	2342
EY24	3.740%	2,879,800	2400
EY25	3.830%	2,949,100	2458
EY26	3.920%	3,018,400	2515
EY27	4.010%	3,087,700	2573
EY28	4.100%	3,157,000	2631

Additional generating capacity will need to be installed to replace capacity that 'retires' (begins to generate Class I RECs) after its 15 year SREC generation life. This ramp up in retirements corresponds to 15 years after years of significant growth in the NJ installed base – most notably EY11 and EY12. Fifteen years from EY 11 and EY12 is EY25 and EY26.

According to OCE's website, there are currently 2,168 MW installed as of May 31, 2017. If all development were to halt, this alone would be enough installed capacity to generate the SRECs required under EY20 targets. Indeed, this timeframe is an underestimation because it does not include the significant number of banked SRECs that will continue to be generated over this time. Given the slow rate of incline in the SREC requirement during this timeframe, one could expect the banked SRECs to fill any additional growth in SREC requirement for a number of years.

Additionally, OCE's website shows that there are currently 414MW in the pipeline. If all of this capacity were to be installed, then there would be enough generating capacity to meet the SREC requirement through EY27. Again, this is an underestimation because it is not accounting for SRECs that are generated in one year and 'banked' for use in future years.

Even though utility-scale projects tend to have a one to two year lead time, the above analysis shows that absent a major change, there does not show a potential need for additional Subsection r capacity until at retirement of installed capacity starts to ramp up around EY2 or EY26. In other words, the BPU can analyze the SREC market again next year (and the year after that and the year after that) and not run into any timing issues with ramping up this market segment.

Grid supply projects are an important part of New Jersey's solar program and continue to move forward. Indeed, 144MW of the pipeline – or 35% of the pipeline capacity – are from grid-supply projects. Additionally, grid supply projects can access the SREC program through Subsection t. They also comprise almost 25% of all installed capacity in the State.

Absent significant changes in the SREC requirements, any additional capacity approved under this subsection would further exacerbate the oversupply in the SREC market, significantly lengthen the time needed for the market to recover, and could very well negatively impact to development of projects in the current and future OCE pipeline.

SEIA urges the BPU to find that the maximum amount of aggregate capacity to make available under Subsection r in EY 18 is zero.

We also take this opportunity to note our support for utility scale solar projects to have the ability to opt into receiving Class I RECs instead of SRECs.

We look forward to continuing to work with the BPU and other stakeholders to create and implement policies that support all market segments.

Sincerely,

David Gahl  
Solar Energy Industries Association  
dghal@seia.org



June 29<sup>th</sup>, 2017

Mr. B. Scott Hunter  
Office of Clean Energy  
New Jersey Board of Utilities  
44 South Clinton Avenue  
Trenton, NJ 08625  
VIA EMAIL: OCE@bpu.nj.gov

Subject: EY18 Subsection R Comments

Dear Mr. Hunter:

Conti Solar ("Conti") respectfully submits these comments in response to the New Jersey Board of Public Utilities' (the "Boards'") Request for Comments: Subsection (r) Capacity and Other Factors for Consideration in Energy Year 2018, which was issued on June 15, 2017. Based in Edison, New Jersey, Conti is a 111-year old, family-owned company that employs over 600 people. Conti has been active in the state's solar market for over ten years and is currently developing a solar project on Naval Weapons Station Earle ("NWS") in Monmouth County, New Jersey.

Intended to stabilize New Jersey's solar market, and encourage development on the most appropriate sites in the state, the Solar Act was signed into law by Governor Christie on July 23, 2012. The Solar Act provides that a solar project shall be considered "connected to the distribution system" – and thus eligible to receive Solar Renewable Energy Credits ("SRECs")—when the Board determines that the project has met four criteria. These criteria are that: (1) the project would not adversely affect the SREC market; (2) the project would not significantly impact the preservation of open space; (3) the project would have a beneficial effect on electric rates and economic development; and (4) the project would not impinge upon a utility's ability to maintain its equipment.

In 2015, Conti was awarded exclusive dright to develop a solar facility on the unutilized "Wayside Area" within Naval Weapons Station Earle. The Navy's solicitation for a project developer, and Conti's interest in participating and subsequent award of the project, were predicated on the expectation that the project would receive qualification for SRECs under Subsection (r). Conti thus partnered with the Navy's Resilient Energy Program Office and invested significant resources to develop the project, which is part of the Navy's larger initiative to develop one gigawatt of renewable resources serving military bases or sited on them.

Conti believes that the Earle project perfectly meets the criteria to qualify as a Subsection (r) project. First, the site is located on an unused portion of a military base near munitions storage facilities and also

borders industrial facilities outside of the installation. As the site is neither open space nor suitable for most other development, it is an ideal candidate for a large solar installation, given the Board's concern with preserving open space.

Second, the project is sited near the high-voltage Atlantic substation, and has executed an Interconnection Services Agreement and Construction Services Agreement with PJM and JCP&L. Given the electrical infrastructure surrounding the site and the completion of studies, the project will not impinge upon JCP&L's ability to maintain its equipment.

Third, the NWS Earle project will support economic development. The state's military bases are leading employers, providing jobs to 73,000 people and generating more than \$9.6 billion in total economic activity in the state of New Jersey. They are also vital for the readiness of the Armed Forces, and New Jersey legislators have repeatedly urged the Department of Defense to keep its bases open. In addition to providing an excellent use for unutilized land, the project utilizes an "enhanced use lease", in which Conti will provide low cost solar energy to the base from a smaller behind-the-meter solar facility. The presence of the solar facility will improve the long-term viability of the base and, through cost savings, increase opportunities for training and operations hosted at NWS Earle.

Below, please find Conti's answers to individual questions posed by the Board.

### **1) Total Capacity**

Conti recommends 120 MW as a limit on total capacity for projects from Energy Years 2017 and 2018.

While the Board rightly considers the volatility of the SREC market, it must also consider the volatility of New Jersey's broader solar market. Some proposed projects have been in development for greater than three years, in anticipation of the opportunity to qualify for SRECs under Subsection (r). These projects represent significant investments from project stakeholders who have relied upon the Board's guidance related to the rollout of Subsection (r) over the past several years and were forced to continue to delay their projects when there was no Subsection (r) qualification in Energy Year 2017 as provided in the Solar Act. We believe that 120 MW of capacity should be available for qualification under Energy Year 2018. Such a quantity would balance valid concerns for the SREC market and from stakeholders who have invested time and resources into their projects. This amount is also consistent with previous capacity quotas set forth by the Board, such as Subsection (q).

### **2) Individual System Capacity**

Setting a limit on individual system capacity for Subsection (r) projects is inconsistent with the policy behind the Solar Act to encourage sustainable solar energy projects in New Jersey. Accordingly, Conti recommends that the Board instead award certification based on the projects' merit under Subsection (r) determinations and its viability to reach commercial operation.



The 2014 report, Mitigating Solar Development Volatility, commissioned to the Rutgers Center for Energy, Economic and Environmental Policy by the Board, analyzes the effects of total capacity additions to the SREC market, rather than the effects of individual project sizes. In fact, with respect to volatility, the report clarifies that “behind-the-meter projects can have a similar effect on SREC market supply-demand dynamics”. For instance, during Q1 2012, when a surge of capacity was installed causing significant volatility in the market, grid-supply projects comprised only approximately 35% of installed projects.

The report does not find that a large project creates more volatility than a series of small projects of the same total capacity. For example, the market effect of ten 1-MW projects would be the same as a single 10-MW project. Penalizing projects of a certain size would be arbitrary, and also would not ensure market stability.

For current projects that have submitted a valid Expression of Interest, we recommend that the Board evaluate them on the basis of their particular **viability and suitability**.

The Board should give preference to the most viable projects: those furthest along in the development process and most likely to reach commercial operation within two years of certification. While many factors influence viability, the Board should prioritize those projects, like NWS Earle, that have received Interconnection Services Agreements and Construction Services Agreements, and those with executed leases for the property on which they will be built.

Additionally, Subsection (r) contains criteria on which projects can be evaluated. The Board can rank the projects on the basis of “preservation of open space”, as well as evaluating special economic benefits. For example, projects, like NWS Earle, located in highly industrialized areas or those that would not be reasonably made into open space should be ranked ahead of those which are located on or nearby areas of potential open space (i.e., near residences).

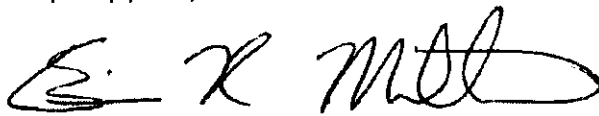
### 3) Other Factors

- a. The rigorous interconnection studies conducted by PJM and the state’s EDCs will ensure that no project will cause an adverse impact to the EDC’s distribution system. Interconnection status more importantly informs the Board of Project Viability.
- b. Based on Conti’s prior work with PJM, we find that our projects typically reach commercial operation within 12-18 months after the Interconnection Services Agreement and Construction Services Agreement are signed. Based on this timing, we recommend that the Board require an executed Interconnection Services Agreement before qualifying projects.
- c. We recommend that the Board require, with submission of an Expression of Interest, aerial imagery of the project site’s parcel(s). The map should also show all parcels contiguous to the project site’s parcel(s) or within ¼ mile of the project site. Based on

this analysis, the Board can determine the presence of farmland and the effect of the project on open space.

Conti appreciates the opportunity to submit these comments and looks forward to working with the Board to realize the intent of the Solar Act to promote stable sources of solar energy in suitable regions of the state as was envisioned with the passage of the Solar Act. Please do not hesitate to contact me should you have any questions or require further information.

Very truly yours,

A handwritten signature in black ink, appearing to read "E. K. Millard". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Eric K. Millard  
Vice President  
Conti Solar

## Hunter, Benjamin

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**From:** SHEPPARD JR, JAMES <bob.sheppard@holocene-energy.com>  
**Sent:** Thursday, June 29, 2017 4:32 PM  
**To:** OCE  
**Subject:** EY18 Subsection R Comments

Holocene Clean Energy ("Holocene") is the owner of the first four projects listed on the "Subsection (r) Complete Expressions of Interest received in response to Board's May 2016 & Feb 2017 Orders". (These projects identify Conergy Development Corp. as the Developer; however, Holocene is the current owner of all four projects.)

Although we are not in a position to comment on the total capacity that should be accepted for EY18, we note that a cap that results in some projects not receiving SRECs will disappoint the expectations of developers who may have expended substantial funds to develop a project that meets all appropriate criteria. Any project that is denied SRECs as a result of the cap will necessarily have much greater difficulty in being financed.

The information required by Section 14:8-2.4 is adequate to determine whether a project will have an impact on farmland. Our projects, for example, are all located on rooftops; this will be clear from our submission. With respect to information that indicates a likelihood that a project will commence operations within two years, the best indicator is the track record of the developer in financing other similar projects. It is reasonable to require this information. Finally, we believe that each utility will, in its interconnection requirements, adequately ensure that a new solar project will not have an adverse impact on the distribution system.

While the Board's Request for Comments suggests ranking projects by size, with smaller projects being favored, we suggest that, other things being equal, priority should be given to projects based on the order in which their EOIs were filed. The earlier an EOI was filed, the more likely it is that the developer has made substantial progress in developing the project. Moreover, when a scarce resource is to be allocated, it is normally regarded as fair to give priority to those parties that accessed it first.

Submitted by,

J. Robert Sheppard, J.

Holocene Clean Energy  
727 West Hargett Street, Suite 201  
Raleigh, NC 27603  
704 363-9304

June 29, 2017

On June 15, 2017 NJ BPU-OCE Staff posted a request for comments from stakeholders regarding EY18 Subsection (r) capacity.

KDC Solar is a New Jersey based solar developer located in Bedminster, NJ. We focus our development on large scale, net metered solar facilities. We are currently operating 15 projects aggregating 76 MWs in New Jersey and have invested in excess of \$200 million. These solar projects result in significantly lower costs of electricity for our customers and improvement of their economic competitiveness. In addition, these projects also help the State reach its clean energy goals, in addition to the creation and retention of jobs.

KDC offers the following answers to questions asked by the NJ BPU-OCE Staff.

**Q1. Total capacity:** What should be the maximum amount of aggregate capacity the Board should make available via Subsection (r) in EY18? Please support your recommendation;

The EY18 RPS requirement is 3.20%. Using reported retail electric sales from EY16 as proxy, there is a need for approximately 2.375mm SRECs to meet compliance. As of 5/31/17 there was 2,169 MW of projects "connected to the grid" in NJ, capable of generating SRECs. Assuming 1200 hours of annual production, these systems would generate 2.603mm SRECs, 110% of the



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estimated RPS requirement. Further, we note the robust pipeline of projects for installation, running most months more than 400MW, and 6-month trailing install average of 29.2MW. Additionally, there continues to be a carried forward of SRECs minted in prior energy years that have not been retired.

The BPU has an obligation to ensure orderly market development. The BPU has established procedures, as required through the Solar Act of 2012, to monitor solar market volatility. Allowing any additional capacity through Subsection (r) in EY18 would result in the BPU creating additional supply of MWs to the solar/SREC market thereby creating volatility which is counter to the obligation to ensure an orderly market.

Our recommendation for the maximum amount of aggregate capacity to be made available via subsection (r) for EY18 is therefore 0 MW.

**Q2: Individual System Size:** If the Board allows additional capacity under this subsection in EY18, should there be a maximum size? What should the maximum size be? Should developers be able to expand projects approved under Subsection (q)? If the Board were to make capacity available for Subsection (r) projects in EY18, should individual project approval decisions be based solely on a project's proposed capacity if all other criteria have been met?

As a general rule, KDC Solar does not believe there should be a maximum

system size limit imposed by regulations. Other factors, such as interconnect upgrade costs and available footprint for project installation will influence ultimate project size. Expansion of an existing subsection (q) project should be allowed, assuming the added capacity is under the previously issued SRP #. If capacity under subsection (r) is made available for EY18, Board should consider in addition to proposed capacity, that project's impact on the local electric distribution system and the ability of other renewable projects (in particular behind the meter projects) to be constructed.

**Q3: Other factors:**

KDC Solar has no comments with regards to existing requirements on PJM interconnection documentation or evidence that proposed subsection (r) is not being constructed on farmland.

We appreciate, as always, the opportunity to provide stakeholder comments to Board Staff.



June 29, 2017

**VIA REGULAR AND ELECTRONIC MAIL**

Office of Clean Energy  
New Jersey Board of Public Utilities  
44 South Clinton Avenue, PO Box 350  
Trenton, NJ 08625  
[OCE@bpu.nj.gov](mailto:OCE@bpu.nj.gov)

Re: EY18 Subsection R Comments

Dear Whom It May Concern:

Thank you for the opportunity to offer comments on the potential first application window under Subsection R, and for allowing Marina Energy the chance to provide input on the State's vision for solar development and energy future.

We support the action by the state in 2012 and 2015 to stabilize the solar market and increase the solar net metering capacity; encouraging steady continued development of solar. New Jersey continues to be a leader in the nation for the development of small and large scale solar projects. South Jersey Industries and Marina Energy support the state's continued investment in renewable energy and the long term commitment to achieving a renewable portfolio standard of 22.5% by 2021.

Beginning in energy year 2018, the renewable portfolio standard will see a significant decrease in the demand for new installed solar and remain at these levels over the next 10-years. The reduced annual increase in the solar RPS is a result of the 2012 Solar Act that accelerated the increase in the RPS for energy years 2013 through 2017 followed by a marked reduction in the annual increase beginning in EY 2019.

Under the current RPS and anticipated electric demand in the state, SREC requirements for electric power suppliers and basic generation service providers will decrease by two thirds. Unless future investment in solar decreases by a commensurate amount, the industry is likely facing an oversupply in SRECs beginning in 2018-2019 regardless of any approvals under Subsection R. Currently, Subsection R appears to be incredibly popular with expressions of

interest totaling 147.71MW. Unfortunately the current RPS program is insufficient to support the additional development under the program.

Under the current RPS, EY18 can sustain 126MW<sup>1</sup> of development, while EY19 and each subsequent energy year can only sustain 57MW<sup>2</sup> of development. Projects are currently being developed at a pace of 33MW per month<sup>3</sup>. Even without the approval of any Subsection R projects, the current RPS program is insufficient to continue to match the current pace of development. A continuation of the twelve month average build rate would translate to 396MW of development per year. The pipeline below is sufficient to maintain the current pace of development and annual development of 396MW per year would cause the SREC market to be quite oversupplied.

Interconnection Type	Project Pipeline Qty	Total Pipeline Capacity (kW)	% of Pipeline Capacity
Behind the Meter (Residential)	13,367	111,899	27.02%
Behind the Meter (Non-Residential) <= 100 kW	304	10,706	2.59%
Behind the Meter (Non-Residential) > 100 kW to < 1000 kW	162	56,175	13.57%
Behind the Meter (Non-Residential) >= 1000 kW	33	90,593	21.88%
<b>Total BTM</b>	<b>13,866</b>	<b>269,373</b>	<b>65.05%</b>
Grid Supply	17	144,712	34.95%

Under the current RPS, the current pace of development is entirely not supported, so approval of any additional projects would be extremely detrimental to the SREC market and harm existing projects. Furthermore, subsection Q capped the aggregate annual development at 80MW and the individual project limit was 10MW. These limits were implemented to correct the prior market crash. Seven projects under the Subsection R program exceeded the 10MW threshold that was designed to previously fix the market. Under Subsection R, the first criterion the Board must consider includes: "the SRECs forecasted to be produced by the facility do not have a detrimental impact on the SREC market or on the appropriate development of solar




power in the State.” In the 2014 report on Mitigating Solar Development Volatility, the board found that projects greater than 2MW contributed most significantly to the solar market volatility. Only three of nineteen projects in the Subsection r program are under that threshold.

Developers continue to need robust SREC pricing to cover their debt service and robust SREC markets are critical to support additional economic development. Therefore, the pace of development in EY18 needs to be 10.5MW per month in EY18 and 4.75MW per month in EY19 to take place at the rate supported by the current RPS program.

In closing, we strong believe the entire Subsection R program should be postponed until the RPS program can support additional large scale development. We appreciate the opportunity to comment on the potential first application window under Subsection R.

Thank you again for the opportunity.

Sincerely,

A handwritten signature in black ink, appearing to read 'D Sperrazza', with a long horizontal flourish extending to the right.

Dan Sperrazza  
Manager, Government Affairs  
South Jersey Industries

## Appendix

1.  $((75,390,475 * .032) - (75,390,475 * .03)) / (.1362 * 8760) = 126 \text{ MW}$

EY15 Electricity Sales-75,390,475  
 EY17 RPS requirements- .03  
 EY18 RPS requirements- .032  
 NJ Capacity Factor-.1362  
 Hours in year-8760

2.  $((75,390,475 * .039) - (75,390,475 * .032)) / (.1362 * 8760) = 57 \text{ MW}$

EY15 Electricity Sales-75,390,475  
 EY18 RPS requirements- .032  
 EY19 RPS requirements- .0329  
 NJ Capacity Factor-.1362  
 Hours in year-8760

3. 4/16-3/17 was utilized for the twelve month trailing average, as April and May are likely not finalized.

Build Rate	Total of All Projects (MW) as of 5/31/17	
	Total Qty	Total Capacity
Apr-16	1,194	35,924
May-16	2,038	43,263
Jun-16	2,334	29,250
Jul-16	1,814	22,705
Aug-16	2,372	27,161
Sep-16	1,715	27,118
Oct-16	1,573	56,314
Nov-16	1,639	31,970
Dec-16	2,032	21,573
Jan-17	1,813	37,532
Feb-17	1,736	20,689
Mar-17	1,802	33,890
<b>12 month trailing avg:</b>		

## RPS Schedule

Energy Year	Solar Carve-Out (A.B. 3520)**	Pre A.B. 3520/S.B. 1925 Solar Carve-Out**
EY 2005	--	0.0100% (pre-A.B. 3520)
EY 2006	--	0.0170% (pre-A.B. 3520)
EY 2007	--	0.0393% (pre-A.B. 3520)
EY 2008	--	0.0817% (pre-A.B. 3520)
EY 2009	--	0.1600% (pre-A.B. 3520)
EY 2010	--	0.2210% (pre-A.B. 3520)
EY 2011	306 GWh	0.3050% (pre-A.B. 3520)
EY 2012	442 GWh	0.3940% (pre-A.B. 3520)
EY 2013	596 GWh	--
EY 2014	772 GWh	2.050% (S.B. 1925)
EY 2015	965 GWh	2.450% (S.B. 1925)
EY 2016	1,150 GWh	2.750% (S.B. 1925)
EY 2017	1,357 GWh	3.000% (S.B. 1925)
EY 2018	1,591 GWh	3.200% (S.B. 1925)
EY 2019	1,858 GWh	3.290% (S.B. 1925)
EY 2020	2,164 GWh	3.380% (S.B. 1925)
EY 2021	2,518 GWh	3.470% (S.B. 1925)
EY 2022	2,928 GWh	3.560% (S.B. 1925)
EY 2023	3,433 GWh	3.650% (S.B. 1925)
EY 2024	3,989 GWh	3.740% (S.B. 1925)

<http://programs.dsireusa.org/system/program/detail/564>

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June 29, 2017

Via email to [OCE@bpu.nj.gov](mailto:OCE@bpu.nj.gov)

B. Scott Hunter  
New Jersey Board of Public Utilities  
Office of Clean Energy  
44 South Clinton Avenue  
P.O. Box 350  
Trenton, New Jersey 08625

Re: Request for Comments – Subsection r Capacity and Other Factors for Consideration in Energy Year 2018

Dear Mr. Hunter:

Jersey Central Power & Light Company (“JCP&L” or the “Company”) is pleased to submit comments on the Board of Public Utilities (“BPU”) Staff’s (“Staff”) request for comments regarding “Subsection r Capacity and Other Factors for Consideration in Energy Year 2018” issued June 15, 2017. While Staff posed three questions, JCP&L’s response will focus primarily on question 3) a) and b), but also provide some insight in the Company’s experience that may be responsive to the second question regarding individual system capacity.

The Company believes the Staff would be best suited to recommend to the Board the maximum amount of aggregate capacity to make available via Subsection r in EY18 and, therefore, offer no comments. A number of factors must be taken under consideration in order to preserve supply/demand balance and market stability relative to Renewable Portfolio Standards obligations and the Solar Renewable Energy Credit market relative to any potential additional capacity from Subsection r projects. The question of maximum project size should also be considered relative to the maximum available capacity.

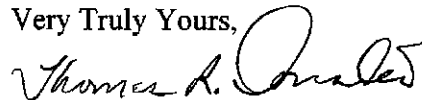
JCP&L believes that the rules governing the Subsection q projects relative to individual project size should be a starting point for consideration of maximum project size under the pending Subsection r process. Although with careful study and planning, larger projects could be accommodated, JCP&L believes a smaller size limit may be preferable as the Board considers market impacts. For instance, in the JCP&L service territory, the Company has interconnected systems as large as 17 MW connecting to the 34.5 kV sub-transmission system (which may be considered ‘connected to the distribution system’ if the project is directly connected to the electric grid at 69 kilovolts or less, regardless of how an electric public utility classifies that portion of its electric grid, and is designated as “connected to the distribution system” by the Board pursuant to subsection q. through s. of section 38 of P.L.1999, c.23 (C.48:3-87)). These have only been

possible due to thorough analysis provided by an impact study. During this study, specific requirements for connecting large systems would be so identified, and might include the installation of a ring bus, or significant reconductoring, or possibly the construction of a new line. The feasibility and impact studies would identify any negative aspects of connecting the proposed site to the JCP&L system and would identify the required capital projects and expenditures needed to eliminate any negative impacts.

This background and experience supports the Company's recommendation relative to question 3) a) and b) that the requirement for application and consideration of SREC credits under Subsection r should be contingent on the developer having submitted a completed interconnection application and obtained both a 'Feasibility Study' and an 'Impact Study' or the equivalent if the requirement for separate studies is waived by the Electric Distribution Company ("EDC"). This documentation and appropriate studies would serve to support a determination that a project has a reasonable likelihood to proceed to commercial operation, and any adverse impacts to the EDC's distribution system would be identified and addressed.

The Company appreciates the opportunity to provide these comments, which it hopes will be helpful to Staff in implementing the application process for solar projects under Subsection r. If there are any questions, please contact me.

Very Truly Yours,



Thomas R. Donadio



June 29<sup>th</sup>, 2017

Mr. Scott Hunter  
Office of Clean Energy  
New Jersey Board of Public Utilities  
44 South Clinton Avenue  
Trenton, NJ 08625

RE: Request for Comments – Subsection (r) Capacity and Other Factors for Consideration in Energy Year 2018 – Issued June 15, 2017

In a Request for Comments issued June 15, 2017, the staff of the New Jersey Board of Public Utilities solicited input on Subsection (r) Capacity and Other Factors for Consideration in Energy Year 2018. Starwood Energy Group Global Inc. and Energy Management Inc. submit these comments as the joint developers of a Subsection (r) project at Joint Base McGuire-Dix-Lakehurst (JB MDL), a tri-service military installation spanning Burlington and Ocean counties. In addition to being among New Jersey's second largest employer, JB MDL is among New Jersey's most critical facilities from the perspective of State security and emergency response. This was demonstrated during Hurricane Sandy as an Emergency Operations Center was established at JB MDL, coordinating the reception, staging, and onward movement of critical support and supplies before, during, and after the storm made direct impact with the State.

The Solar Act of 2012 set forth under Subsection (r) that a proposed solar electric generation facility that is neither net metered nor an on-site generation facility, may be considered connected to the distribution system, and thus eligible to receive SRECs, upon designation as such by the board, after notice to the public and opportunity for public comment or hearing. Subsequent directives by board indicated that principal among its considerations would be a given project's impacts on the SREC market, grid reliability, electric rates and economic development, and the preservation of open space.

In 2013, based on the guidance of the Solar Act and Energy Master Plan, and as part of a wide-ranging energy resilience effort at JB MDL we undertook development of a 13 MW solar facility to be located on the Lakehurst portion of the installation. In addition to serving as a significant source of renewable generation, the project represents a continuation of the installation's efforts to provide resiliency to the base electrical system. Revenues generated by the lease arrangement will be applied to capital investment in the electrical distribution system, to include upgrading of switchgear, additional on-site power generation and storage, and build-out of a JB MDL microgrid system. As such, execution of the project will significantly enhance the installation's ability to support not only National Defense missions, but serve as a regional (Base Support Installation) platform for recovery in the wake of man-made or natural disasters.



The site itself was selected for its proximity to several other industrial uses, its previously impacted nature as a decommissioned runway, and its location immediately adjacent to both JB MDL's and JCP&L's local substations – an ideal project based on guidance provided by the Board for Subsection (r) to pursue projects with minimal impacts on open space and that benefit electric rates and grid reliability.

Below, we provide comments in direct response to Staff's questions.

### **Total Capacity**

We recognize staff objectives in imposing a maximum amount of aggregate capacity made available via Subsection (r) with respect to controlling the timing and supply of SRECs in the marketplace and mitigating potential SREC price volatility. This concern must be balanced against the benefits of appropriately-sited and cost-effective grid-supply solar projects in helping the State of New Jersey meet its renewable energy goals and indeed a consideration of stranded costs faced by stakeholders who have expended significant resources to pursue such projects.

The aggregate cap set in Subsection (q) of 80 MW per year was the outcome of a fair and open process which balanced the above objectives. The EOI list appended to the Request for Comments reflects a total Subsection (r) pipeline of 147 MW. Certain of these projects, such as our own, have origins which date back over four years. We believe that setting a cap of 100 MW in aggregate of Subsection (r) projects to qualify for SREC eligibility in EY's 2017 and 2018, will create a reasonable balance with respect to concerns of SREC market supply and demand balance and consideration of the benefits of well-conceived grid-supply projects and developers' stranded costs.

### **Individual System Capacity**

The benefits of a grid-supply solar project over a rooftop or net-metered installation are largely defined by the cost-effectiveness of the installation. If the Board of Public Utilities is concerned with achieving the goals of the Solar Act in a manner consistent with its mandate to ensure fair and reasonable electricity costs for New Jersey ratepayers, grid-supply solar projects must comprise a meaningful proportion of the New Jersey solar portfolio on a go-forward basis.

By not limiting the project size within the framework of approving grid-supply Subsection (r) projects, the New Jersey solar portfolio may benefit from potential economies of scale, increasing the overall cost-effectiveness of the SREC program. The impacts on SREC supply of ten 1 MW systems is equivalent to that of a single 10 MW system, but benefits from applying fixed costs over a larger revenue source. The indication in the Request for Comments that staff might propose ranking and accepting projects from smallest to largest is surely the least cost-effective way to achieve the objectives of the Solar Act.



## **Other Factors**

We believe that the Board should evaluate projects principally on the basis of their maturity and consistency with the Energy Master Plan's articulated objectives in the way of land-use, energy resiliency, and economic development.

A measure of volatility in any market, particularly in the SREC market, is uncertainty with respect to supply and demand. As a result, a key objective of BPU staff in evaluating Subsection (r) applications for EY2018 should be a determination of project viability and support as a means of distinguishing truly shovel-ready projects. The higher the bar for project maturity and viability set by the BPU in the process, the lower the potential disconnect between projected and actualized supply of SRECs from approved Subsection (r) projects. It may be the case that several of the projects that filed EOIs for consideration under Subsection (r) are still in the very early stages of development. The BPU should not consider such projects for SREC eligibility and we encourage the BPU to follow through with a documentation requirements to demonstrate that an applicant project is truly shovel ready.

### *Interconnection Documentation*

The EOI process cast a broad net with respect to admitting all projects with a PJM queue number, which reflects a relatively low bar for project maturity. To ensure project viability, the application process should require that the total project scope and cost to upgrade the EDC distribution system have been identified and quantified from a System Impact Study and that the project developer has consented and committed to this scope by way of an executed Interconnection Service Agreement (ISA) and Construction Service Agreement (CSA).

### *Additional Documentation on Project Readiness and Timeline*

In addition to an executed ISA and CSA, and to further ensure project viability, the Board should give preference to projects that have all necessary unappealable land use and environmental permits in hand and require documentation of such – namely confirmation that all such approvals and permits have been issued by supplying approval dates and supporting documentation from each relevant agency and authority having jurisdiction.

### *Additional Documentation on Appropriate Land Use*

We support a requirement that documentation be provided to demonstrate that a project will not be built on farmland or have an adverse impact on open space preservation in the State. Such objective could be accomplished with Board analysis of the location of the site and the character of the surrounding land and land uses. Implementing the above recommendation regarding demonstration of all land use and environmental permits will help achieve this objective as well as any local governing agencies having authority over land use and permits will implicitly have considered such impacts in issuing the subject permit or approval.





We appreciate that Staff has put significant effort and time into considering the sound implementation of Subsection (r), thank the Board and Staff for the opportunity to comment, and will continue to stay engaged in this matter, of utmost importance to our companies, JB MDL, and the State of New Jersey.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bradford T. Nordholm".

Bradford T. Nordholm  
Co-Head and Senior Managing Director  
Starwood Energy Group Global Inc.

A handwritten signature in black ink, appearing to read "Jim Gordon".

Jim Gordon  
President  
Energy Management, Inc.