



## NEW JERSEY BOARD OF PUBLIC UTILITIES

[www.nj.gov/bpu/](http://www.nj.gov/bpu/)

### REQUEST FOR PUBLIC COMMENT

The New Jersey Board of Public Utilities ("Board") has adopted amendments to its rules governing the Renewable Portfolio Standards ("RPS"), to advance the "solar transition" outlined in the Board's December 6, 2007 Order. Some of the comments that the Board received on the proposal of those amendments concerned the elimination of the requirement that Solar Renewable Energy Certificates ("SRECs") be based only on electricity generated by a solar generation facility located on a customer-generator's premises, accompanied by the retention of the requirement for the generation facility to be connected to an electric distribution system serving New Jersey customers.

The retention of the requirement for connection to the local distribution system reflected the Board's concern about the importance of clean local electric generation in mitigating congestion on the electric transmission system. Some commenters suggested that solar electric generation facilities connected to the electric transmission system in New Jersey could also mitigate congestion on the transmission system in a manner that would help to preserve or improve the reliability of the supply of electricity in New Jersey. Those commenters were also concerned that the limitation in the rules would discourage investment in new large-scale solar generation facilities in New Jersey, because of the difficulty in connecting such generators to the distribution system rather than the transmission system.

In light of these concerns, the Board hereby solicits public comment on the appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system to earn/own SRECs. Specifically, the BPU request comments on the following issues:

1. Whether, to what extent, and why the interconnection requirement to NJ distribution lines under the Renewable Portfolio Standard ("RPS") rules for solar could hinder the development of larger solar projects in NJ.
2. Possible ways to eliminate such a hindrance (if any) while still ensuring that NJ gets the local benefits referenced in the Rulemaking.

The comment period will close on **April 24, 2009**. All comments should be submitted electronically, in Microsoft Word format, or in a format that can be easily converted to Word format to: [OCE@bpu.state.nj.us](mailto:OCE@bpu.state.nj.us). After reviewing public comments, the Board will decide on whether to propose an amendment that would further broaden eligibility of solar electric generation systems to earn SRECs.

A handwritten signature in black ink, appearing to read "Kristi Izzo".

Kristi Izzo  
Secretary of the Board

Dated: 3/9/09



Advanced Solar Products, Inc.

415 Route 31 north, Bldg. 2, Ringoes, NJ 08551  
sales@advancedsolarproducts.com

609-466-4495 off.  
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April 24, 2009

Ms. Kristi Izzo  
Secretary  
New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ

**Re: New Jersey's Renewable Energy Manufacturer's Incentive Proposal - Draft 4/17/09**

Dear Ms. Izzo:

Advanced Solar Products appreciates this opportunity to comment on the proposed Renewable Energy Manufacturer's Incentive. First, I would like to express support for the proposed incentive. I believe that if adopted it will be the best step New Jersey has taken to date to bring renewable energy manufacturing into the state. I can personally attest that this particular type of incentive is well-designed not only to attract a manufacturer to New Jersey, but also to keep the manufacturer here. For a manufacturer the incentive is "ready when you are" – there isn't a lot of red tape, or waiting, or doubt – you either qualify or you don't; that's why it is attractive. The incentive keeps the manufacturer in New Jersey because it only continues as long as the product is manufactured in New Jersey. Rather than a lump sum given by the state based on the hope that the manufacturer will remain for the long term, the incentive is paid over time, in amounts proportional to the amount of product produced and sold within the state. Thus, there is a good degree of certainty that the payout will be in proportion to the benefit for the state.

As a New Jersey manufacturer in the solar power industry, I am writing to request that the Renewable Energy Manufacturer's Incentive include PV mounting systems, a feature not contained in the above-referenced draft.

Advanced Solar Products is currently manufacturing and shipping a PV mounting system, a patent-pending design called the Solstice mount. We have already installed about 3 MW of PV systems in New Jersey using this mounting system. It has been very successful, and offers substantial advantages in regard to PV system cost, design flexibility, and performance. We are ready to begin a substantial expansion in manufacturing and sales of this system. This will include expanded use in our own projects; sales regionally and nationwide to the PV industry; and soon global sales with strategic partners.

ASP has been manufacturing part of the system in New Jersey, and part of it out of state. We currently are looking into having it manufactured entirely in New Jersey, right down to and including buying aluminum from a renewably-fueled aluminum mill in the state.

However, we have also been approached by several vendors from out of state who are competing vigorously to capture this work. Some are located in states also vying forcefully for renewable manufacturing with targeted and fast-acting incentives. We plan to make a decision within a month or two regarding these choices, and it is important for us to understand whether incentives will be available for New Jersey manufacturing. The only New Jersey incentive that, in our opinion, will offer value to our company is the proposed Renewable Energy Manufacturer's Incentive.

We have not yet calculated accurate figures for the difference in cost between manufacturing in New Jersey and manufacturing in other states, but our current estimate is that in terms of the raw manufactured cost of the product, the difference is expected to be about \$0.02 to \$0.03 per watt. Furthermore, we would value the expected incentives offered by other states, taking into account timing and probability, at approximately \$0.05 to \$0.10 per watt. However, if it can be justified, I want to keep the manufacturing of this product in New Jersey.

We believe that there is a sound policy justification for putting mounting systems on a similar footing with inverters. The major pieces of a PV system are modules, inverters, and mounting systems. Conceptually and economically, mounting systems occupy a similar position in the PV industry compared to inverters. The wholesale cost of inverters is generally in the range of \$0.30 to \$0.80 per watt, depending primarily on size. The wholesale cost of mounting systems is generally in the range of \$0.40 to \$0.90 per watt, depending primarily on type. Therefore, inverters and mounting systems occupy a similar cost fraction in PV systems, with mounting systems being somewhat higher (PV modules, for comparison, are about \$2.00 to \$3.25 per watt). The design of mounting systems and inverters both have a strong effect on labor cost (this is especially true for mounting systems). The design of mounting systems and inverters also both have significant effects on PV system performance. In both mounting systems and inverters, there is a great deal of innovation going on, with new and advantageous products coming to market.

Due to the similarity between inverters and mounting systems in cost and other qualities, mounting systems could simply be added to inverters as a qualifying technology for the incentive which appears in the draft as Table 3. Thus, making this addition need not add complexity to the policy.

I urge the Board to adopt the Renewable Energy Manufacturer's Incentive, and I hope that the Board and staff will consider making the addition of mounting systems to the proposed incentive.

Sincerely,

A handwritten signature in black ink, appearing to read "Lyle Rawlings". The signature is written in a cursive, flowing style.

Lyle K. Rawlings, P.E.  
President & CEO

**Old Mill Power Company**  
*Your Renewable Resource Electric Company*  
2530 Wyngate Road Charlottesville, VA 22901-8927

VIA EMAIL

April 24, 2009

Kristi Izzo  
Secretary of the Board  
Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

Subj: Comments of Old Mill Power Company in the matter of the appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system to earn/own Solar Renewable Energy Certificates (SRECs, NJ BPU Request for Public Comment, 3/9/09).

Dear Ms. Izzo:

Please accept for filing the attached Comments of Old Mill Power Company (Old Mill) pursuant to the Board's March 9, 2009 Request for Public Comment (undocketed at this time) in the matter of the appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system to earn/own Solar Renewable Energy Certificates (SRECs).

Old Mill Power Company: a) understands and appreciates the important policy question the Board is seeking comments on; b) has no position regarding the what the policy should be as the Company believes it will be able to continue to operate as a dealer of NJ SRECs regardless of the Board's final position on the matter; but c) offers the following comments on how the Board's final order in this matter should be worded in order to avoid perpetuating misunderstandings that currently exist in the marketplace regarding NJ SRECs and Behind-the-Meter (BTM) systems:

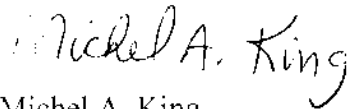
On November 23, 2008, Old Mill timely filed, via email, the attached comments in Docket No. 8060385. In the matter of the Use of PJM-EIS GATS for Issuance, Tracking and Trading of Class I BTM Renewable Energy Certificates (RECs) for Use in the Board's Renewable Portfolio Standards. The purpose of Old Mill's comments in that case was to draw the Board's attention to several errors in the Board's October 23, 2008 Notice in that case that, if carried over into the Board's final order in that matter, would further confuse stakeholders, including, potentially, Board members, regarding such matters as the name of the PJM Generation Attribute Tracking System (GATS), who owns it, what it does, and what Class I systems--solar systems only, or solar systems plus systems using technologies other than solar--the Board intended its rule to apply to.

Note that the Board's December 8, 2008 Final Order in that earlier case (Docket No. 8060385): a) incorrectly stated that "One stakeholder submitted written comments to the Board: Atlantic

City Electric,"); b) made no mention of Old Mill's submission, whether deemed timely or not; and, most importantly, c) perpetuated the very errors Old Mill sought to avoid by bringing these matters to the Board's attention.

As the Board is now revisiting the issue of what systems should receive credit for compliance with the NJ Renewable Energy Portfolio Standards, Old Mill resubmits its November 23, 2008 comments for the Board's consideration in the current case and reminds the Board to choose its words carefully when issuing its final order in the current case in order to avoid further misunderstandings and in order to avoid repeating some of the errors contained in its December 8, 2008 Final Order.

Respectfully submitted,

A handwritten signature in black ink that reads "Michel A. King". The signature is written in a cursive style with a large, prominent "M" and "K".

Michel A. King

President

Office: 1-434-979-WATT(9288)

Email: [mitchking@oldmillpower.com](mailto:mitchking@oldmillpower.com)

**Old Mill Power Company**  
*Your Renewable Resource Electric Company*  
2530 Wyngate Road Charlottesville, VA 22901-8927

VIA EMAIL

November 23, 2008

Kristi Izzo  
Secretary of the Board  
Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

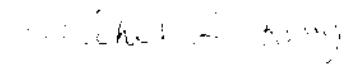
Subj: Comments of Old Mill Power Company in Docket No. E008060385, In the matter of the Use of PJM-EIS GATS for Issuance, Tracking and Trading of Class I BTM Renewable Energy Certificates (RECs) for Use in the Board's Renewable Portfolio Standards

Dear Ms. Izzo:

Please accept for filing the attached Comments of Old Mill Power Company pursuant to the Board's October 28, 2008 Notice in Docket No. E008060385, In the matter of the Use of PJM-EIS GATS for Issuance, Tracking and Trading of Class I BTM Renewable Energy Certificates (RECs) for Use in the Board's Renewable Portfolio Standards.

Thank you.

Respectfully submitted,



Michel A. King  
President  
Office: 1-434-979-WATT(9288)  
Email:

## Comments of Old Mill Power Company

These Comments of Old Mill Power Company (the "Comments") are hereby submitted to the New Jersey Board of Public Utilities (the "Board") pursuant to the Board's October 28, 2008 Notice in Docket No. E008060385, In the matter of the Use of PJM-EIS GATS for Issuance, Tracking and Trading of Class I BTM Renewable Energy Certificates (RECs) for Use in the Board's Renewable Portfolio Standards (the "Notice").

Old Mill Power Company ("Old Mill") is a Charlottesville, Virginia-based corporation that has been a dealer in renewable energy and Renewable Energy Certificates (RECs) used by many load serving entities for compliance with New Jersey's Renewable Energy Portfolio Standards since those standards were first promulgated in 1999. Old Mill supports the transfer of authority for issuing and tracking Behind-the-Meter (BTM) RECs from a corporation currently under contract to the Board to PJM Environmental Information Services, Inc. However, Old Mill believes the Notice contains several minor errors that may, or may not be, purely technical, but, in any case, should be avoided in the Board's final order on this matter, lest the accumulation of such minor errors eventually become confusing to stakeholders and/or inadvertently amount to something substantive that was not intended by the Board.

### Technical Errors in the Notice that Should be Avoided in the Final Order

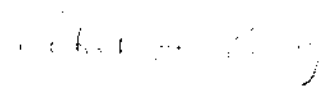
1. The Notice refers to a "*Generator* Attribute Tracking System" [emphasis added] operated by an affiliate of PJM identified in the Notice as "PJM Environmental Information *Service*" [emphasis added]. The correct name for the tracking system is the "*Generation* Attribute Tracking System" [emphasis added] and the correct name for the PJM affiliate that operates such a tracking system is "PJM Environmental Information *Services, Inc.*" [emphasis added].
2. The Notice abbreviates the PJM affiliate's name as "PJM-EIS", whereas the affiliate typically uses the abbreviation "PJM EIS" [without the hyphen].
3. The Notice states that the Board will consider issuing an order approving the use of PJM EIS RECs for "*New Jersey-based* behind-the-meter *facilities*" [emphasis added], whereas the Clean Energy Order dated 8/31/05 that initially defined the terms "behind-the-meter" and "BTM" (the "GATS Order")<sup>1</sup> referred to BTM "*systems*" [emphasis added] rather than "facilities" and defined the geographic scope as, "A BTM system means any Class I renewable energy system that is interconnected and net meters the electricity generated from the renewable energy system into New Jersey's electric distribution system." Old Mill believes the GATS Order specified the geographic scope for BTM systems in terms of New Jersey's electric distribution system rather than New Jersey's geo-political boundary in order to minimize the risk of running afoul of the U. S. Constitution's interstate commerce clause. Old Mill recommends that the Board use the same geographic scope language as in the GATS Order when identifying which BTM systems will be affected by the proposed new order.

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<sup>1</sup> Non-docketed Clean Energy Order dated 8/31/05, In the matter of the Authorization to Use Class I and Class II Renewable Energy Certificates Issued by PJM-Environmental Information Services, Inc. for Compliance with New Jersey's Renewable Portfolio Standards (the "GATS Order").

4. The caption for the docketed case refers to the PJM EIS GATS as a system for "Issuance, Tracking and *Trading* of Class 1 BTM Renewable Energy Certificates (RECs)" [emphasis added]. As a member of the stakeholder group that initially defined the scope and capabilities of the PJM EIS GATS, as well as a long-time subscriber to the GATS, Old Mill knows that the GATS is *not* designed, nor does it function as, a REC *trading* system: it's a system for issuing and tracking RECs, but not trading them. The Board should avoid identifying the GATS as a REC trading system.

Respectfully submitted on behalf of OLD MILL POWER COMPANY by



Michel A. King  
President  
Old Mill Power Company  
2530 Wyngate Road  
Charlottesville, VA 22901-8927  
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November 23, 2008



## **NEW JERSEY BOARD OF PUBLIC UTILITIES**

### **COMMENTS OF CONSOLIDATED EDISON SOLUTIONS, INC. AND CONSOLIDATED EDISON ENERGY, INC. ON SOLAR RENEWABLE ENERGY CERTIFICATE REQUIREMENTS**

In a Request for Public Comment dated March 9, 2009, the New Jersey Board of Public Utilities (“Board”) asked interested parties to provide written comments about whether the current interconnection requirement to NJ distribution lines under the Renewable Portfolio Standard (“RPS”) rules for solar generation were adversely impacting the development of solar projects in NJ and if so, how to have a broader interconnection requirement while still maintaining local benefits from such projects. Consolidated Edison Solutions, Inc. (“CES”) and Consolidated Edison Energy, Inc. (“CEE”) submit the following comments:

#### **CORPORATE BACKGROUND**

CES is a retail energy provider serving more than 200,000 residential, commercial and industrial customers throughout the Mid-Atlantic, Northeast and Texas. In addition to retail energy supply, CES offers its customers a number of energy related services, including demand response and energy conservation services, renewable energy and other distributed energy products and maintains an office in Cherry Hill, New Jersey. CEE is an energy trading company, supplying electricity to utilities and competitive retail energy providers in the New York ISO, ISO New England, and PJM, and is an active participant in New Jersey’s BGS auction process.

#### **GENERAL COMMENTS**

CES and CEE support the expansion of the interconnection requirement to allow solar projects connected to transmission facilities in New Jersey to qualify as Solar Renewable Energy Certificates (“SRECs”). From a practical perspective, allowing more NJ based solar facilities to qualify for SRECs will help increase competition in the market, reduce customer costs, and allow for more solar installations to be developed in the State.

#### **RESPONSES TO SELECT QUESTIONS POSED IN THE MARCH 9, 2009 REQUEST FOR PUBLIC COMMENT**

*Q1 – Whether, to what extent, and why the interconnection requirement to NJ distribution lines under the Renewable Portfolio Standard (“RPS”) rules for solar could hinder the development of larger solar projects in NJ.*

A1 – While the previous Board decision to allow distribution-connected facilities to qualify for SRECs is a positive step and allows some grid-connected facilities to participate in the SREC market, it still excludes solar facilities connected directly to transmission facilities. While this may not be a prevalent interconnection, allowing for transmission connected facilities would provide for solar installations both at industrial facilities such as power plants and large manufacturing installations where the primary connection (or perhaps the only connection) may be to transmission-level facilities.

***Q2 – Possible ways to eliminate such a hindrance (if any) while still ensuring that NJ gets the local benefits referenced in the Rulemaking.***

A2 – Connecting solar panels to most transmission facilities would still provide significant “local benefits” to New Jersey ratepayers as injections at 69 kV, 115 kV and 138 kV facilities would be effective at relieving congestion and line losses and would also provide significant reliability benefits to that portion of the electrical grid. From a practical perspective, the cost of interconnecting facilities at higher voltages (230 KV and 500 KV) is likely to be too prohibitive for solar installations so the Board should not be concerned that a relaxation of interconnection requirements would lead to a proliferation of installations without “local benefits”.

**CONCLUSION**

As discussed above, CES and CEE recommend that New Jersey expand the interconnection requirement to allow solar facilities interconnected to transmission-level facilities in New Jersey to qualify for SRECs.

Respectfully Submitted,

**/s/ Stephen Wemple**

Stephen Wemple  
Vice President, Regulatory Affairs  
Consolidated Edison Competitive Shared Services, Inc.  
For Consolidated Edison Solutions, Inc. and Consolidated Edison Energy, Inc.  
701 Westchester Ave. Suite 201 West  
White Plains, NY 10604  
914-993-2149

April 24, 2009

April 24, 2009

**BY ELECTRONIC DELIVERY**

Kristi Izzo, Secretary  
Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

Re: RPS Rules for Solar

Dear Secretary Izzo:

This letter is submitted to the Board of Public Utilities (“Board”) on behalf of Atlantic City Electric Company, Jersey Central Power & Light Company, Public Service Electric and Gas Company and Rockland Electric Company (collectively, the “EDCs”) in response to the request for public comments, dated March 9, 2009 (“Request for Comments”), concerning the current requirement under New Jersey’s Renewable Portfolio Standards, N.J.A.C. 14:8-2.1 et seq., that solar facilities be interconnected to an electric distribution system serving New Jersey customers in order to qualify for the issuance of Solar Renewable Energy Certificates (“SRECs”).

In particular, the Request for Comments seeks comments on the following issues:

1. Whether, to what extent, and why the interconnection requirement to NJ distribution lines under the Renewable Portfolio Standard (“RPS”) rules for solar could hinder the development of larger solar projects in NJ.

2. Possible ways to eliminate such a hindrance (if any) while still ensuring that NJ gets the local benefits referenced in the Rulemaking.<sup>1</sup>

By way of background, N.J.A.C. 14:8-2.9(d) currently requires that for electric generation, including solar generation, to qualify for issuance of a renewable energy certificate, including SRECs, it must be “produced by a generating facility that is interconnected with an electric distribution system . . . that supplies New Jersey.” Both in the Request for Comments and in its response to Comment 10 in the Rulemaking (*see* 41 N.J.R. at 1262 (March 16, 2009)), the Board indicated that the impact on mitigating congestion on the transmission system, and thereby enhancing the reliability of electricity supply, would be a principal consideration in the Board’s assessment of the advisability of modifying N.J.A.C. 14:8-2.9(d) to allow solar facilities that interconnect with an EDC’s transmission system, in addition to its distribution system, to qualify for the issuance of SRECs.

The EDCs support the development of solar generating resources and believe that the interests of all stakeholders will be furthered by allowing the development of both smaller and larger facilities. In this way, the State’s goals concerning solar generation, increased reliability of supply and reduction of greenhouse gas emissions will be addressed in the most cost-effective manner. In particular, it has been recognized that allowing the development of larger solar systems will contribute to a more cost-effective approach to meeting the State’s aggressive solar

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<sup>1</sup> The referenced “Rulemaking” refers to amendments to the RPS proposed by the Board on June 18, 2008 (40 N.J.R. 3586(a)) and adopted on February 17, 2009 (as published on March 19, 2009 (41 N.J.R. 1261)), as part of the Board’s efforts to advance the “solar transition” outlined in the Board’s December 6, 2007 Order.

goals. Indeed, the December 8, 2004 Economic Impact Analysis of New Jersey's Proposed 20% Renewable Portfolio Standard performed by the Center for Energy, Economic & Environmental Policy ("CEEEP Report") assumed no restriction on the size of solar generating systems (or wind systems for that matter) and, in fact, assumed that the RPS would be met, at least in part, with larger systems (*see, e.g.*, CEEEP Report, Table 2.11, p. 26, which shows the number of 8 MW solar plants necessary to achieve the 20% RPS goal). Without these larger systems, the underpinnings of the CEEEP Report as to the cost-effectiveness of the 20% RPS goal are invalidated, as the cost of meeting the 20% goal will be significantly higher than anticipated.

Moreover, in its Notice dated February 11, 2009, the Board itself stated that the elimination of the 2 MW entity cap that had previously been established as part of the SREC-Only Pilot program<sup>2</sup> would "help to harness market forces to promote cost-effective development of solar electric generation facilities." This view was endorsed by the comments of the Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel") in connection with the Rulemaking. The Board described Rate Counsel's Comment 11 as supporting expanded SREC eligibility because, in Rate Counsel's view, "larger [solar] units have an important role to play in achieving the Board's clean energy and renewable energy goals and have lower unit costs, thereby creating potential financial benefits for ratepayers relative to smaller projects" (*see* 41 N.J.R. at 1262 (March 16, 2009)).

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<sup>2</sup> As part of the same Rulemaking, the Board also eliminated the requirements that SRECs be based only on electricity generated on customer-generators' premises and that SREC-eligible solar generation be owned only by customer-generators eligible for net metering, so as to further expand the potential sources of SRECs.

However, the existing requirement in N.J.A.C. 14:8-2.9(d), that solar generating facilities be interconnected with an EDC's distribution system that supplies New Jersey customers in order to qualify for the issuance of SRECs, severely hinders the development of these more cost-effective larger solar facilities. For operational reasons, systems over roughly 2 MW (and certainly systems over the 8 MW included in the analysis in the CEEEP Report) will, in many circumstances, not be able to interconnect at lower voltages due to the design of an individual EDC's delivery system. Generation sources that exceed a certain size, if interconnected at lower distribution voltages, could create current flows<sup>3</sup> that exceed circuit limits, causing voltage regulation, system planning and fault protection issues that are avoided at higher voltages. Voltage regulation on the distribution system is generally managed using controls in substations on individual circuits based on the power flow leaving the substation. Such controls will not perform, or will not perform reliably, in the event power flows in the opposite direction. Inverter-based solar generating systems with inverters certified in accordance with UL 1741, however, are designed with protections such that voltage swings directly impact and interrupt their operation to avoid back-feeding into the utility's system when the utility source has been interrupted. Interconnection of generating systems on the distribution system that are large enough to impair voltage regulation could be inadvertently affected by this protection system, which could interfere with a solar generator's reliable operations, and would likely exacerbate

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<sup>3</sup> The amperage (A) associated with any generator is based on the wattage (W) divided by voltage (V) (or by the product of voltage and the square root of three for three phase systems). Amperage in excess of approximately 200A approaches capacity limits for a 4.16 kV system. Amperage associated with a 2 MW three phase generator connection at 4.16 kV would be 277A, while the same generator connected at 34.5 kV would involve only approximately 33A.

distribution system reliability concerns and lead to service degradation, rather than help. However, as noted above, without these larger projects, the cost of achieving the RPS goals may well be prohibitive.

This hindrance on the development of larger solar projects can be substantially ameliorated simply by allowing large solar projects, that would need to interconnect with an EDC's transmission system, to qualify for the issuance of SRECs. Such a change to the RPS rules will not lessen the local benefits to be derived from solar generation, which are characterized in the Request for Comments and the Rulemaking as the mitigation of congestion on the transmission system in a manner that would help to preserve or improve the reliability of the supply of electricity in New Jersey. In fact, the reliability value of solar generation and its ability to mitigate congestion on the transmission system depends more on the system's capacity, operational characteristics and proximity to load pockets than on whether the point of interconnection is on an EDC's distribution or transmission system (*see, e.g.*, CEEEP Report, p. 65, which states that to "maximize the *reliability* value" of New Jersey's investment in solar, the systems should be located on "the *transmission* and distribution system (T&D) in load pockets" (emphasis added)). Thus, in light of the acknowledged congestion in all four New Jersey transmission zones,<sup>4</sup> strategically located distributed generation resources can provide important relief, whether interconnected at transmission or distribution voltages.

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<sup>4</sup> *See* 2008 PJM State of the Market Report from Monitoring Analytics, the Independent Market Monitor for PJM, (Vol. II, Sec. 7 – Congestion; Mid-Atlantic Region Congestion – Event Summaries by Transmission Zone, beginning on page 362).

These issues also raise questions about the equitable treatment of customers served at transmission voltages. These customers pay societal benefits charges as well as the costs associated with meeting the RPS (through the cost of energy supply), but, under the current rules, they are unable to participate in the New Jersey solar market as a practical matter because any solar generating system that they might consider constructing would be ineligible for the creation of SRECs. The affected customers would include government facilities, military bases, and major commercial and industrial customers, all of which are critical elements of the New Jersey economy and essential participants for achievement of the Energy Master Plan goals. The State has aggressive goals for solar generation, targeting nearly 1,800 MW by 2020. Allowing solar projects that interconnect with an EDC at transmission voltages will help the State reach this targeted capacity.

The proposed modifications can be implemented through a straightforward revision of N.J.A.C. 14:8-2.9(d) to allow a generating facility located in New Jersey to interconnect with an electric distribution system “or with an electric distribution company”, in each case as defined in N.J.A.C. 14:4-1.2, not N.J.A.C. 14:8-2.2. Because it is important that these issues be addressed in order to foster the necessary solar development in New Jersey, the EDCs suggest that the Board move forward with the limited amendments required to allow interconnection at transmission voltages on a fast track, without combining them with any other amendments to the RPS or otherwise that might lengthen the process, in a process similar to the recently enacted amendments addressing the definition of “annualized period” for net metering purposes. In the interim, the Board could begin the transition to allowing transmission level solar projects by



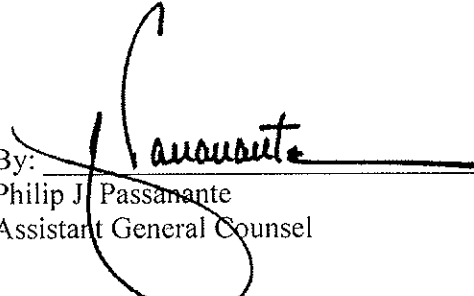
Kristi Izzo, Secretary  
April 24, 2009  
Page 7

exercising its authority under N.J.A.C. 14:8-2.9(d) to waive the requirement that a solar facility be interconnected with an electric distribution system. However, it must be understood that an interconnection with the transmission system will require that the solar project must utilize the PJM generator interconnection process, unless the project intends to net meter or use all of the generated power internally. Even interconnections with the distribution system, where the solar project plans to sell its power into PJM's wholesale markets, would require the project to go through the PJM generator interconnection process.

Thank you for this opportunity to comment on these important matters.

Respectfully submitted,

ATLANTIC CITY ELECTRIC COMPANY

By:   
Philip J. Passanante  
Assistant General Counsel

PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY

By: \_\_\_\_\_  
Gregory Eisenstark  
Assistant Corporate Rate Counsel

JERSEY CENTRAL POWER & LIGHT  
COMPANY

By: \_\_\_\_\_  
Marc B. Lasky  
Morgan, Lewis & Bockius LLP

ROCKLAND ELECTRIC COMPANY

By: \_\_\_\_\_  
John L. Carley  
Assistant General Counsel

Kristi Izzo, Secretary  
April 24, 2009  
Page 7

exercising its authority under N.J.A.C. 14:8-2.9(d) to waive the requirement that a solar facility be interconnected with an electric distribution system. However, it must be understood that an interconnection with the transmission system will require that the solar project must utilize the PJM generator interconnection process, unless the project intends to net meter or use all of the generated power internally. Even interconnections with the distribution system, where the solar project plans to sell its power into PJM's wholesale markets, would require the project to go through the PJM generator interconnection process.

Thank you for this opportunity to comment on these important matters.

Respectfully submitted,

ATLANTIC CITY ELECTRIC COMPANY

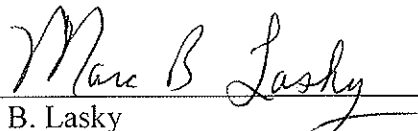
PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY

By: \_\_\_\_\_  
Philip J. Passanante  
Assistant General Counsel

By: \_\_\_\_\_  
Gregory Eisenstark  
Assistant Corporate Rate Counsel

JERSEY CENTRAL POWER & LIGHT  
COMPANY

ROCKLAND ELECTRIC COMPANY

By:  \_\_\_\_\_  
Marc B. Lasky  
Morgan, Lewis & Bockius LLP

By: \_\_\_\_\_  
John L. Carley  
Assistant General Counsel

Kristi Izzo, Secretary  
April 24, 2009  
Page 7

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Thank you for this opportunity to comment on these important matters.

Respectfully submitted,

ATLANTIC CITY ELECTRIC COMPANY

PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY

By: \_\_\_\_\_  
Philip J. Passanante  
Assistant General Counsel

By:  \_\_\_\_\_  
Gregory Eisenstark  
Assistant Corporate Rate Counsel

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Page 7

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ATLANTIC CITY ELECTRIC COMPANY

PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY

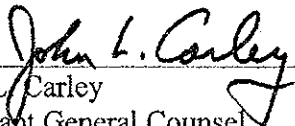
By: \_\_\_\_\_  
Philip J. Passanante  
Assistant General Counsel

By: \_\_\_\_\_  
Gregory Eisenstark  
Assistant Corporate Rate Counsel

JERSEY CENTRAL POWER & LIGHT  
COMPANY

ROCKLAND ELECTRIC COMPANY

By: \_\_\_\_\_  
Marc B. Lasky  
Morgan, Lewis & Bockius LLP

By:  \_\_\_\_\_  
John L. Carley  
Assistant General Counsel

## Response to the New Jersey Board of Public Utilities Request for Comments Regarding Eligibility of Transmission Level Interconnected Solar Systems to earn SRECs

VIA EMAIL TO [OCE@bpu.nj.us](mailto:OCE@bpu.nj.us)

The board has solicited public response to the question of whether transmission-connected solar systems should be eligible for earning SRECs. We thank the board for engaging public input on this important question, and offer the following feed-back for consideration. We believe this issue could potentially have a large impact on the existing SREC market, and we therefore urge timely response and formal policy clarification on this issue.

### Position Summary:

We believe that transmission-connected solar systems should NOT be eligible to earn SRECs because a) that expansion of the market is not needed to meet the RPS requirements b) it is counter to the intent of the existing SREC market framework, c) it has significant potential to be highly disruptive to the market, and d) including such market expansion does not bring significant additional rate-payer advantage.

- **Not Needed:** The existing market allows applications (both net metered and non-net-metered) that are connected to the distribution system. That interconnection capability is generous, and is naturally able to support systems up to approximately 20MW in many cases. The existing provisions are therefore fully supportive of a wide range of system applications, including substantial large scale applications that are cost effective. Note that a 20MW system would require at least 100 acres of space, so enabling larger systems are relatively impractical (and rare) in a highly developed state like NJ.
- **Inconsistent:** The SREC market is based on the presumption that solar systems merit the economic premium inherent in SRECs due to their role as a highly distributed resource serving relatively localized loads. Allowing transmission-connected systems to earn SRECs enables systems that are much more “centralized” in nature, and therefore fundamentally incompatible with the economic premium associated with SRECs. It is worth noting that the legislative change made to net metering last year (2008) specifically specified that non-net-metered systems must be distribution-connected, and we therefore believe there is clear legislative intent that SRECs are targeted to highly distributed systems (specifically, distribution connected) only.
- **Disruptive:** Allowing transmission-connected systems enables extremely large systems, with essentially no limit. A 50MW solar system would therefore become possible, and in a market that only grows by 50MW a year, the market then faces scenarios where a single project (or small group of projects) consumes the entire RPS demand for a given year. Even enabling such large systems would therefore be highly disruptive to the market, especially for investors that are considering future project investments, regardless of whether such



large systems actually realized. There is therefore great risk to the operation of the desired competitive SREC market if transmission-connected systems are approved.

- **No Advantage:** enabling transmission-connected systems (typically larger than 20MW) might bring some small incremental benefit due to their larger scale (\$/watt), but this difference is not large given that the existing distribution-connected market already allows very large and highly cost effective applications. The incremental gain in economics for these extremely large (>20MW) projects is therefore minor, and does not compensate for the substantial negatives that transmission-connected systems would introduce (as per the above points).

For these reasons, we believe there is little merit to approving transmission-connected system, and the potential to in fact cause significant market harm. We therefore urge the board to NOT allow transmission-connected systems, and retain the existing distribution-only market structure.

#### **Detailed Comments:**

The Board has solicited responses to 2 specific questions:

1. "Whether, to what extent, and why the interconnection requirements to NJ distribution lines under the Renewable Portfolio Standard (RPS) rules for solar could hinder the development of larger solar projects in New Jersey"
2. "Possible ways to eliminate such a hindrance (if any) while still ensuring that NJ gets the local benefits referenced in the Rulemaking"

#### **Response to Question #1:**

It is the opinion of the undersigned that the current Rule in place, which requires a system to be interconnected to NJ Distribution lines DO NOT hinder the development of large solar projects in New Jersey. Current data from PJM indicates that there are 4 large projects totaling over 45 MW in development being planned in New Jersey all of which conform to the current distribution line regulation. Given that the total MW installed in New Jersey to date is approximately 80MW, and that there is now 45MW of large projects being planned, which is over 50% of the total installed capacity, it would be hard to state that the distribution line regulation is hindering the development of large projects in New Jersey.

PJM data also suggests that it is fact the level of engineering, expense, and time associated with the PJM Interconnection process that is the greater of limiting factors in the size of projects being developed in New Jersey. PJM has an expedited "Small Generation Interconnect" application process for all generation projects under 20MW's. Coincidentally all the large solar projects currently seeking interconnection approval from PJM are 20MW or smaller. This would indicate that it is not the distribution line regulation that limits application size, but rather the 20MW cutoff for the PJM application process.

Lastly a second natural limiting factor (though not a hindrance) is available land to build larger the 20MW's in New Jersey. A 20MW solar project would require approximately 100 – 250 Acres, depending on the technology, including necessary setbacks, and fencing. Vacant, contiguous, land of that size is quite scarce in New Jersey, and as such most large solar projects will naturally be 20MW's or less due to availability of land.


Response to Question #2:


It is our opinion that since we do not believe that the current regulation poses a hindrance to large project development, then NO corrective action is necessary.


Furthermore it is our opinion that transmission level interconnected projects would be in the over 20MW category and due to land requirements would be located in a geographic region that offered sufficient land mass to encompass such a large project, as such this would likely be in the far corners of our state, out of populated areas, and the local benefits that SREC's were designed to support would be greatly diminished.

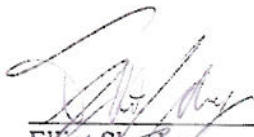
Summary: It is our belief that the local distributed generation benefits that SREC's were designed to support would be greatly diminished in a Transmission Level Interconnected project, and as such we DO NOT support the right of these projects to qualify for SREC's.


Very Truly Yours,


  
Jim Torpey  
SunPower Corporation  
Trenton, NJ


  
Mark Warner  
SunFarm Network  
Flemington, NJ

  
Scott Weiner  
Resource Energy Systems  
Rochelle Park, NJ

  
Elliot Shanley  
PV One  
Shrewsbury, NJ

  
Fred Zalcman  
SunEdison

  
Rick Brooke  
Jersey Solar  
Hopewell, NJ

  
Gaurav Naik  
GeoGenix  
Eatontown, NJ

April 24, 2009



John D. Jones  
Chief Operating Officer  
Lincoln Renewable Energy, LLC  
1 N. Wacker Drive, Ste. 4800  
Chicago, IL 60606

April 24, 2009

New Jersey Board of Public Utilities  
Two Gateway Center (8<sup>th</sup> floor)  
Newark, NJ 07102

Re: Request for Public Comment dated March 9, 2009

The Board has requested public comment regarding the impact of the current policy requiring that projects generating SRECs be interconnected to NJ distribution lines.

Lincoln Renewable Energy (Lincoln) is active in the development of utility scale PV and wind projects throughout North America, and is actively pursuing the development of PV projects in New Jersey. As such, Lincoln is pleased to have the opportunity to provide comment on such a vital issue.

It is clear that many policy objectives are met by requiring that such facilities be based in New Jersey, particularly the alleviation of congestion on the transmission system. However, the requirement that they be interconnected to distribution wires is an unnecessary impediment to the development of large scale solar projects in the state.

The interconnection requirement to NJ distribution lines under the RPS rules for solar is a hindrance to the development of large scale PV facilities for a number of reasons:

- Increased project cost - Interconnection to lower voltage substations effectively limits project size. This results in higher project costs (as much as 10% higher), and therefore, higher prices to the consumers.
- Reduced energy production – Solar intensity is not uniform across New Jersey. The solar irradiance in the northern portion of the state is over 20% lower than in the southern part of the state. Interconnection to transmission facilities managed by PJM would make contracting with utilities in areas of the state less suitable for utility scale solar development (PSEG and JCP&L) much more straightforward, substantially lowering the cost of compliance with the RPS for customers in those areas.
- Public impacts - Distribution systems are typically found in more populated areas. As a result, there are much fewer suitable parcels of land (>20 acres) near distribution substations than near transmission substations. This has the dual negative impacts of driving up costs due to the small scale of such projects, and invites land use concerns in urban areas.

In sum, it is Lincoln's view that the goals set forth by the Board in the Solar Transition Order are furthered by eliminating the requirement that such projects be interconnected to a distribution system. Again, we appreciate the opportunity to comment, and are happy to address any further questions that you may have.

Thank you,

John D. Jones





PO Box 280  
Princeton, NJ 08542  
(609) 613-0794

April 24, 2009

Ms. Kristi Izzo  
Secretary  
New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ

**MSEIA Comments on the appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system to own/earn SRECs.**

1. Whether, to what extent, and why the interconnection requirement to NJ distribution lines under the Renewable Portfolio Standard (“RPS”) rules for solar could hinder the development of larger solar projects in NJ.

The interconnection requirement referenced above does not and will not materially hinder the development of larger solar projects in NJ for years to come. The substations in New Jersey range in size from about 20 MW to over 100 MW in their capacity to transform transmission voltage to voltages for local distribution. These substations have a total capacity on the distribution side of the substation of in excess of 20,000 MW. This is due to the fact that recorded peak demand for electricity in New Jersey is about 20,000 MW on a hot summer day. The distribution system has a safety factor and thus has additional capacity beyond this level.

To date, the largest solar electric systems operating in New Jersey have been 2 MW in size, and were able to be connected to the incoming electric service of the facility where they are located. To the best of our knowledge, no solar electric system has yet had to connect directly to a local substation because its output was greater than the local electric distribution wires would accept. Furthermore, New Jersey’s substations have the required capacity to connect much larger systems.

Thus the capacity exists today to connect solar electric systems as large as 10 MW, and in many cases a multiple of 10 MW, on the distribution side of the existing substations in New Jersey. Solar generation systems have yet to start tapping into the transmission side of substations, much less exhausted their capacity to receive solar electricity. *Thus there is no need to allow connection of solar electric generation at the transmission level.*

If very large solar systems were allowed to connect at the transmission voltage level and earn SRECs, one or more large projects could fill the annual solar RPS requirement, and leave no SREC demand for the development of distributed solar systems, devastating the existing solar industry in New Jersey.

A thriving ecosystem of solar businesses exists in New Jersey today, essentially created by the combination of state and federal policies to encourage the growth of solar. Previous New Jersey policies were effective in encouraging a diverse ecosystem that supported the growth of New Jersey-based small and medium-sized businesses. However, the solar industry within New Jersey is immature. It is in a fragile state due to the suspension of rebate programs during 2008, and is struggling to survive and grow to deliver the solar electricity goals contained in the New Jersey RPS. To allow large-scale solar systems to connect to the transmission system, rather than the distribution system, will unbalance this ecosystem. It is a change that has the potential to stifle the development of the New Jersey solar electric industry, and subvert the goals of the RPS to develop a robust solar industry installing distributed solar generation of benefit to all ratepayers by generating electricity where it is consumed.

Nearly 4000 distributed solar electric generation systems have been installed in New Jersey today. These systems are providing substantial benefit to New Jersey by reducing electric demand where it occurs, particularly on those peak electric demand days when solar electric output is produced coincident with peak electric demand. By supplying solar electricity where it is consumed, or on the distribution side of a substation, the capability of that substation and the distribution network to supply increasing electric demand from load growth is increased. This benefit only occurs on the distribution side of the substation, and will not be delivered by large-scale solar systems that connect to the transmission system. As such, a solar system connecting to the transmission network would deliver substantially less value to New Jersey ratepayers.

New Jersey is undergoing a difficult transition from a rebate supported solar industry to one in which tradable SRECs form the basis for financial support for the industry's growth. Load serving entities that are required to deliver a percent of their electricity from clean sources, or purchase SRECs to fulfill that requirement, have largely avoided entering into contracts of sufficient length and price to support the amount of solar development necessary to meet the RPS. This unwillingness on the part of LSEs to enter into long term SREC purchase agreements is the primary reason why the state has not achieved the amount of solar generation specified in the RPS. More than sufficient solar capacity was registered into the SREC only program (about 120 MW), that **if only 50% of the registered projects had been able to secure long term SREC contracts to support project financing, there would be no SREC shortfall today.** This failure of the SREC market to adequately support the development of distributed solar electric generation by providing the necessary certainty to project financiers may soon be remedied by the SREC contract solicitations to be held by JCP&L and Atlantic City Electric in a few months, along with an expanded loan program by PSEG, and possibly the Solar 4 All program currently being sought by PSE&G. The aforementioned programs in total would result in the construction of 238 MW of solar projects over the next four years, in addition to the general SREC market and existing rebate and loan programs.

The annual incremental demand for additional solar generation capacity in New Jersey is modest compared to the scale of solar generation plants being developed in other parts of the United States. For the next four years (through energy year 2013) the annual incremental MW capacity need ranges between 45 and 80 MW per annum. Solar electric farms being built in other parts of the country are rapidly increasing in size, and similar sized projects developed in New Jersey by connecting to the transmission grid, would quickly fill the annual solar RPS acquirement,

devastating the existing solar industry in New Jersey. Of recent note is the recent selection by the Long Island Power Authority in New York of the 37 MW solar generation system proposed by BP Solar, submitted in response to their RFP seeking 50 MW of solar capacity. More recently a 48 MW PV project was announced by First Solar for Sempra in Nevada, and this week First Solar announced it will soon add 48 MW to an existing 10 MW solar plant in Nevada. This dramatically increasing scale of solar generation plants does not fit with the very gradual ramp up of solar capacity requirement in the NJ RPS. Large solar projects would quickly fill the annual NJ RPS requirement for years to come, squeezing out the commercial net metered industry, and forcing many existing NJ solar companies out of business. **Just one to two projects of such a size could wipe out the entire market for the New Jersey-based solar industry for a year, and thus destroy all of the state's solar businesses.** MSEIA believes that to deliberately create a policy environment that would bring about such business disruption would not be consistent with the state's overall goals.

MSEIA recommends that consideration of any such change be deferred for at least two years. In the interim the opportunity for connection of multi-MW solar electric systems to the many substations in New Jersey should be studied to identify the solar capacity that could be connected to the distribution side of those substations. To do otherwise risks the devastation of much of the existing solar industry in New Jersey.

It should also be noted that if solar power projects connected to the transmission system are allowed to earn SRECs, then **solar projects built outside New Jersey would be allowed to earn SRECs.** Projects built out of state will not deliver the intended benefits to the state of New Jersey.

2. Possible ways to eliminate such a hindrance (if any) while still ensuring that NJ gets the local benefits referenced in the Rulemaking.

MSEIA, as outlined above, denies that any significant hindrance is created by the requirement that PV systems connect to the New Jersey distribution system. The distribution side of existing substations has ample capacity to allow for the connection of larger solar projects.

The term "larger solar Projects" has not been defined, so it may be worthwhile to attempt to define the term. Residential solar projects range in size from a small residential system of 3 KW to 10 KW or more for a large home. Commercial solar projects in New Jersey have ranged from 20 KW to about 2000 kW on a large building or on the ground. Although some of the largest warehouses are large enough to locate a 5 MW system on about 1,000,000 sq. ft. of roof space, there are a limited number of these buildings in the state. Thus the term "larger" is relative to the type of solar system and host location. Because no systems greater than 2 MW exist today in New Jersey, one could argue that anything larger than 2 MW fits the definition of "larger". All the systems developed to date in New Jersey have been net metered, producing electricity at the site where it is consumed, and thus provide the maximum benefit to New Jersey ratepayers.

When considering the benefits that "larger" systems will supply to New Jersey, one needs to consider where it connects to the electric network. Connecting where the electricity is consumed has the highest benefit, because it lessens the demand on local wires, the transformer supplying

the facility or group of facilities, and lessens the load on the higher voltage wiring, usually 13,000V, that supplies all the local transformers, and which connects back to the nearest substation.

A solar system that is located away from electric consumption, such as on a farm, a landfill, or other low value property, supplies some benefit to the distribution network, but less than a solar system located at the point of electric consumption. Such a system can be many MW in size, even several tens of MWs, and still connect to the distribution system side of the nearest substation. Benefits are delivered to the distribution network by reducing the demand on the substation whenever the solar system is generating. Because the output of solar systems have a high coincidence factor with the hours when the electric distribution system sees peak demands, the solar output augments the distribution capacity of the transformers in the substation, potentially extending their useful life.

Solar systems that are so large that they need to connect to the transmission network do not deliver any value to the distribution network. This is because all the electricity produced would need to flow on the transmission network and through existing substation capacity to the point of consumption.

We recommend that systems connecting to the transmission network not be allowed to earn SRECs.

Thank you for this opportunity to comment.

Sincerely,

A handwritten signature in black ink that reads "Lyle Rawlings". The signature is written in a cursive, flowing style.

Lyle Rawlings  
President

## **Response to the New Jersey Board of Public Utilities Office of Clean Energy's Request for Comments**

Panda Energy recognizes the very aggressive solar generation goal which has been set forth by the Governor's Energy Master Plan in support of the New Jersey Renewable Portfolio Standard. We appreciate that, among many noteworthy goals, the RPS was established to benefit the citizens of the Garden State by promoting the use of renewable energy, reducing the state's reliance on fossil fuels and limiting the impact of greenhouse gases.

As one of the nation's most experienced developers of clean energy, however, we are also aware that — in order for New Jersey to meet its ambitious goal of 2,120 GWh of solar energy by 2020, or approximately 170-180 MW per year of installed capacity — all potential obstacles to the development of large-scale solar electric facilities must be removed.

As a result, and for the following reasons, we strongly oppose any proposal which would solely limit the connection of solar generation facilities to electric distribution lines:

- Approximately seven to ten acres of land are required to support one MW of solar generation. Consequently, developed urban areas serviced by electric distribution lines will not support larger scale solar facilities due to the scarcity and cost of available site locations that have sufficient size and energy injection capability.
- System reliability will be improved with larger scale, transmission-level generation interconnections. (Put differently, if an outage occurs on a distribution line, all solar capacity connected to that line will immediately drop off the grid.)
- Although transmission congestion relief is a worthy benefit of siting large scale solar generation at the distribution level, it is not the primary focus of the RPS. In addition, if a sub-transmission substation is lightly loaded then congestion relief is not a concern.
- New Jersey's solar generation target cannot be met without substantial capital investments. Solar facilities are capital intensive and, in order for the necessary capital to be available, potential investors will want to minimize the installed cost of a facility so they can achieve sufficient returns on their investments. This goal can more likely be achieved by choosing more reasonably priced land outside of dense, urbanized areas. Investment capital will not be available if significant constraints are imposed on where a facility can be located.
- Allowing solar projects to interconnect to the transmission system could, over time, lead to larger, more cost effective projects to be developed and increase the supply of SRECs in the system. Therefore compliance costs to LSEs and the impact on rate payers could be lowered.
- Having the option to interconnect to either transmission or sub-transmission level systems through "distributed generation" could have a beneficial effect on LMP pricing, especially in areas of congestion.

Our recommendations are that:

- Solar generation projects be allowed to interconnect to either distribution or transmission lines, subject to the requisite analysis and protective schemes.
- NJBPU develop an expedited interconnection process for renewable projects.
- All types of solar generation be eligible for SRECs.

-----Original Message-----

**From:** Pfeifferjr@aol.com [mailto:Pfeifferjr@aol.com]

**Sent:** Wednesday, March 11, 2009 10:12 PM

**To:** OCE

**Cc:** McShea, Anne

**Subject:** Re: Public Notice for Comments

Sirs:

I am providing my comment on the below matter concerning solar interconnection to NJ distribution lines.

I do not believe that NJ should be funding any ground based solar projects. These projects cover over farm land, grass land or in some cases, result in forested areas being leveled for the purpose of installing solar systems. This is no longer "green" energy. Large acre fields with direct connection to the distribution system will exacerbate this situation. Let's keep the long range goal of "green" in mind.

If the state felt that biodiesel from palm oil in Indonesia was not green energy, how can it justify this in our own state. Let's not pave over NJ. Solar can go on roof tops, car ports and many other places without covering our land.

Respectfully submitted.

Regards,  
James Pfeiffer  
EnGeneration, LLC  
Ridgewood, NJ  
201-251-3815 office  
201-264-5361 cell  
-----

**RUSSO TUMULTY NESTER  
THOMPSON & KELLY, LLP**

A NEW JERSEY LIMITED LIABILITY PARTNERSHIP

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Howard O. Thompson  
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REPLY TO CEDAR KNOLLS OFFICE

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April 24, 2009

**BY E-MAIL AND REGULAR MAIL**

The Honorable Kristi Izzo, Secretary  
New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

Ms. Anne Marie McShea  
NJ BPU Office of Clean Energy  
Two Gateway Center  
Newark, NJ 07201

**Re: In the Matter of the Proposed Amendments to New Jersey's  
Renewable Portfolio Standards ("RPS") at N.J.A.C. 14:8-2**

**SRECs and Interconnection of Solar Generation with  
New Jersey transmission system**

Dear Secretary Izzo and Ms. McShea:

The undersigned represents PPL Corporation and its subsidiaries, PPL Renewable Energy, LLC and PPL EnergyPlus, LLC (collectively "PPL" or the "PPL Companies"). Enclosed please find the comments of PPL regarding the Proposed Amendments to New Jersey's Renewable Portfolio Standards ("RPS") at N.J.A.C. 14:8-2, Docket No. 08040255. These comments also are being filed electronically at [OCE@bpu.state.nj.us](mailto:OCE@bpu.state.nj.us).

General comments about solar goals are submitted, with Section V focused on granting SRECs to New Jersey solar generation projects that interconnect with the New Jersey transmission system. The Board requested that comments about such interconnection and the RPS be submitted on or before today.

Respectfully submitted,

RUSSO TUMULTY NESTER  
THOMPSON & KELLY, LLP

  
HOWARD O. THOMPSON

Enclosure

c: Samuel Wolfe, BPU Chief Counsel  
Lance Miller, Chief of Staff  
Michael Winka, Office of Clean Energy  
NJ Rate Counsel

**COMMENTS OF THE  
PPL COMPANIES**

**SOLAR RPS STAKEHOLDER  
PROCESS REGARDING**

**ENERGY MASTER PLAN  
RENEWABLE ENERGY GOALS  
AND  
CHANGES TO THE NEW JERSEY  
RENEWABLE PORTFOLIO  
STANDARDS (“RPS”)  
AT N.J.A.C. 14:8-2**

**April 24, 2009**

**I. Introduction.**

PPL Corporation and its subsidiaries, PPL Renewable Energy, LLC and PPL EnergyPlus, LLC (collectively “PPL” or the “PPL Companies”) respectfully submit these comments to the New Jersey Board of Public Utilities (the “Board” or “BPU”). These comments are being submitted in response to the Board’s request for comments, through a Stakeholder Meeting approach, focused on possible changes to the solar portion of the regulations governing New Jersey’s Renewable Portfolio Standards (“RPS”) at N.J.A.C. 14:8-2.

PPL EnergyPlus was one of the first entities to be licensed in New Jersey as a third party electricity supplier, has been active as a wholesale power supplier in all of New Jersey’s Basic Generation Service (“BGS”) auctions, and is a significant supplier of BGS load. PPL Corporation’s subsidiary, PPL Renewable Energy designs, constructs and operates solar projects in New Jersey and elsewhere in PJM – including a 1.7 MW rooftop solar project at Schering-Plough in Summit, New Jersey. PPL Corporation’s generation subsidiaries operate nuclear power, wind and hydroelectric power generation and its development subsidiaries are expanding low carbon/carbon-free generation in the PJM region. PPL has been and remains focused upon New Jersey with respect to electricity supply generally and renewable energy in particular.

The Board Staff identified the following issues for a Stakeholder Process commencing with a meeting on March 18, 2009:

- **Change the solar energy goals from a percentage of 2.12% to a goal of 2,120 GWh by 2020**
- **Methodology for allocating SREC obligation to the load serving entities (LSE’s)**
- **Net Metering Phase II Amendments (Real time Crediting and Meter Requirements)**



- **The propriety or need for a rule change allowing interconnection to transmission system in creation of an SREC**
- **Best approach and next steps to Community Renewables**
- **Getting to 30% by 2020: Next Steps.**

## **II. Changing the solar goals from a percentage to a GWh total**

The RPS solar provisions call for a gradual increase in the percentage of solar-generated electricity out of overall supply from load serving entities (“LSEs”). The Governor’s Energy Master Plan (“EMP”) specifically calls for the change from the rising percentage to the GWh goal and notes that, with the state’s intention to reduce energy usage by 20%, a failure to change the solar percentage provision would result in a suppression of solar energy development between now and 2020.<sup>1</sup> According to the EMP, if the state is successful in its reduction of electricity consumption, only 1,347 GWh (or 1,300 MW) of solar generation would be built, whereas the change of measurement assures that 2,120 GWh (or 1,800 MW) of solar generation.<sup>2</sup>

The EMP also states:

Remaining consistent with the State’s desire to provide clear signals to investors and the solar energy community, setting this goal will continue the State’s role as a national leader in the development of solar energy and provide a more stable environment for which to support these projects. As part of this revised goal, the BPU will work to make the necessary rule changes that will appropriately distribute SREC requirements to the load serving entities (LSE’s).

PPL applauds the effort to send clear signals to the solar marketplace and supports an explicit map that shows each electricity supplier exactly what its solar RPS obligations will be in each year between now and 2020. The existing solar percentages increase solar supply requirements each year on a set schedule. The BPU should re-set the RPS regulations working back from 2020 and its aggregate of 2,120 GWh – decreasing the 2,120 GWh total in each year preceding 2020 in proportion to the percentages currently stated for such year.

The amount of solar generation that a supplier must provide as part of its supply portfolio must be known well in advance of the year of supply. The BGS auction solicits supply in three-year commitments. Solar requirements must be known for the length of the contract, or suppliers will need to add costs for the potential of increased requirements. If the solar requirement is going to change after 2020, such a change should be made clear now. Many suppliers may wish to develop solar power projects, arrange for solar generation supply, and/or arrange for a supply of solar renewable energy certificates (“SRECs”) on the basis of longer term contracts – aiming to reduce costs by committing to longer terms.

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<sup>1</sup> EMP at page 69-70.

<sup>2</sup> EMP at page 70.

SREC purchase agreements could be for 10, 12 or 15 years in duration – and at 12 years or longer, such a commitment goes beyond 2020. A stable solar market, with lower prices, benefits from a consistent regulatory process that sets its solar requirements for as long as the SRECs have value – i.e. 15 years – and thereby allows market participants to plan. A clearly defined, regulatory change that moves to 2,120 GWh in 2020, with proportionally less GWh in the intervening years, and defined amounts of solar supply through 2025 needs to be set. The EMP calls for this extension of requirements and PPL confirms that defined requirements in solar through 2025 are important to market participants.<sup>3</sup>

### **III. Methodology for allocating SREC obligation to the LSEs**

The current version of the RPS requires that each LSE be responsible for arranging its electricity supply portfolio. This is the appropriate method in a market-based system. PPL is a strong proponent of allowing the market participants to undertake construction of solar generation and, when needed, to arrange for short or long term solar supply contracts. The solar alternative compliance payment (“SACP”) is an effective way to motivate suppliers to build or arrange for solar supply. The BPU should be setting the SACP dollar number for the 8<sup>th</sup> year and beyond – keeping them solidly higher than the market cost for solar – as a way to make sure that solar facilities are built. (With that, the BPU also must continue to keep inspection and SREC enrollment systems efficient in terms of timing and cost).

The solar playing field and the ability to create or acquire SRECs must be kept level. SREC cost and the cost of solar electricity will be brought down if the market participants – facing solar requirements – are allowed to act. PPL does not view New Jersey electric distribution company (“EDC”) solar loan programs or solar construction programs as needed in the long term, but PPL recognizes that state legislation has opened the door for such programs. Right now, the resulting SRECs are sold only after they are generated. If this approach is to continue (i.e. solar is to be built with ratepayer dollars or backstopping support) and the LSEs are going to have supply obligations, then the SRECs resulting from such programs should be sold via auctions only open to LSEs with BGS or third party supply obligations. Lower costs should result if the solar generating sites were permitted to sell SREC output for a period of years via auctioned contract open on a level

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<sup>3</sup> The EMP states at page 75 that:

The current RPS maintains the 2020 requirements to any future year. It is appropriate to begin the process of evaluating the appropriateness of increasing the Standard for the years 2021 to 2025. This evaluation will be undertaken by the BPU and will consider issues such as grid reliability, ..., and the projected costs of solar technology. The BPU staff will work to finalize this 2025 RPS by January 1, 2010 to ensure that the RPS is always set at least ten years out.

*IMPACTS:* Increasing the RPS for the years 2021 to 2025 will send a clear signal to investors, renewable energy companies and the utilities, that renewable energy technologies will continue to make up a large portion of New Jersey’s energy future. The impacts and capacity of the electricity grid will be part of this evaluation to determine which, if any, infrastructure improvements are necessary to support an aggressive renewable energy commitment through 2025.

playing field to LSEs. Again, given that a BGS supplier commits to providing electricity for three years at a set price, it would be appropriate to make this source of SRECs available to be purchased for three year periods.

PPL recognizes that this topic for comment comes directly from the EMP. At page 70, the EMP states: “As part of this revised goal, the BPU will work to make the necessary rule changes that will appropriately distribute SREC requirements to the load serving entities (LSE’s).”

It appears that the BPU could translate the GWh as proportionately laid out on a yearly basis working back from 2020 (as noted above), then translate the GWh into MW, and then have a supplier calculate its supply of MW (from BGS and direct, retail supply) to New Jersey. Consistency with the existing regulations is important. LSEs have studied the existing regulations and many have arranged for solar supply for many years in advance in order to be prepared for the rising RPS solar requirements. If there is going to be a change in calculation, it must respect the existing regulatory expectations. Moreover, whatever the methodology, the Board needs to set very clear, easily understood and readily calculable regulations for suppliers so that their regulatory compliance and the reporting forms/filings are simple and straight forward.

#### **IV. Net Metering Phase II Amendments (Real Time Crediting and Meter Requirements)**

PPL reserves the right to comment on net metering issues and concepts as regulatory changes are presented.

#### **V. The Propriety or Need for a Rule Change Allowing Interconnection to Transmission System in Creation of an SREC**

PPL respectfully submits that the restriction of SRECs to solar generation installations located in New Jersey that are tied only into distribution lines physically located in New Jersey – as opposed to both distribution lines and transmission lines physically located in New Jersey – is a limitation without a reasonable regulatory foundation. Moreover, the proposed restriction is contrary to the State’s intent that solar generation be built in New Jersey quickly and efficiently, which intent has been enunciated in New Jersey’s EMP and in various Board Orders regarding solar generation.<sup>4</sup> This limitation is a serious roadblock to the speedy introduction of solar generation into New Jersey and it is imperative that the proposed regulation be changed to confirm that solar generation facilities tied into transmission lines physically located in New Jersey will have their electricity qualify for SREC treatment.

As PPL argued in its August 2008 submission, solar generation projects that interconnect

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<sup>4</sup> In particular, see the Board’s December 6, 2007 Decision and Order Regarding Solar Generation in Docket No. EO06100744.

to transmission lines physically located in New Jersey should be deemed eligible for SRECs. By way of historical background, the summary in the 2008 Notice of Proposal for the RPS rules (the “**2008 Proposal Summary**”) (which rule changes were approved) noted:

**Wider eligibility for solar RECs**

When the BPU adopted changes to the RPS in 2006, several commenters questioned the limitation in N.J.A.C. 14:8-2.8, which allows solar RECs to be generated only based on electricity generated on a customer-generator’s premises. 38 N.J.R. 2186 (May 15, 2006). In response, the BPU stated:

There are significant differences between customer-sited clean energy generation sources and larger power plant scale generation sources used to supply the grid. Decentralized customer-sited applications warrant more ratepayer support because of the higher cost of deployment and the greater benefits these applications provide to the local distribution system.

However, the BPU also stated, “As conditions evolve and additional information regarding the distribution system benefits of power plant scale projects is obtained, the Board may reconsider this stance.” For the reasons discussed below, the Board has reconsidered its position, and proposes to amend N.J.A.C. 14:8-2.8 to provide that solar electric generation facilities can generate solar RECs regardless of whether they are located on a customer-generator’s property, but retained the requirement at N.J.A.C. 14:8-2.9(d) that the facility must be interconnected with an electric distribution system that supplies New Jersey. (Emphasis added)<sup>5</sup>

The 2008 Proposal Summary then proceeded to identify the electric generation supply problem facing New Jersey:

Most importantly, action by the United States Department of Energy (“USDOE”) has focused the Board’s concern on the importance of clean local electric generation in mitigating congestion on the electric transmission system. ... The USDOE identified ... all of New Jersey, as an area where “it is critically important to remedy existing or growing congestion problems because the current and/or projected effects of the congestion are severe.” ... Governor Corzine’s draft Energy Master Plan ... emphasizes the serious and growing threats to the reliability of New Jersey’s supply of electricity. The draft Plan relies upon clean local generation as part of a suite of measures to support the reliability of New Jersey’s supply of electricity without exacerbating air pollution and other environmental problems in the State.<sup>6</sup>

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<sup>5</sup> 2008 Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section, at page 12.

<sup>6</sup> 2008 Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section, at page 12 and page 13.

PPL re-confirms its assertion from August 2008: larger solar generation facilities are part of the solution for the issues identified in the EMP. If they tie directly into the **transmission** lines physically located in New Jersey, these larger solar facilities help meet the reliability needs of New Jersey. It is well known that there are transmission constraints that, in periods of peak demand, create “congestion” limiting the amount of power that can be imported into New Jersey. The key transmission constraint continues to be the “Eastern Interface” located in Pennsylvania. PJM has called for more transmission lines from out of state to maintain the reliability and increase the flow of available power into New Jersey. Increasing the amount of in-state generation also helps reliability, hence the EMP’s partial reliance on increasing clean local generation.

The 2008 Proposal Summary framed the discussion as follows:

The Board believes that this reliance is justified, and that clean local electric generation is an essential element in any strategy to mitigate congestion on the electric transmission system and protect the reliability of New Jersey’s supply of electricity. Larger-scale solar electric generation facilities in New Jersey, regardless of whether they are located on a customer-generator’s premises, help to maintain the reliability of local electricity supplies in New Jersey.

Specifically, those facilities provide local supplies of “**reactive power**” at the times that they are needed most. Reactive power is the energy supplied to create or be stored in electric or magnetic fields in and around electrical equipment. Equipment such as electric motors, transformers, pumps, and air conditioning depend on a supply of reactive power; when electric transmission lines are carrying heavy loads, they consume large amounts of reactive power as well. Local supplies of reactive power are essential, because reactive power can be transmitted only over relatively short distances during times of high electricity demand. ...<sup>7</sup>  
(emphasis added)

As PPL noted in its August 2008 comments, **reactive power and its benefits are not limited to local electric distribution systems**. One of the benefits of larger solar facilities is their ability to help provide local reactive power. **Solar generation need not be interconnected with New Jersey electric distribution systems to provide reactive power. Interconnecting larger solar facilities with transmission lines physically located in New Jersey provides the same benefit of reactive power as smaller solar facilities connected to distribution systems in New Jersey.**<sup>8</sup>

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<sup>7</sup> 2008 Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section, at page 13.

<sup>8</sup> Currently, PJM pays for reactive services from generators connected to the transmission system under Schedule 2 of PJM’s Open Access Transmission Tariff (“OATT”). PJM Open Access Transmission Tariff

**SCHEDULE 2**  
**Reactive Supply and Voltage Control from**  
**Generation or Other Sources Service**

As stated in the 2008 Proposal Summary:

*Crucially, the ability of larger solar facilities to provide local reactive power tends to occur at or near times of peak demand, when it is needed most.* The same is not true of all types of renewable electric generation; for example, some wind facilities consume reactive power rather than supplying it. Unlike fossil-fueled electric generation, solar facilities provide reactive power support without emitting greenhouse gases or other types of air pollution. For these reasons, the Board believes that such generation should not be deemed ineligible for the incentives that result from generating solar RECs. (emphasis added)<sup>9</sup>

The PPL Companies respectfully submit that the summary in the 2008 Notice of Proposal then begins to erroneously mix apples and oranges with respect to the nature of reactive power. The summary confuses reactive power as being solely linked to distribution lines.

The Board has therefore proposed to amend N.J.A.C. 14:8-2.8 and 2.9 to allow solar electric generation facilities interconnected with an electric distribution system that serves New Jersey to generate solar RECs, regardless of whether the facility is located on a customer-generator's premises. Those facilities provide essential support to the reliability of the supply of electricity in New Jersey. Due to the inability to transmit reactive power over long distances, solar electric generation facilities that are interconnected with electric distribution systems that do not serve New

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In order to maintain transmission voltages on the Transmission Provider's transmission facilities within acceptable limits, generation facilities and non-generation resources capable of providing this service that are under the control of the control area operator are operated to produce (or absorb) reactive power. Thus, Reactive Supply and Voltage Control from Generation or Other Sources Service must be provided for each transaction on the Transmission Provider's transmission facilities. The amount of Reactive Supply and Voltage Control from Generation or Other Sources Service that must be supplied with respect to the Transmission Customer's transaction will be determined based on the reactive power support necessary to maintain transmission voltages within limits that are generally accepted in the region and consistently adhered to by the Transmission Provider.

Reactive Supply and Voltage Control from Generation or Other Sources Service is to be provided directly by the Transmission Provider. The Transmission Customer must purchase this service from the Transmission Provider.

In addition to the charges and payments set forth in this Schedule 2, Market Sellers providing reactive services at the direction of the Office of the Interconnection shall be credited for such services, and Market Participants shall be charged for such services, as set forth in section 3.2.3B of the Appendix to Attachment K.

#### **Payment to Generation or Other Source Owners**

Each month, the Transmission Provider shall pay each Generation or other source Owner an amount equal to the Generation or other source Owner's monthly revenue requirement as accepted or approved by the Commission... Generation Owners shall not be eligible for payment, pursuant to this Schedule 2, of monthly revenue requirement associated with those portions of generating units designated as Behind The Meter Generation...

<http://www.pjm.com/markets/settlements/downloads/reactive-revenue-requirements-table-jul-08.pdf>

<sup>9</sup> 2008 Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section, at pages 13-14.

Jersey are unable to provide the same contribution to reliability in New Jersey. The proposed amendments also address potentially confusing wording in existing N.J.A.C. 14:8- 2.9(a), to clarify that the phrase “for use in complying with this subchapter” refers to the use of RECs to comply with the renewable portfolio standards, and to clarify that the phrase “in accordance with this section” refers to the issuance of RECs. The proposed amendments also specify in N.J.A.C. 14:8-2.1(a) that one of the purposes of increasing the supply of renewable electric generation is to support the reliability of New Jersey’s electricity supply. Under the proposed amendments to N.J.A.C. 14:8-2.9(d), the Board can consider that purpose in determining whether to waive the requirement to be interconnected with an electric distribution system that serves New Jersey. The proposed amendments preserve this requirement for solar electric generation specifically because of the highly localized benefits to reliability associated with the ability of solar generation to provide reactive power at times of peak electricity demand. ...<sup>10</sup>

Solar projects located in New Jersey will provide the benefits of reactive power in New Jersey; **but it is not relevant to which voltage level the solar projects are connected.** A 5 MW project connected at the transmission level (69kv or above) provides the same amount of reactive power in New Jersey as does a 5 MW project connected at the distribution level in New Jersey. What is relevant is the electrical location of the project with reference to the load center. As long as each solar project is within the same approximate location electrically, then it will provide the same local reactive support. There is no reason to discriminate against a larger solar project which must be connected at the transmission level as long as that project is within the same general electrical area as a smaller project connected to the distribution level. Both types of projects would help to maintain the reliability of local electricity supplies in New Jersey.

Further, it is important to the discussion of the reliability benefits that the Board recognize that **the majority of reactive supply provided by generators comes from generators connected at 69kv or above.**<sup>11</sup> There simply is no basis for restricting solar electric generation facilities eligible for SRECs to facilities interconnected with New Jersey electric distribution systems on the basis of reactive power. The distribution line restriction is a red herring. Interconnection to transmission lines physically located in New Jersey also will address the reactive power concern.<sup>12</sup>

PPL also notes that more recent New Jersey legislation does not restrict the inclusion of

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<sup>10</sup> 2008 Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section, at page 14.

<sup>11</sup> Energy Information Administration (EIA), *Electric Power Annual* (2003), Chapter 2, Table 2.1, Existing Net Summer Capacity by Energy Source and Producer Type, 1991 through 2002, at <http://www.eia.doe.gov/cneaf/electricity/epa/epat2p1.html>

<sup>12</sup> Per the FERC Staff Paper *Principles for Efficient and Reliable Reactive Power Supply and Consumption*, “The major advantage of distributed generators is that they provide reactive power capability locally, often at the site of large loads, reducing reactive power losses in **transmission lines**.” (Emphasis added). <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10399489>

solar generation systems in the way set out in the RPS regulations. The regulation should be revised to permit solar REC eligibility for solar generation systems interconnecting with electric transmission lines physically located in New Jersey. This would be in keeping with recent legislation expanding SREC eligibility. The 2008 Proposal Summary summarizes as follows:

In addition, recently enacted legislation makes it clear that eligibility to generate solar RECs should not be limited to facilities located on a customer-generator's premises or to facilities that use a net meter. P.L. 2007, c.300 directs the Board to establish rules that:

. . . require the board or its designee to issue a credit or other incentive to those generators that do not use a net meter but otherwise generate electricity derived from a Class I renewable energy source and to issue an enhanced credit or other incentive, including, but not limited to, a solar renewable energy credit, to those generators that generate electricity derived from solar technologies. . .<sup>13</sup>

**Chapter 300 does not restrict eligibility to tie-ins to distribution lines.** The continued restriction to distribution lines frustrates the intent of the EMP to increase solar generation and also the eligibility criteria for generators not using a net meter. Chapter 300 did not impose a size limitation on solar generation that will be eligible for net metering; and beyond a certain voltage level, generators are going to tie-in to the transmission lines, rather than the distribution lines. New Jersey has affirmed its need to greatly expand solar generation in the EMP – which ramp up in solar was already called for the solar portion of the RPS – and the EMP removed doubt about exactly how much solar generation is required over the next 11 years. The goal is now 1,800 MW. This requires approximately 1,700 MW of solar to be brought on line between now and the 2021. New Jersey should be welcoming any renewable, carbon-free generation of any size – such generation, large or small, does precisely what New Jersey wants: provides clean, local generation that serves as reactive power that contributes to the reliability of New Jersey's electric systems.

PPL respectfully submits that solar regulations should be oriented not just on customer-based solar generation, but also on larger solar generation installations, which also are needed in New Jersey. In a competitive market, suppliers and providers must be free to identify, build and/or buy their solar (and other Class I and Class II) energy as they choose. Implicit in this freedom is suppliers building and/or buying renewable power to meet portfolio obligations in as cost-effective manner as possible in order to remain competitive. Larger solar facilities provide greater market opportunity and economic benefit for capital that is invested in New Jersey.

Suppliers and providers face risk in the solar market, which risk is spelled out in the RPS

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<sup>13</sup> Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section, at page 14.



rules.<sup>14</sup> No third party supplier or BGS provider wants to be placed in the position of having to make an SACP. The cost is high and it is an out-of-pocket payment that needs to be recovered for profitability sake. In short, the SACP's do exactly what they are intended to do: they drive entities to install solar generation and thereby avoid having to make SACP's. But the RPS regulations deter or thwart the suppliers/providers from building needed larger-scale solar generation installations which will deliver more efficient and cheaper priced solar power to New Jersey.

Larger sized solar generation systems provide economies of scale and the solar portion of the RPS rules must be amended to permit larger-scale solar generation tied into transmission lines to receive SREC treatment. The SRECs are a key element to making solar projects financeable. The value of their income streams over a period of years is crucial to a project's economics. While small, net metered solar generation systems are an important piece of New Jersey's overall generation puzzle, such solar generation systems are not the only solar piece to the puzzle. Larger solar generation systems have a place too if New Jersey is serious about quickly and dramatically ramping up its solar-generated supply of electricity. Smaller systems tied to distribution lines should not enjoy a competitive advantage provided by government regulation – larger systems should have the benefit of SREC treatment too and their lower per kW cost will help drive down the pricing of solar for all. Larger, transmission tied solar systems are more efficiently built and provide economies of scale AND they too enhance the reliability of New Jersey's electric infrastructure.

In summary, New Jersey will benefit from larger-scale solar based in New Jersey and tied to transmission lines serving New Jersey. PPL respectfully submits that larger solar projects physically located in New Jersey and tied to transmission lines will: be less costly, fairer to the ratepayers, provide jobs, improve reliability and security, contribute to the orderly development of solar in New Jersey, have lower per-kW transaction costs, be a critical component in the State meeting its RPS solar targets, and – just like small solar projects – support other policy goals such as environmental protection and public health. The summary to the proposed RPS regulations states that “(m)eeding the standards, which increase substantially over time, depends on rapid growth in the market.”<sup>15</sup> This is not to take away from the benefit of small solar projects, which will help New Jersey achieve its policy goals. Nothing, however, will meet New Jersey's need for less costly, rapid growth in solar better than larger solar generation projects based in New Jersey and tied to transmission lines that serve the New Jersey market. The RPS regulations should support both small and large solar generation projects.

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<sup>14</sup> As the summary in the 2008 Notice of Proposal for the RPS rules states: “To comply with the solar energy portion of the RPS, suppliers and providers obtain and use Solar Renewable Energy Certificates (“solar RECs”). A solar REC represents the environmental benefits or attributes of one megawatt-hour of solar electric generation. A supplier or provider who holds too few solar RECs to meet the RPS can make up for the shortfall by paying a solar Alternative Compliance Payment (“SACP”).” See, Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section at pages 2-3.

<sup>15</sup> 2008 Proposed Amendments to the RPS, N.J.A.C. 14:8-2; Notice of Proposal – Summary Section, (Subsection 1, Sustained, orderly market development), at page 4.

## **VI. Best approach and next steps to Community Renewables**

PPL reserves the right to comment on issues and concepts regarding community renewables after proposals and/or as regulatory changes are presented.

## **VII. Getting to 30% by 2020: Next Steps**

PPL urges a speedy change to the solar regulations to provide SREC treatment to New Jersey-based solar generating systems that tie into transmission lines that serve New Jersey. The RPS already sets rising renewable requirements for LSEs for solar and other renewables. Speedy resolution of issues regarding wind and the EMP's goals are needed to bring clarity to the marketplace. Aside from the foregoing, PPL reserves the right to comment on issues and concepts reaching 30% by 2020 after proposals and/or as regulatory changes are presented.

## **VIII. Conclusion.**

The PPL Companies support the expansion of renewable energy resources in New Jersey and elsewhere. The proposed regulations should not discriminate against large solar generation facilities that tie into transmission lines physically located in New Jersey. Such new solar facilities – whether they tie into transmission lines physically in New Jersey or into distribution lines physically in New Jersey – should be part of the mix that helps New Jersey achieve its goals of quickly building renewable generation in the State and meeting its RPS solar goals in the most cost-efficient manner.

The PPL Companies thank the Board for the opportunity to present these comments and look forward to participating in the Stakeholder Process intended to formulate amendments to the solar portion of the RPS regulations.



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April 24, 2009

**COMMENTS OF THE NEW JERSEY DEPARTMENT OF THE PUBLIC ADVOCATE  
DIVISION OF RATE COUNSEL  
POTENTIAL CHANGES TO THE RENEWABLE PORTFOLIO STANDARD  
REGARDING SOLAR ENERGY INTERCONNECTION REQUIREMENTS  
BEFORE THE NEW JERSEY BOARD OF PUBLIC UTILITIES**

The New Jersey Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel") would like to thank the Board of Public Utilities ("BPU" or "the Board") for the opportunity to comment on potential changes to its rules governing New Jersey's Renewable Portfolio Standards ("RPS").

On March 9, 2009, the Board issued a Request for Public Comment on two topics related to potential changes for allowing solar electric generation facilities connected to the New Jersey transmission system to earn/own solar renewable energy credits ("SRECs"). The Board's current rules only allow those solar energy facilities interconnected at the distribution level to earn SRECs.

Rate Counsel supports expanding the eligibility of SRECs to larger solar energy generators that are interconnected to the New Jersey transmission system. Rate Counsel takes no position on whether these facilities will, or will not, alleviate transmission constraints at either the distribution or transmission level. However, it is Rate Counsel's position that the answer to this question can only be attained through detailed load flow studies and simulations that have not been offered in any of Board's proceedings throughout the multi-year solar transition process.

Rate Counsel does maintain, however, that solar energy, by its very nature, will provide positive environmental benefits to New Jersey ratepayers. Rate Counsel supports the development of larger-scale solar energy projects that can deliver more solar energy to ratepayers at lower unit cost than smaller-scale systems. Rate Counsel also supports the development of relatively efficient, low-unit-cost solar energy and believes that allowing projects located in the state, and interconnected at the transmission level, will support what we believe should be an important solar energy policy objective of the Board (i.e., low cost solar energy development).

Very truly yours,

RONALD K. CHEN  
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April 24, 2009

VIA EMAIL TO OCE@bpu.state.nj.us

On March 9, 2009, the Board of Public Utilities requested comment on the appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system to earn and/or own Solar Renewable Energy Credits (SRECs). In particular the Board requested comment on the following issues:

1. *Whether, to what extent, and why the interconnection requirement to NJ distribution lines under the Renewable Portfolio Standard ("RPS") rules for solar could hinder the development of larger solar projects in NJ.*

2. *Possible ways to eliminate such a hindrance (if any) while still ensuring that NJ gets the local benefits referenced in the Rulemaking.*

At the outset we need to define what is meant by the "distribution" system versus the "transmission" system. BPU regulations define "electric distribution system" as

*... that portion of an electric system which delivers electric energy from transformation points on the transmission system to points of connection at the customers' premises.*

N.J.A.C. § 14:5-1.2. The regulations do not define "transmission system." EDECA defines "transmission and distribution system" as:

Philadelphia • Reading • Valley Forge • Lehigh Valley • Harrisburg • Lancaster • Scranton  
Williamsport • Wilkes-Barre • Princeton • Cherry Hill • New York • Wilmington

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*...with respect to an electric public utility, any facility or equipment that is used for the transmission, distribution or delivery of electricity to the customers of the electric public utility including, but not limited to, the land, structures, meters, lines, switches and all other appurtenances thereof and thereto, owned or controlled by the electric public utility within this State.*

For purposes of this discussion we understand that the request for comment addresses the portions of the transmission system located in New Jersey and does not extend to projects located outside of New Jersey connected to the PJM transmission system and this is the context in which our comments are made.

The transmission network transmits power at higher voltages intended to move long distances, including across state lines. This higher voltage power is stepped down to lower voltages when it reaches the more localized distribution systems. Any project that connects directly to the transmission system is likely to be of significant size (between 2 and 20 MW or even larger) in order to generate the required transmission voltage. The ramifications of allowing such large systems to generate SRECs should be analyzed to determine the benefits and impacts. We can speculate that allowing interconnection of large projects would permit large scale solar projects be built. Such projects require acres of open space and access to solar resources, in contrast to urbanized and developed areas where pre-existing structures and landscape typically limit the size of individual solar projects. Facilitating construction of considerably larger projects can be expected to facilitate attainment of the solar RPS requirements. If such projects also are allowed to generate SRECs, they could have a significant impact on the quantity of and market for SRECs in New Jersey. At this time, the Solar Alliance is not aware of any studies that analyze and assess the impact that allowing transmission system-connected projects to generate SRECs could have on the RPS or the SREC market either in the short or the long term. Generating large quantities of SRECs has the potential of creating so many SRECs that the market would be oversaturated and of creating a boom/bust cycle for solar projects.

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The prospect of transmission-connected projects also raises the question of the impact these projects would have on the other segments of the solar market. New Jersey has expended considerable resources to build a solar market that serves a variety of customer classes—residential, commercial and industrial, not for profit, municipalities, schools, and low income housing. If maintaining and fostering that segmented market is of value, New Jersey must evaluate the potential that a handful of transmission-connected mega-projects could result in meeting the RPS but decimating demand within all other segments of the market. If load serving entities can meet their RPS obligations by entering into a small number of mega-contracts, there is little reason why they would pursue multiple smaller transactions, with the result that the small solar projects' SRECs could be stranded and worth significantly less than large projects' SRECs. If the Board were to allow SRECs for transmission-connected solar systems, it could avoid damaging impacts to the remainder of the solar market by limiting how and to what degree SRECs are generated in any given year by transmission-connected projects.

This request for comment comes at a time when there is much attention being given nationally and regionally to the need to upgrade the transmission grid to accommodate large renewable projects at the locations where they are producing energy. (Although the request for comment only addresses interconnection of solar projects.) Apart from the issue of SREC generation, New Jersey needs to identify the potential for dispersed renewable electricity to be integrated into the existing transmission systems. If careful examination of the facts and data shows there is sufficient capability in the existing system to allow a certain number of MW of distributed renewables to be added at the transmission level, there is no reason why that additional capacity could not be approved, recognizing that the BPU would still need to address the issue of the potential disruption to the SREC market as a whole. If the studies show that the existing grid has limited ability to integrate the distributed load, allowing transmission connected systems should be postponed until the grid is modified or updated to accommodate that additional load.

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The Board also should consider the legal and constitutional ramifications of an extension of the SREC program to projects connected to New Jersey's transmission system. The current limitation on SREC eligibility to those projects connected to the New Jersey distribution network ensures that local job creation, environmental, energy security and other benefits associated with distributed solar development are concentrated in New Jersey.

Conferring additional incentives on New Jersey-based projects is entirely rational given these localized benefits, and therefore capable of withstanding legal scrutiny under the Commerce Clause. This distinction is based on a legitimate policy goal and does not discriminate based on state of origin. The Commerce Clause allows a state to restrict eligibility to those generators that provide benefits to the state. Such a restriction assures that the state receives benefits in return for incurring the costs of an RPS requirement. That a benefits test might incidentally exclude sellers from out of state does not make it unconstitutional as long as the criterion for inclusion is the presence of benefits of "local interest," not state boundaries.

However, the ability to sustain the distinction between benefits created by in-state projects becomes much more difficult with regard to larger projects connected to the transmission system. For example, it could be argued that larger solar projects constructed just across the New Jersey border, but nonetheless connected to the PJM transmission grid, can create many of the same environmental, reliability and economic development benefits. As such, the Board's distinction between in-state and out-of-state projects begins to look more suspect and smacks of mere economic protectionism. The Board should review these legal considerations before moving forward with proposed changes to the SREC program.



STEVENS & LEE  
LAWYERS & CONSULTANTS

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While the Solar Alliance supports programs for development and deployment of solar projects, we urge the BPU to carefully study the legal and practical market implications of allowing solar electric generation facilities connected to the NJ transmission system to earn/own SRECs.

Very truly yours,

A handwritten signature in black ink, appearing to read "Susan P. LeGros". The signature is fluid and cursive, with a large initial "S" and "L".

Susan P. LeGros



RENEWABLE ENERGY PROVIDER

Honorable Kristi Izzo  
Board of Public Utilities  
Two Gateway Center  
Newark, New Jersey 07101  
April 24, 2009

**RE: Comments on appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system**

Dear Secretary Izzo:

On behalf of Soltage, LLC, please accept the following comments on the appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system to earn/own Solar Renewable Energy Certificates (SRECs).

**COMMENTS:**

The amendments adopted to the Renewable Portfolio Standard per **N.J.A.C. 14:8-2** continue to encourage a viable, robust, and efficient market which provides tangible in-state benefits. Soltage comments that the amendment that there must be a connection to a local distribution system is **appropriate** and sufficient to encourage stable New Jersey solar market development. Soltage agrees that the ability to interconnect solar electric generation facilities to the local distribution systems will allow for increased size in systems developed throughout the state, a reduced cost in delivered solar energy to the consumer, and will positively contribute to the mitigation of congestion on the electric transmission system overall.

Soltage comments that the proposal to allow the production of New Jersey Solar RECs through connection to transmission systems serving the New Jersey markets has the ability to change the focus of the New Jersey solar market. In keeping with the intent of the NJ solar market to encourage in-state economic growth, it is important to continue to require that solar RECs are produced from solar installations constructed, owned and operated within the state of New Jersey. This has been accomplished heretofore by the connection of solar generation facilities behind a meter of a New Jersey consumer, and currently expanded through the amendment that the solar generation facilities must be connected to a New Jersey distribution system. As there are ample interconnection points within the distribution system of New Jersey to site solar facilities there is no reason to believe that this amendment hinders the development of a robust and scalable solar market.

Furthermore, the interconnection to transmission system greatly increases the complexity, cost, and scale of solar development undertakings and will require the involvement of numerous additional state, regional, and federal entities in the regulatory/interconnection

process. It would be useful to get more information on how those entities would interact with the transmission system interconnection process, documentation requirements, timelines for permitting, anticipated growth in projects, and other similar details before considering such a further revision to the amendments to the State Renewable Portfolio Standards.

Respectfully submitted,

Soltage, LLC.



March 6, 2009

To the Commissioners and Staff of the New Jersey Board of Public Utilities:

Fotowatio USA Inc. is the subsidiary of Fotowatio in the United States. Our corporate strategy is to develop large commercial and utility-scale solar power generating projects in the United States. Focusing primarily on photovoltaics, Fotowatio is a world leader in the development and operation of this technology. Fotowatio today, operates and owns more than 120 MW worldwide with a pipeline exceeding 1 GW. In 2008, Fotowatio was pleased to take on General Electric as an investor and partner with an initial investment of \$ 235 million for a minority shareholding position in Fotowatio. Most recently, Fotowatio has acquired solar assets of MMA Renewable Ventures. This investment in a leading US firm is indicative of Fotowatio's commitment to the U.S. market. Fotowatio believes that clear and consistent regulations that support market-based approaches will help the growth of solar power and other renewable energy resources in New Jersey in particular and in the United States as a whole.

New Jersey's commitment to renewable energy and its strategic foresight in the development of its Energy Master Plan has placed it in the forefront of renewable energy development in the United States. New Jersey has implemented one of the most aggressive RPS goals in the country and through the careful and committed analysis of market mechanisms has created an advanced SREC market that is propelling it towards those goals efficiently and cost effectively. Fotowatio USA is currently working to advance several solar projects in New Jersey and is committed not only to the growth of solar in New Jersey but also to the development of policies that facilitate the growth of solar power. Accordingly, Fotowatio USA is a stakeholder with a strong desire to see regulatory changes made that enhances solar opportunities in the State.

Meeting the compliance requirements of aggressive RPS targets laid out through 2021 will require a mix of distributed generation and larger solar projects. The Governor's Energy Master Plan indicates that the State's goal should be 1,800 MW of solar generation by 2020. Given that New Jersey currently has less than 100 MW of installed solar, this is an ambitious goal. While ambitious, the solar goal also is highly meritorious as solar installation means jobs, clean power production, more New Jersey-based power, and greater reliability of the State's electricity systems. Simply put, however, the continued growth of solar and the meeting of future compliance targets will require projects larger and less than 2MW.

The New Jersey Board of Public Utilities has asked stakeholders if the RPS regulations should be changed to permit SRECs for solar generation systems that interconnect with

transmission lines. By this letter, Fotowatio USA confirms to the New Jersey Board of Public Utilities that Fotowatio USA strongly supports amending the RPS in ways that will support larger scale solar generating projects. Specifically, Fotowatio USA strongly supports implementation of a provision enabling transmission-tied solar projects based in New Jersey to generate SRECs for load serving entities' use in complying with the solar portion of the RPS. Smaller projects can interconnect through the distribution lines of the local electric utilities. But allowing larger projects to interconnect with the transmission system (subject to the interconnection requirements of PJM) that serve New Jersey and receive SRECs for generated electricity would greatly help the New Jersey market grow and mature. Fotowatio USA notes the following benefits:

1. Large solar projects that connect to transmission lines benefit from higher economies of scale, improving the competitiveness of this type of technology.
2. An amendment of the rule would translate into greater market opportunities, which will attract capital investment to the State.
3. Larger scale projects tied into transmission lines (like smaller projects tied into distribution lines) would help with reliability because the generating system would be in New Jersey and not subject to the constraint of the Eastern Interface of PJM's transmission system.
4. Larger solar projects tied in via transmission lines would help assure that New Jersey meets its goal of 1,800 MW of solar generation.
5. Larger scale solar projects would bring green jobs to New Jersey.
6. Such an amendment would minimize solar alternative compliance payment ("SACP") costs to load serving entities, which ultimately get passed on to ratepayers, by helping load serving entities achieve RPS targets.
7. Transmission-connected solar systems that get SRECs would help dormant sites that otherwise wouldn't be developed or used due to poor economic conditions in the State.

New Jersey's commitment to solar and its subsequent willingness to work with industry have created the second largest PV market in the United States. We would like to congratulate the State for the success of its solar programs to date. Fotowatio USA believes that permitting SRECs for transmission-tied solar projects enhances the chances of the State's future success with solar development. Thank you for giving us the opportunity to express our opinion through this letter.

Sincerely,

Diego Belmonte  
President/CEO Fotowatio USA Inc.

**EASTERN ORGANIC RESOURCES LLC**  
c/o Chestnut Hill Partners  
24 Crafts Road, Chestnut Hill, MA 02467

March 23, 2009

Ms. Kristi Izzo, Secretary  
New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

Re: Solar RPS Stakeholder Process  
Amendments to Renewable Portfolio Standards at N.J.A.C. 14:8-2  
SRECs for New Jersey-based solar generation  
with transmission line interconnection

Dear Secretary Izzo:

This letter is submitted in response to the request for comments made by the New Jersey Board of Public Utilities (the "BPU") regarding possible amendments to the solar provisions of the Renewable Portfolio Standards ("RPS") at N.J.A.C. 14:8-2.

**Solar Power and RPS Issues.** The BPU is conducting a stakeholder process on several issues related to solar power development, but the BPU has asked for public comment on "the appropriateness of allowing solar electric generation facilities connected to the New Jersey transmission system to earn/own SRECs." The BPU posed two specific issues:

1. Whether, to what extent, and why the interconnection requirement to NJ distribution lines under the Renewable Portfolio Standard ("RPS") rules for solar could hinder the development of larger solar projects in NJ.
2. Possible ways to eliminate such a hindrance (if any) while still ensuring that NJ gets the local benefits referenced in the Rulemaking.

**Eastern Organic.** Eastern Organic Resources LLC ("Eastern Organic") is the owner of a 156 acre parcel of land directly adjacent to Fort Dix Army Base and near McGuire Air Force Base in Springfield Township, Burlington County, New Jersey. Eastern Organic is in the process of closing its food waste and wood recycling operations at its property and is very interested in developing its property into a solar generating facility. A transmission line runs through the property, making an interconnection of a significantly sized (i.e. 5 MW or larger) solar generating facility to transmission lines – working with

PJM and the local electric utility (in this case, Jersey Central Power & Light) – a highly logical path for development. As a property owner with a property available in these difficult economic times for use for renewable generation, Eastern Organic has a stake in the BPU's process for amendment of its RPS rules as they relate to solar power.

**Meeting the Challenge to Build Solar Generation.** Eastern Organic commends the BPU for its leadership in making New Jersey one of the go-to states for development of solar powered generation. The BPU's move to a market-based regulatory system is essential due to the sheer cost of renewable energy construction. The SREC program is essential to development of solar power in New Jersey given the State's commitment to 2% of total supply coming from solar by 2020. According to the Energy Master Plan, the BPU is charged with adjusting the percentage to a specific number of GWh and that the revised goal would translate into approximately 1,800 MW of solar generation in New Jersey. Reports issued by the Office of Clean Energy indicate that less than 100 MW of solar generation has been built – meaning that the State's RPS for a ramp up in solar generation is aggressive. The market has to be permitted to respond to the regulatory goal in a speedy, efficient way. Eastern Organic respectfully submits that larger solar generation projects that tie into transmission lines that serve New Jersey (instead of just interconnecting to distribution lines) should be a key part of meeting the solar construction challenge.

**SRECs, SACPs and Reducing Costs.** It would appear that to reach the State's solar targets between now and 2021, New Jersey needs perhaps 150 MW of solar built each year. That is quite a large number of solar projects. New Jersey wants its ratepayers to benefit and has required that the solar generation be built in the State. To help define the market, the BPU has set up the SREC system, providing SRECs for actual solar power generated (provided it is generated in New Jersey and is used on site or goes through local utility distribution lines). It is Eastern Organic's understanding that if not enough solar generation is built such that there are enough SRECs to satisfy the solar RPS requirements for the year, then an onerous solar alternative compliance payment ("SACP") is required. While a high SACP is a good way to spur solar construction, those costs are borne by the ratepayers (as the electricity suppliers account for it in their price). The SACP money helps fund construction of small solar via OCE's rebate system, which has a public policy benefit at the same time that it has a ratepayer-borne cost. Larger New Jersey-based solar projects interconnected through transmission lines can help meet the solar RPS requirements, reduce the SACPs, and provide solar at a lower cost than small systems (which also have their place in meeting solar requirements) through economies of scale. If the BPU does not change the rule to allow transmission-connected solar to get SRECs, the State faces a slower, more costly process to get enough solar built to meet the RPS requirements for solar supply.

**SRECs Will Help Get Larger-Scale Solar Built.** SRECs are one of the key elements in getting solar power generating projects funded. The others are the federal investment tax credit ("ITC") and the stream of income from the sale of the generated electricity. Like other entities interested in solar power, Eastern Organic wants to get SREC treatment for its project and then arrange a long-term sales contract for the anticipated SRECs resulting

from operation of the generating system. The contract, together with the anticipated electricity revenue and the ITC, attracts the upfront financing that gets the solar generating system built in the first place.

**New Jersey Will Benefit From Larger Scale Solar Obtaining SRECs With Interconnection to Transmission Lines.** New Jersey would benefit greatly from permitting SRECs for larger-scale solar generation projects. We all know that the nation's and the state's economies are hurting. Real estate development is part of the problem. Many properties in New Jersey will sit dormant or underutilized because profitable development opportunities are few and far between. For some properties, like the property owned by Eastern Organic, larger-scale solar power development would be a win-win result for the property owners and New Jersey. When transmission lines that serve New Jersey run right through those properties and sizeable solar projects can be built, it simply makes sense to allow interconnection to those transmission lines and for the solar power systems to get SRECs for the power generated. Eastern Organic respectfully submits the following incomplete list of benefits that New Jersey, its ratepayers, owners of potential larger-scale sites, and the solar industry would receive if the BPU amended the solar portion of the RPS to permit SRECs for New Jersey-based solar generation that interconnects to transmission lines that serve New Jersey:

1. Idle and/or underutilized property that might not be developed or used due to the poor economy would be developed into successful business ventures generating taxes for the State.
2. Changing the rule will help attract capital to support solar projects – bigger, cheaper projects will provide more and better opportunities in the solar market – and the simple truth is that capital is needed in order to build.
3. Building these larger solar projects means more “green” jobs for New Jersey.
4. These larger projects will help New Jersey reach the solar power goal set in the Governor's Energy Master Plan.
5. Utilizing existing transmission line capacity fosters lower-cost and more rapid development of new energy generation in New Jersey – particularly when that energy is clean, renewable energy.
6. Solar power projects are expensive, but larger, transmission-connected projects will be cheaper to build, using the economies of scale, and will allow for lower electricity cost – meaning that all solar development will be challenged to get better and cheaper – and permitting the lowering of the dollar amount set by the BPU for SACPs.
7. Lower project costs and less of a need for SACPs to drive solar development mean less cost to be borne by New Jersey ratepayers.
8. Larger, transmission-tied solar projects also mean that more solar development will be constructed by the market and less by regulated utilities that use the ratepayers as a backstop for utility-funded solar projects.
9. Load serving entities would find it easier to find and buy SRECs with larger suppliers available, leading to lower costs in supplying power to New Jersey.
10. New Jersey faces transmission constraints with power being delivered across PJM's Eastern Interface which would be helped by the existence/contributions of



larger, transmission-tied solar based in New Jersey; i.e. these systems can help with the reliability of New Jersey's electricity delivery.

11. Larger, transmission-tied solar represents clean, renewable power that supplants the need for fossil fuel-based power and supplants the need to turn some of those fossil fueled plants on: cleaner air for New Jersey.

**The Distribution Line Restriction Hinders Larger Solar Development.** Eastern Organic and many properties with the potential to host larger-scale solar generating systems have transmission lines that run across them. At least in such cases, the obvious interconnection points for a large systems (2 MW or more) are to the transmission lines. Such interconnections will be subject to cooperation with the owning utility and authority under open access requirements from PJM – after confirming appropriate engineering matters. But it makes no sense to subject such property owners to: (1) a requirement that they run lines to and tie into distribution lines running down nearby streets (assuming they exist); and (2) the electrical engineering concerns that might exist regarding the distribution lines capacity.

The BPU's premise behind restricting solar generation to interconnection to distribution lines was that solar power provided important reactive power – i.e. helped reliability of the system – during periods of higher demand. But, as pointed out by PPL in its August 2008 comments, solar power interconnected to the transmission system in New Jersey also provides reactive power benefits. If a solar generating system of perhaps 5, 10 or more MW can be built in New Jersey and can tie into a transmission line located in New Jersey that serves New Jersey, there is no reason why such a beneficial, eco-friendly type of power system should not receive SRECs for the electricity it generates. Right now, the regulation does not permit SRECs for such an interconnected system and this restriction takes away a key financial component to getting such a solar generating system built – despite its benefits for New Jersey. Simply put, the distribution restriction hinders financing for New Jersey-based solar projects that wish to tie into transmission lines serving New Jersey.

**A Modified Regulation Can Keep the Local Benefits.** Eastern Organic recognizes that the BPU has a concern that solar power that is built benefits New Jersey. In this regard, it would be logical to require that the would-be owner: notify the OCE of its intention to build a solar project, provide copies of agreements with and approvals obtained from the transmission line owner and/or PJM to the OCE, and have the OCE inspect the built system – all of which would assist the OCE and the BPU in efforts to monitor the progress of solar power growth in the State. But it is unfair to keep restraining the expansion of solar power by denying SRECs to transmission-connected systems. Larger scale solar power serves the needs of New Jersey and it is incorrect to deny SRECs on an incorrect view of reliability. Transmission-connected solar based in New Jersey enhances reliability. In this vein, the issue is one of physics: electricity generated locally is actually used up locally. New Jersey is importing power. Solar power based in New Jersey means electricity exists in New Jersey – ready to be used by New Jersey consumers – and thereby less power needs to be imported.

The restriction of SRECs should simply be one that requires: (a) the solar generating system to be based/built in New Jersey and (b) tied to a transmission or distribution line that delivers power to New Jersey. New Jersey will reap the benefits of more solar power by allowing transmission-interconnected solar power generating systems to receive SRECs for the electricity they generate. A great many MW of solar power need to be built and transmission-interconnected solar power generating systems receiving SRECs should be part of the solution.

As a property owner and would-be developer, Eastern Organic thanks the BPU for the opportunity to provide its opinion and viewpoint. An amendment to permit SRECs for New Jersey-based solar generating systems that interconnect with transmission lines that serve New Jersey is a win-win for New Jersey.

Respectfully,

EASTERN ORGANIC RESOURCES LLC

By: *J. Michael Maynard*  
J. Michael Maynard, Manager

Cc: President Jeanne M. Fox  
Commissioner Frederick F. Butler  
Commissioner Joseph L. Fiordaliso  
Commissioner Nicholas Asselta  
Commissioner Elizabeth Randall  
BPU Chief Counsel Samuel Wolfe  
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