Proposal to Address Solar Metering Challenges

<u>Statement of the Problem</u>: In late January, PJM-EIS sent notification to solar generation system subscribers that due to certain revisions to NJBPU's implementation of regulations at <u>N.J.A.C.</u> 14:8-2.9(c) PJM-EIS would no longer be providing SRECs to systems utilizing (1) a multiplier for meters (e.g. interval meters); and (2) estimated meter readings trued-up with actuals within a reasonable period of time as has been historically utilized to measure generation and continues to be utilized to measure all generation besides solar consistent with <u>N.J.A.C.</u> 14:3-7.2(c) and (e).

In February 2013 numerous solar generation facilities with revenue-grade meters began not receiving SREC revenues either because their meter utilized a multiplier or, for whatever reason, they were unable to obtain and input an actual meter reading. This has triggered severe concern throughout the solar marketplace as the financing for many solar projects both within and outside PSE&G's Solar Loan Program is dependent upon SREC revenue to cover all or significant portions of the cost of solar projects.

Applicable Regulation:

N.J.A.C. 14:8-2.9(c)

Beginning December 4, 2012, in measuring generation to determine the number of RECs or SRECs to issue, the Board or its designee **shall accept only readings of a meter** that records kilowatt-hour production of electrical energy, and which meets all applicable requirements at (c)1 and 2 below. The readings may be taken or submitted by any person, but shall be verified by the Board or its designee:

- 1. The American National Standards Institute (ANSI) Standard C12.1-2008, Electric Meters Code for Electricity Metering, incorporated herein by reference, as amended or supplemented; and
- 2. Any additional requirements in the PJM-EIS Generation Attribute Tracking System Operating Rules, Revision 6, September 2010; and the PJM-EIS Generation Tracking System Terms of Use, last modified on January 3, 2011; which are incorporated herein by reference, as amended and supplemented, and can be found at www.PJM-EIS.com

Background:

Multiplier Meters

Meter multipliers are necessary to ensure accurate measurement of generation at facilities with certain site characteristics. Multipliers are also an essential component of utility metering as meter dials do not typically spin to infinity. Rather, meters typically spin to a point and then restart with zeroes. Multiplier meters are a well-accepted industry practice

utilized to accurately measure usage. There exist interval meters that are revenue-grade. PSE&G's Solar Loan Program utilizes revenue grade interval meters as do many private solar project developers. Approximately 120 commercial customers within the PSE&G Solar Loan Program require a "multiplier meter."

Meter Interval Calculation Method: Interval Aggregaate * Multiplier = Total Generation (applied in real-time)

Estimated Meter Readings

It is well-accepted that, for a variety of reasons, public utilities and those owning generation may not obtain or report actual meter readings every single month. For public utilities, this can be due to access issues at the customer site among other reasons. Recognizing this issue, there is a well-established process of utilizing estimated readings trued-up with actuals in the measurement of consumption and generation supply. In the solar context, from discussions with solar developers in and outside the PSE&G Solar Loan Program, PSE&G has been informed that SREC eligibility dependent upon actual meter readings 100% of the time was not anticipated by most solar developers and, particularly for many residential and commercial in-service projects, would add significant unanticipated costs and/or be financially and operationally untenable.

Proposed Action for Consideration:

Balancing the interest in solar generation measurement accuracy against the operational burdens and practical implications associated with measuring generation output and the potential harm to continued solar development, it is proposed that N.J.A.C. 14:8-2.9(c) be interpreted to permit the use of interval meters and estimated meter readings trued-up with actual meter readings in recognition that in both instances the resulting SRECs are in fact based on readings of a meter that records kilowatt-hour production of electrical energy, and which meets all applicable requirements of the regulation.

If acceptable, Board Staff need only notify PJM-EIS that it may accept "Generation Entry Type of Actual" in addition to "Meter Reading Type." These entries would in fact be readings from a revenue-grade meter with the appropriate multiplier calculation performed by the solar generator. For monthly entries based on estimates, the solar generator recognizes that in a subsequent month, there would be an obligation to true-up the estimate with an actual meter reading – either based on interval meter data or data from another type of revenue-grade meter. In addition, PJM-EIS may request documentation of the estimate and subsequent actual meter reading and/or generation data. Under its existing regulations, the Board has the authority to inspect and verify electric generation and SREC issuance. Should an entity be found to have failed to true-up for actuals or engaged in any improper practice with respect to certifying entitlement to SREC revenues, the Board of course has the means to pursue appropriate action.

N.J.A.C. 14:3-7.2

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*** This file includes all Regulations adopted and published through the ***

*** New Jersey Register, Vol. 45, No. 5, March 4, 2013 ***

TITLE 14. PUBLIC UTILITIES CHAPTER 3. ALL UTILITIES SUBCHAPTER 7. BILLS AND PAYMENTS FOR SERVICE

N.J.A.C. 14:3-7.2 (2013)

- § 14:3-7.2 Form of bill for metered service
- (a) This section applies only to a utility that provides metered service.
- (b) Unless a utility has been specifically relieved of so doing by order of the Board, a bill for metered service shall show the following:
- 1. The meter readings at the beginning and end of the billing period;
- 2. The dates on which the meter is read:
- 3. The number and kind of units measured;
- 4. Identification of the applicable rate schedule. If the applicable rates are not shown, the bill shall carry a statement to the effect that the applicable rate will be furnished upon request;
- 5. The gross and/or net amount of the bill;
- 6. If the utility uses gross and net billing, the date on which payment must be made to qualify for the net billing or discount;
- 7. A distinctive marking to indicate the method used to calculate the bill; for example, electronic readings, estimated billing, budget billing, or the index of a remote reading device. In addition, the utility may also provide a web address and telephone number where the customer can obtain a description of the method used;
- 8. An explanation or statement of any conversion from meter reading to billing units or any other calculations or factors used in determining the bill;
- 9. For each Class A water utility and each wastewater utility that meets the revenue threshold of a Class A water utility subject to the Board's jurisdiction, sufficient information to reflect the estimated amount of money in that individual bill, which is collected for the gross receipts and franchise taxes pursuant to N.J.S.A. 54:30A-54. The following language is suggested as a model statement to be indicated on the bill: "Approximately 13% of \$______ of your current period charges reflect the average gross receipts and franchises taxes

which are paid to the State of New Jersey and distributed to New Jersey municipalities."; and

- 10. For each electric and gas utility, a statement of all applicable taxes imposed upon and included in the cost of the energy provided to the customer. The following language is suggested as a model statement to be included on the bill: "Under applicable tax law, the State sales and use tax, corporate business tax, and Transitional Energy Facility Assessment are imposed upon the energy which you have used. To obtain the exact amount of tax included in your billing, please contact the utility at the telephone number listed on your bill."
- (c) If for any reason a utility cannot read a customer's meter, the utility may use estimated billing in accordance with (e) below.
- (d) (Reserved)
- (e) Rules concerning estimated bills for all customers are as follows:
- 1. Utility companies shall maintain a regular meter reading schedule and make a reasonable effort to read all meters;
- 2. Utility companies, upon request, shall make available to all customers a postage paid business reply card on which the customer may mark the meter reading as follows:
- i. The business reply card shall have appropriate explanation. The utility shall permit the customer to telephone the meter reading to the utility. The customer reading is to be used in lieu of an estimated reading, provided the reading is received in time for billing;
- 3. When a utility estimates an account for four consecutive billing periods (monthly accounts), or two consecutive billing periods (bimonthly and quarterly accounts), the utility shall mail a notice marked "Important Notice" to the customer on the fifth and seventh months, respectively, explaining that a meter reading must be obtained and said notice shall explain the penalty for failure to complete an actual meter reading. After all reasonable means to obtain a meter reading have been exhausted, including, but not limited to, offering to schedule meter readings for evenings and on weekends, the utility may discontinue service provided at least eight months have passed since the last meter reading was obtained, the Board has been so notified and the customer has been properly notified by prior mailing. If service is discontinued and subsequently restored, the utility may charge a reconnection charge equal to the reconnection charge for restoring service after discontinuance for nonpayment;
- 4. Utility companies shall submit to the Board of Public Utilities a statement detailing their estimating procedures;
- 5. If low estimates result in a customer receiving an actual bill that is at least 25 percent greater than the prior estimated bill, the utility shall allow the customer to amortize the excess amount. The amortization will be in equal installments over a period of time equal to the period when no actual reading was taken by the customer or the utility; and
- 6. Annually, the utility shall notify all customers of their rights to amortize as set forth in (e)5 above.
- (f) Prior to the implementation of any plan, automated or otherwise, which would replace or

modify a utility's current method of taking actual meter readings for any class of customers, said plan shall be submitted to the Board for approval. The plan shall be accompanied by all of the following:

- 1. A justification for the new or modified plan;
- 2. A list of all associated costs and/or savings;
- 3. The impact, if any, upon safety; and
- 4. The potential for the diversion of service.

HISTORY:

As amended, R.1979 d.474, effective January 1, 1980.

See: 11 N.J.R. 402(b), 12 N.J.R. 49(b).

As amended, R.1980 d.44, effective January 24, 1980.

See: 12 N.J.R. 156(d).

As amended, R.1980 d.299, effective July 1, 1980.

See: 12 N.J.R. 209(f), 12 N.J.R. 495(d).

As amended by R.1987 d.163, effective April 6, 1987.

See: 18 N.J.R. 2425(a), 19 N.J.R. 552(a).

Substituted "and sewerage" for "sewage".

Amended by R.1991 d.221, effective May 6, 1991.

See: 22 N.J.R. 1112(a), 23 N.J.R. 1439(b).

Deleted archaic "Board of Public Utility Commissioners".

Amended by R.1997 d.39, effective February 3, 1997.

See: 28 N.J.R. 1810(a), 29 N.J.R. 449(a).

Added (a)10; in (b)3, inserted provision on offering evening and weekend readings; in (b)5, inserted reference to averaged bills and bills based upon remote reading device index; and added (c).

Amended by R.2002 d.280, effective September 16, 2002.

See: 34 N.J.R. 992(a), 34 N.J.R. 3216(b).

In (a), rewrote 9 and 10.

Recodified from N.J.A.C. 14:3-7.9 and amended by R.2008 d.119, effective May 19, 2008.

See: 39 N.J.R. 4077(b), 40 N.J.R. 2481(a).

Added new (a); recodified former (a) as (b); added new (c), recodified former (b) and (c) as (e) and (f); in the introductory paragraph of (b), substituted "a bill for metered service" for "the bill"; rewrote (b)7; in (b)9, inserted "; and" at the end; in (b)10, substituted "utility, a statement of for company subject to the Board's jurisdiction, sufficient information to adequately reflect that the payment of" and "the energy provided to the customer" for "each kilowatt hour of electricity and therm of gas consumed by an electric and gas company", deleted "pursuant to P.L. 1997, c.162 and other applicable laws of this State" from the end of the first sentence and substituted the last occurrence of "utility" for "company"; in the introductory paragraph of (e), substituted "all" for "residential"; in (e)1, substituted a semicolon for a period at the end; in (e)2, substituted "shall" for "must", substituted "as follows:" for a period at the end and recodified the second through fourth sentences as (e)2i; in (e)2i, substituted "The business reply" for "Said", the second occurrence of "shall" for "must" and a semicolon for a period at the end; in (e)3, deleted "company" following the first occurrence of "utility", substituted "utility shall" for "the company must initiate a program to", substituted the second occurrence of "shall" for "must", substituted the third occurrence of "utility" for "company" and substituted a semicolon for a period at the end; in (e)4, substituted "shall" for "may" and substituted a semicolon for a period at the end; deleted former (e)5; recodified (e)6 and (e)7 as (e)5 and (e)6; in (e)5, substituted the first occurrence of "utility" for "company" and "utility; and" for "company."; in (e)6, substituted "utility" for "company" and "set forth in (e)5" for "outlined in (b)6"; and rewrote (f).

Former N.J.A.C. 14:3-7.2, Deposits to insure credit of new customers, was repealed.

CASE NOTES

Implementation of 1991 amendments to Gross Receipts and Franchise Tax statutes. In Matter of Implementation of P.L. 1991, C. 184, 92 N.J.A.R.2d (BRC) 53.

Change in bill format rejected; determination of complex rate increase petition. In re: Public Service Electric & Gas Co., 6 N.J.A.R. 633 (1981).

Chapter Notes

BUILDING SOLAR SOLUTIONS



March 18, 2013

B. Scott Hunter Renewable Energy Program Administrator Office of Clean Energy Division of Economic Development and Energy Policy New Jersey Board of Public Utilities 44S. Clinton Ave., POB 350 Trenton, NJ 08625-0350

RE: Proposal to Address Solar Metering Challenges

Dear Mr. Hunter;

Following the readoption with amendments of Chapter 8 Title 14 of the New Jersey Administrative Code (N.J.A.C.), a notice was sent out to all NJ PJM-GATS SREC Subscribers who were not already using the "Meter Reading" entry method, explaining to them that their account would be switched over to this method on January 31, 2013; that moving forward only meter readings would be accepted for SREC reporting purposes.

The vast majority of Vanguard Energy Partners, LLC customers received this letter, because they were reporting their monthly generation, as it was being reported by Noveda, their online Data Acquisition Systems (DAS). Their DAS' reported the actual monthly production figures based solely on the data imported from the Shark 100S, or equivalent, meter installed on each of the PV arrays. These meters are all ANSI Certified C12.20, with a +/-2% accuracy rating, meeting the metering requirements as per the New Jersey Clean Energy Program's (NJCEP) rules and guidelines.

Now, with the new reporting requirements, these customers must enter in their meter readings. Though their Noveda Systems allow them to remotely read these meters, these meters are programmed to roll over at 99,999.999 kWh. As such, many of these customers' meters roll over, some several times in a month. Based on exchanges our customers and Noveda have had with PJM-GATS, PJM-GATS cannot accommodate multiple meter roll overs in a given year, let alone in a given month. Due to this many of our customers are experiencing issues when they attempt to enter in their meter readings. As things stand now, a few customers could potentially lose upwards of 100,000 to 400,000 kWh each per month.

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A solution, we would like to propose, is that our customers be able to use the "lifetime" odometer reading for their systems. This odometer reading is available online through Noveda. This lifetime odometer reading is a running aggregate total of the meter readings for the lifetime of the system. It recognizes each roll over event and adds it into the total production number. It is commensurate to the odometer meter, if it was to never roll over.

Moreover, the data is readily confirmable, if the BPU ever needs to investigate the systems production values. Reports can be pulled from the Noveda system showing values per month, to per minute, if need be. Access to the reports and portal can be granted to the BPU, or their chosen representative.

As the Board has made it clear that their reasoning behind requiring meter readings only, is to facilitate verification of production values when needed, I believe our recommendation to allow our customer to use their online "lifetime odometer" reading in lieu of their physical meter reading, sufficiently meets that need. The "lifetime odometer" reading is easily and readily available to the BPU. Its values are supportable and based on an ANSI C12.20 certified meter with a +/- 2% accuracy.

If the Board is not inclined to allow these customers to use this "lifetime" odometer, we would like to pose a second option where the Board allows these customers to continue using the "Generation Type of Actual" reporting method. Especially, as their monthly totals are based on the data input from their Shark 100S meter. The Actual Monthly production is not based on estimates but real hard data that can be corroborated. Furthermore, this suggestion is in line with PSE&G's suggestion regarding the issues surrounding their interval meters.

A third option would be to reset all of the meters to zero and reprogram the meters to roll over at 99,999,999 kWh. We would still have a customer or two whose meter would roll over within the 15 year term for SREC's, but most would not. It would though require significant coordination between Noveda and PJM to reset all of 150+ NJ customers' meters.

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Preferably, these meters will be reset at the end of the month. The ending meter read for that month will be recorded and then the meters will be rest at 12:00 AM on the first of the following month. The customers will have to call PJM-GATS and explain the situation and to submit their meter readings. Moving forward from this point, the customers will then be able to use their physical meter odometer reading, as there will be little to no roll over events.

This option, though, could negatively impact our ability, and our customers' ability, to monitor system performance, as watt level of granularity would be lost. Currently, with the meter programing at 99,999.999 kWh, we are able to better detect ground faults and other production issues early, helping us to ensure these this systems are running at optimal capacity. For example, following the severe storms, this level of detail was instrumental in our ability to detect onsite problems and to correct them before any significant loss of production occurred.

Vanguard Energy Partners, LLC fully understands the need for accurate, supportable SREC production reporting, and believes that the proposals we have presented here will provide this. As demonstrated the readings our customers will provide will all be verifiable and accessible to the BPU, at the BPU's request. We sincerely hope that the BPU will take our suggestions under advisement. In the meantime, we look forward to your decision.

Respectfully,

Shannon Donnelly

March 19, 2013

New Jersey Board of Public Utilities
Attn: B. Scott Hunter, Renewable Energy Program Administrator
44 S. Clinton Ave., POB 350
Trenton, NJ 08625-0350

Transmitted via email

Dear Mr. Hunter:

Please find below Hartz Mountain Industries, Inc. response to your request for public input to metering issues arising from N.J.A.C. 14:8-2.9 c.

Hartz is the owner/operator of 18 commercial-scale, net-metered, solar PV systems in New Jersey. Of these 18 systems, 13 generate SRECs under the PSE&G Solar Loan program.

All 18 systems are served by ANSI C.12.1-2008 energy meters to record kwh energy production. In cases where the system is under the PSE&G Solar Loan, these meters provide a redundancy function to the energy meters installed separately by PSE&G for the purpose of generating SRECs. In cases where the system is not in the PSE&G Loan Program, these meters provide the data necessary for the purpose of generating SRECs.

Each meter is a equipped with a display screen that contains a cumulative kwh reading per the requirements of N.J.A.C. 14:8-2.9 c. To aide in our asset management operations, each meter is also equipped with a Data Acquisition System (DAS) that provides the same metered energy data, via internet portal, to a desk-top computer. This is a standard configuration for commercial scale solar systems and allows operators to monitor energy production without physically going to the solar site to view the meter. It also allows users to provide accurate, time-bound data in their generation of SRECs. Specifically, the DAS allows a user to record kWh production up to 11:59pm on the last day of the underlying generation month. Without the DAS tool, the only way a user could obtain data with the same time-bound accuracy would be to physically view and record the meter display in person at that same time.

However, the format of data in the DAS differs from the format contained on the meter display screen. Whereas the meter display screen contains a cumulative kWh reading, the DAS data is aggregated in intervals ranging from a minimum of 15 minutes to a maximum of 1 month. Consequently, to arrive at a cumulative kWh number on the DAS that matches the cumulative

kWh number contained on the meter display screen, a process of mathematic addition is necessary wherein the interval data is summed using an MS Excel spreadsheet. That summed value is then cut-and-pasted into PJM GATS.

We understand that the New Jersey Board of Public Utilities is concerned by the integrity of this summation process. We understand the concern is founded on the supposition that an arithmetic error could be made resulting in a summation that differs from the cumulative kWh reading on the display screen. To the extent the summation exceeded the value on the meter display screen, SRECs would have been granted for solar energy production that did not occur.

In response to this concern, we would firstly note that the potential for error is not limited to users of DAS. An error could just as easily - perhaps more easily - be made in a user's manual transcribing of a physical meter reading to a sheet of paper then to on to the PJM GATS interface.

As a result, the issue for the board should not be a verification of how users of DAS are aggregating data for the purpose of generating SRECs. Rather, the issue should be how to verify that the cumulative kWh reading on the meter screen matches the number of SRECs generated to the same date for that system.

We believe that the most accurate and administratively streamlined process to accomplish this – both for GATS account holders and the Board and its designees – would be to require GATS account holders to submit annually:

- a photograph of the cumulative kwh reading on the meter display screen; or
- II) a screen shot of the cumulative kwh reading provided by the DAS (if available)

For tracking purposes, the submission should include a reference to the Board's identification number and meter serial number associated with that system. The photograph or screenshot should also include a date stamp.

With this information, the Board and its designees could easily compare the cumulative kWh reading in the photo/screen shot with the number of SRECs generated for that system to that same date.

However, in considering this approach, it must be emphasized that any implementation guidelines would need to address events specific to the physical meter, such as:

- A) The meter is replaced with a new meter
- B) A meter is reset so that the cumulative kWh reading reverts back to zero
- C) The cumulative kWh reading reaches a number of digits that exceeds the digits available on the meter screen. For example, depending on the meter, a 6 digit reading of 999,999 kWh could transition to either 1kWh or 1000.001 MWh after the meter recorded its millionth kwh.
- D) A meter is ANSI C.12.1-2008 certified but does not contain a screen with a cumulative kWh reading.

We hope you find these comments useful as you consider approaches to resolve metering issues arising from N.J.A.C. 14:8-2.9 c.

Sincerely,

Hartz Mountain Industries, Inc.

Alexander C. Stern Associate General Regulatory Counsel Law Department 80 Park Plaza, T5G, Newark, NJ 07102-4194 tel: 973.430.5754 fax: 973.430.5983 email: alexander.stern@pseg.com



March 15, 2013

Mr. Scott Hunter New Jersey Board of Public Utilities 44 South Clinton Ave. Trenton, NJ 08625---0350

Re: Comments on Agenda Item VI from the 3/13/13 RE Committee Meeting – Solar Metering Challenges

Dear Mr. Hunter:

Thank you and the Office of Clean Energy for the collaborative and expedited approach you are taking to addressing recent solar metering concerns as well as your consideration of Public Service Electric and Gas Company's proposed solution. In your e-mail requesting comments, you indicated that Board Staff seeks input in developing a process to ensure that sufficient data is kept available by each SREC account holder with interval production meters to enable the Board or its designee to verify that the MWh data submitted to GATS is consistent with the amount of solar electricity produced by the system for which SRECs were generated. Specifically, you indicated that Board Staff is looking for suggestions on the type of information to be kept, in what form, the frequency of collection, and the retention time.

In response to your request, PSE&G offers the following process:

All solar generators utilizing interval meters shall maintain documentation supporting (1) the specific multiplier and its initial calculation; (2) all monthly kWh interval data to which the multiplier is applied; and (3) proof of the calculation resulting in the PJM GATS generation entry. Such data will be provided upon request to the Board and/or PJM GATS and will consist of system screenshots and excel spreadsheets for detailed interval data.

All multiplier supporting documentation, interval generation data, and monthly calculations should be maintained for a reasonable term to permit review. PSE&G intends to maintain solar generation metering data for six years. However, in recognition of the various entities large and small that are involved in solar

development projects, the Board may wish to establish a different retention period to reflect these varied entities.

Thank you again for your deliberate approach to addressing this important issue.

Respectfully submitted,

Alexander C. Stern

ACS/jb

Deborah Petrisko

From: Sent: Hunter, B [B.Hunter@bpu.state.nj.us] Friday, March 15, 2013 5:07 PM

To:

Jackson, Ronald

Subject:

FW: Comment on Agenda Item VII - RPS SREC Metering Issue

From: Hunter, B

Sent: Friday, March 15, 2013 5:02 PM **To:** 'rfortin@sunstreampartners.com'

Subject: RE: Comment on Agenda Item VII - RPS SREC Metering Issue

Mr. Fortin,

Thank you for your comments.

Scott Hunter

B. Scott Hunter
Renewable Energy Program Administrator,
Office of Clean Energy
Division of Economic Development and Energy Policy
New Jersey Board of Public Utilities
44 S. Clinton Ave., POB 350
Trenton, NJ 08625-0350
www.njcep.com
(609) 292-1956

From: <u>rfortin@sunstreampartners.com</u> [<u>mailto:rfortin@sunstreampartners.com</u>]

Sent: Thursday, March 14, 2013 4:05 PM

To: OCE

Subject: Comment on Agenda Item VII - RPS SREC Metering Issue

As a PSE&G Solar Loan Client, we paid for installation of revenue grade ANSI-C12.1-2208 compliant meters at two locations to track SRECs generated by the solar systems. They are interval meters with a multiplier and were specified by PSE&G for participation in the Solar Loan Program and interconnection with their grid. Since we were required to pay for and install these revenue grade meters by PSE&G, we did not install secondary revenue grade meters at these locations.

One location received permission to operate (PTO) on Sept. 17, 2012, the other on Sept. 24, 2012. The corresponding PSE&G Solar Loans for each site closed on October 25, 2012. SRP Certification Numbers for each location was received in late December and forwarded to PSE&G.

From the PTO date through February 28th, 2013, the revenue meters for these two systems indicated 158 and 116 SRECs generated respectively, with a contract value of \$55,300 and \$40,600, or \$95,900 in total. These SRECs should have been credited to PSEG's account to meet our Solar Loan amortization in January and February. PSE&G did not inform us until March 8th that they were unable to process SRECs with PJM-EIS due to the metering issue.

To date, this metering issue has resulted in added interest expense of \$95,583.43 for these loans. PSE&G Solar Loan agreements call

for payment in cash if SRECs are not generated to amortize the loan. Until the issue is resolved, the loans are accruing interest expense of \$678.09/day. Cash payment in lieu of SREC payment would put these projects in jeopardy.

We followed all the procedures and requirements of both the NJ Clean Energy SRP program, and PSE&G Solar Loan Program, and now find PSE&G either did not follow BPU Board orders or the Solar Loan Program SREC meter was not compliant through no fault of ours. Either way, the rules have changed without forewarning or an opportunity to redress the issue, putting these projects in economic jeopardy. We need an expeditious and cost effective resolution of this issue to avoid potential default under the Solar Loan Program.

Respectfully,

Richard Fortin SunStream Somerset Valley LLC 9 Schuyler Hills Rd. Albany, NY 12211 917-816-8641 rfortin@sunstreampartners.com

Deborah Petrisko

From:

Hunter, B [B.Hunter@bpu.state.nj.us] Friday, March 15, 2013 5:06 PM

Sent: To:

Jackson, Ronald

Subject:

FW: Comments on RE Committee discussion of RPS's SREC metering issues

From: Wemple, Stephen B. [mailto:wemples@conedcss.com]

Sent: Friday, March 15, 2013 4:37 PM

To: OCE; Hunter, B

Subject: Comments on RE Committee discussion of RPS's SREC metering issues

On behalf of Consolidated Edison Solutions, Inc. and Consolidated Edison Development, Inc., I offer the following comments in response to the discussion of SREC metering issues at the March 13, 2013 RE Committee:

- The use of meter multipliers along with meter calibration is standard practice for metering and is used in conjunction with revenue-grade metering throughout the industry including measuring generation output, flows on transmission lines and even billing of retail large retail customers pursuant to BPU-approved tariffs.
- Market participants should be able to submit actual KWH production to PJM GATS based on actual metered
 production adjusted, where applicable, by the appropriate meter multiplier and/or calibration factor.
- The market participant responsible for the metering data should be required to retain and make available to BPU staff for up to three years documentation of the actual meter readings, the applied multiplier(s), the basis for such multiplier(s) and/or calibration.
- While we are not endorsing the use of estimated readings, we recommend that any use of estimated readings be confirmed and, if necessary, corrected with an actual meter reading at the end of each energy year.

Respectfully submitted,

Stephen Wemple Vice President, Regulatory Affairs Con Edison Competitive Shared Services 100 Summit Lake Drive, Suite 410 Valhalla, NY 10595 914-993-2149



Margaret Comes Senior Attorney Law Department

March 15, 2013

B. Scott Hunter
Renewable Energy Program Administrator,
Office of Clean Energy
Division of Economic Development and Energy Policy
New Jersey Board of Public Utilities
44 S. Clinton Ave., POB 350
Trenton, NJ 08625-0350

RE: NJ Renewable Energy Committee Meeting March 13, 2013

Request for Comment on SREC metering issues

Dear Mr. Hunter:

The following Rockland Electric Company ("Rockland") comments are in response to NJBPU Staff's request for comments on the SREC metering issues discussed at the March 13, 2013 Renewable Energy Committee meeting.

For purposes of metering and recording metered generation for the Rockland SREC Based Financing Program, interval meters are not being used. Rockland uses actual meter readings obtained from the same digital meters that we use for billing electric consumption. Rockland has recognized that the PJM GATS meter input screen does not have the ability to allow for a meter multiplier, for multiple meters on one project, or to recognize when a 5 digit meter "turns over" and goes past the index "00000". To accurately record and supply the meter readings to GATS, Rockland records all of its SREC meter readings from its customer information system (CIS) on an Excel spreadsheet.

The spreadsheet allows for the accumulation of meter indexes and multipliers into one meter index that can be entered in the GATS system. The index Rockland enters in GATS is reflective of the actual accumulated generation recorded on the meters. This is similar to the algorithm Rockland's customer billing system uses to arrive at billing kWh for customers where the billing meter has a multiplier. Rockland's SREC program requires this step because Rockland records the meter indexes to GATS instead of the monthly kWh generation. For all other meter indexes, Rockland is entering the actual index read from the SREC meter each month. However, for a number of larger projects, and with time essentially all projects, the amount of kWh recorded will exceed 99,999 which is the highest reading before the meter index will turn over to zero. To allow for

this, Rockland's spreadsheet allows for retaining a meter index with an infinite amount of digits. Rockland has discussed this with GATS and they do not take issue with Rockland's approach assuming Rockland maintains a record of its meter indexes, which is in fact done via the indicated spreadsheet.

Thank you for this opportunity to comment. Please feel free to contact me if you have any questions about these comments.

Very truly yours,

Margaret Comes

From: Mitchell Berman [mailto:mitchell@geogenix.com]

Sent: Thursday, March 14, 2013 8:00 AM

To: OCE

Cc: gaurav@geogenix.com; 'Jacobus, Thirza L.'

Subject: Request for Comment followup to today's RE Committee discussion onagenda item VII. a. RPS's SREC metering

issues

I have several comments involving the new rules:

- Whatever the outcome is of this new implementation, I think a letter needs to be generated explaining the rationale behind these new rules and procedures. Perhaps I have not seen all of the correspondence being sent to SREC generators, but we have received numerous complaints about the recent rules requiring the costly and inconvenient installation revenue-grade meters without being explained the rationale (With all due respect and I think I understand the concern, being told merely "It's the rules" is not an acceptable explanation for the cost and inconvenience about to be incurred by someone who's been happy with not having to do any reporting whatsoever in the past and not having reporting issues.)
- Particularly for the entry of residential meter readings, the mechanism needs to be extremely simple. I suggest
 that the entry of the actual meter reading be instantly (programmatically) scrutinized using reasonability tests
 (e.g., comparisons with PVWatts, previous readings, etc.) to provide immediate feedback in case the bad data is
 erroneously or deliberately input. In addition, uploading of digital meter pictures or screen-shots of revenuegrade data acquisition systems should be done through a "browse for an attachment" process at that point. The
 need for simplicity is exacerbated by the fact that there are many older system owners who's computer
 proficiency is limited.
- For our Customers participating in the PSEG Solar Loan program, I support keeping the status quo in terms of using the current revenue-grade meters installed by use and supplied by PSEG. If the issue is PJMGatts not currently having the ability to record and use a so-called meter multiplier, let them add it to their database. This issue goes beyond PSEG's program and affects many other commercial Customers, as well. Furthermore, there should be no penalty for any of the PSEG Solar Loan Customers because of these new rules, because it was not their fault that these new rules were put in place (with an extremely short implementation leadtime) and they were in full compliance with the rules at the time their systems were installed and contracts signed.

Thanks you for taking the time to consider my comments.

Mitch

Mitchell Berman GeoGenix, LLC 732.343.7680 x202 (phone) 732.895.9552 (cell) 732.626.7010 (fax) www.geogenix.com

Deborah Petrisko

From:

tdonadio@firstenergycorp.com

Sent:

Tuesday, February 26, 2013 1:57 PM

To:

Jackson, Ronald

Subject:

Re: Issues with SREC Registration in GATS

Attachments:

JCP&L GATS Index Examples.xls

Ron,

In response to your request for our methodology used to track our SREC meter readings which are entered in the PJM GATS system, I would first like to clarify that we are not using interval meters and using a calculation to arrive at the MWh generation values. We are using actual meter readings obtained from our 5 dial/digit electric meters which are the same meters that we use for billing electric consumption. We have recognized that the PJM GATS meter input screen does not have the ability to either account for a meter multiplier, allow for multiple meters on one project or recognize when a 5 digit meter "turns over" and goes past the index "00000". To accurately record and supply the meter readings to GATS, we record all of our SREC meter readings from our customer information system (SAP) on an Excel spreadsheet and use the resultant meter indexes.

The spreadsheet allows for the accumulation of multiple meter indexes into one meter index that can get entered in the GATS system. The index we enter in GATS is reflective of the actual accumulated generation recorded on the meters. For projects which have CT rated meters which have a multiplier, we record the actual meter index on a spreadsheet and apply the appropriate multiplier which provides the index that we record in GATS. This is not unlike the algorithm our customer billing system uses to arrive at billing kWh for customers in any given month. Our SREC program requires this step because we record the meter indexes to GATS instead of the monthly kWh generation. For all other meter indexes, we are entering the actual index read from the SREC meter each month. However, for a number of larger projects, and with time essentially all projects, the amount of kWh recorded will exceed 99,999 which is the highest reading before the meter index will turn over to zero. To allow for this, our spreadsheet allows for retaining a meter index with an infinite amount of digits. We have discussed this with Jaclynn Lukach at GATS and they do not take issue with our approach. She only said to maintain a record of our meter indexes which we do. Examples of this are contained on the attached spreadsheet. Let me know if you have any questions.

Tom

Meter Reading	Read Type:	1, 14	Actual					
		3, 13	Estimated		1			
			tual meter reading	s are entered i	n GATS			
Example 1 - me	ter with multiplic	er				- #	1	•
	Meter #	Read Date	Read Type	Read Index	Muit.	kWh Gen.	Cumulative Index for GATS	
	X00000000				40			
		6/1/2010		0	40	0		
***************************************	X00000000 X00000000	6/18/2010	14	360	4	14,400		
		6/27/2010	}	360	40	0		
	X00000000	7/21/2010		1,577	40	48,680		
	X00000000	8/19/2010		2,523	40	37,840		
	X00000000	9/20/2010	1	3,526	40	40,120	141,040	
Evenue o		A5-0						
Example 2 - pro	vject with multip	Read Date	Read Type	Read Index	Mult.	kWh Gen.	Cumulative Individual Meter Index	Multiple Meter Combined Index for GATS
				All Set 7/15/10	at index 0	1		
	X00000000	8/30/2010	3	0	1	. 0	1 0	
	X00000000	9/28/2010	3	0	1	0		·
	X00000000	10/29/2010	3	0	1	0		
	X00000000	11/24/2010	14	13,389	1	13,389		64,25
	X00000000	12/29/2010	13	14,421	1	1,032		66,91
***************************************	X00000000	1/27/2011	13	15,286	1	865	4	
	X00000000	2/25/2011	14	16,213	1	927		80,30
	X00000000	8/30/2010	3	0	1	0	0	
	X00000000	9/28/2010	3	0	1	0	Á	
	X00000000	10/29/2010	3	0	1	0	0	
	X00000000	11/24/2010	14	16,922	1	16,922	16,922	
	X00000000	12/29/2010	13	18,543	1	1,621	18,543	
	X00000000	1/27/2011	13	19,901	1	1,358	19,901	
	X00000000	2/25/2011	14	21,356	1	1,455	21,356	
***************************************	X00000000	8/30/2010	3	0		0		
	X00000000	9/28/2010	3	0			0	
	X00000000	10/29/2010	3	0		0	0	
	X00000000					•	40.000	
	X00000000	11/24/2010 12/29/2010	14	16,989	1	16,989	16,989	
	X00000000	1/27/2011	3 3	16,989	1	0		
	X00000000	2/25/2011	14	16,989 21,418	1	0 4,429	16,989 21,418	
**************************************		.//						11,224,1,244,1,144
	X00000000	8/30/2010	3	O	1	0	0	
**(1/5	X00000000	9/28/2010	3	Ő	1	0	0	
***************************************	X00000000	10/29/2010	3	0		0	0	
***************************************	X00000000	11/24/2010	14	16,958	1	16,958	16,958	
	X00000000	12/29/2010	3	16,958	1	10,930	16,958	
	X00000000	1/27/2011	3	16,958	1	0	16,958	
	X00000000	2/25/2011	14	21,316	i	4,358	21,316	
F								
Example 3 - met	er dials roll over						Index for	
	Meter # X00000000	Read Date 4/20/2010	Read Type	Index 0	Mult.	kWh Gen.	GATS	12000.12000.100
	X00000000		1.4		1	0	0	
	X00000000	5/20/2010	14	29,557	1	29,557	29,557	
	X00000000	6/17/2010	1	56,928	1	27,371	56,928	
	X00000000	7/20/2010	1	92,520		35,592	92,520	
	N00000000	8/18/2010	1	20,166	1	27,646	120,166	

From: tdonadio@firstenergycorp.com [mailto:tdonadio@firstenergycorp.com]

Sent: Friday, March 22, 2013 5:31 PM

To: OCE Cc: Hunter, B

Subject: JCP&L Comments - Solar Metering

In an email dated March 13, 2013, Board Staff requested comment on whether the input of metered solar megawatt-hour data from the required ANSI C-12.1-2008 certified electric meter is appropriate input to the PJM-EIS Generation Attribute Tracking System (GATS). I provide the following comments on behalf of Jersey Central Power & Light Company ("JCP&L")

There are generally four different solar generation metering situations where it is impractical to expect that the physical index of an installed meter will be sufficient for input to GATS for SREC creation without certain modifications that do not change the recording of the magnitude of generation.

- 1. Mechanical 5 dial or electronic 5 digit single and three phase meters
- 2. Interval recording meters
- 3. Current transformation rated metering
- 4. Multiple metering points for a single solar generation project.

Mechanical 5 dial or electronic 5 digit single and three phase meters

It is important to recognize that meters used for the measurement of electricity consumption do not have a limitless number of digits for a meter index. As a result, meter indexes will advance to a maximum level (typically 99999) before restarting at an index of zero. Utility billing systems have the capability to recognize this and a billing algorithm is employed to ensure customers are billed for the correct amount of consumption.

For the solar generation metering, JCP&L recommends that actual meter readings obtained from 5 dial/digit electric meters, the same meters that the Company uses for billing electric consumption, be used as the original data source for input to GATS. We have recognized that the PJM GATS meter input screen does not have the ability to (i) account for a meter multiplier, (ii) allow for multiple meters on one project or (iii) recognize when a 5 digit meter "turns over" and goes past the index "00000". To accurately record and supply the meter readings to GATS, all SREC meter readings would be obtained from our customer information system (SAP) entered on an Excel spreadsheet and the resultant meter indexes used for input to GATS.

For smaller solar installations, generally, this would result in the actual meter index physically on the meter being used as the GATS input. However, for a number of larger projects, and, over time, essentially all projects, the amount of kWh recorded will exceed 99,999 which is the highest reading before the meter index will turn over to zero. To allow for this, a spreadsheet simply allows for retaining the recorded meter index, as well as a cumulative index with an infinite amount of digits. We have discussed this approach with Jaclynn Lukach at GATS. GATS does not take issue it. The only requirement would be that a record of the source data and indexes input to GATS be maintained (for the duration of a solar facilities' SREC creation, and otherwise consistent with applicable records retention requirements).

Interval recording meters

Metering installations on larger accounts may have interval recording meters, which record electric kWh generation as 15 minute interval data. Each interval meter would be set at an index of 00000. To create an index based upon recorded generation, it is a simple matter of summing together all the 15 minute recorded kWhs for a given month and adding that amount to the meter index derived in the prior month to create a current meter index. This is the same process used by JCP&L for its regular billing of eligible large accounts.

Current transformation rated metering

In certain instances, generally for large accounts, the amount of power that would flow through a meter would exceed the amperage limitations of the electric meter. In these cases, a metering installation would use current transformers (CT) with specified conversion ratios that step down the amperage, which flows through the electric meter to be safely metered, while the full level of electric consumption flows through the CT buss bars of the customer's installation. Because the meters will see a lower amperage, this requires that the meter have a multiplier that correlates to the CT ratios. For example, an installation with CTs with a ratio of 200:5 would need a meter multiplier of 40 (multiplying the meter index) to arrive at the actual amount of electricity consumed by a customer during the applicable period.

Multiple metering points for solar generation

In a number of instances, solar developers have elected to install multiple metering points to record the solar output from a single solar project. The reasons for this could include installations for a single net metered customer that involves multiple buildings or recording the solar output on two separate self-contained three phase meters to avoid the project expense of installing a CT enclosure. The PJM GATS system does not have a means to accumulate the physical indexes from two or more meters on the data entry screen. This requires a separate spreadsheet that can combine the meter indices from the multiple meters to provide a single cumulative meter index that can be entered into GATS. This would not be unlike obtaining the reading from multiple inverters to accumulate one qualified metered index.

In the normal course of business, JCP&L accounts for these various scenarios and employs specific algorithms for billing electric customers. The use of this meter data in the form and manner described above do not constitute an estimation of generation in the traditional sense in which that term is used in the electric industry with respect to electric service billing. In the instances under review here, actual meter data is being used to compute the actual generation. There is no reason and no cause for concern about the use of this long-standing and long-approved industry practice for the recording of solar generation in GATS for SREC creation purposes. JCP&L has recognized the meter index input limitation of GATS and has been using a spreadsheet to record all actual recorded meter indexes as well as the resultant index that gets input to GATS. The Company believes that its process to collect and submit meter reading data to GATS is compliant with N.J.A.C. § 14:8-2.9 (c) which states:

- (c) Beginning December 4, 2012, in measuring generation to determine the number of RECs or SRECs to issue, the Board or its designee shall accept only readings of a meter that records kilowatt-hour production of electrical energy (emphasis added), and which meets all applicable requirements at (c)1 and 2 below. The readings may be taken or submitted by any person, but shall be verified by the Board or its designee:
- 1. The American National Standards Institute (ANSI) Standard C12.1-2008, Electric Meters Code for Electricity Metering, incorporated herein by reference, as amended or supplemented; and
- 2. Any additional requirements in the PJM-EIS Generation Attribute Tracking System Operating Rules, Revision 6, September 2010; and the PJM-EIS Generation Attribute Tracking System Terms of Use, last modified on January 3, 2011; which are incorporated herein by reference, as amended and supplemented, and can be found at www.PJM-EIS.com.

The Company currently uses the readings of a meter that records kilowatt-hour production of electrical energy, which information it maintains and uses to convert the data into the form that will comply with the data entry requirements of GATS. A review of the GATS Operating Rules manual indicates that PJM recognizes the mechanics involved in the metering for large generators and the need for interval or CT rated measurements.

Of course, certain information from the meter data source used for solar generation reporting should be recorded and maintained. The type of information recommended to be maintained would be as follows:

- Meter identification numbers (manufacturer initial and serial number);
- Meter installation date(s):
- Meter reading date;
- Recorded meter index;
- Meter multiplier or constant;
- Resultant meter index used for GATS entry;
- Any calculations required for multi-meter sites;
- Interval generation data used to calculate a monthly meter index.

This information should be maintained for each individual project site on an Excel spreadsheet or similar electronic repository. This data should be maintained for the duration of the solar project's creation of SRECs. For JCP&L, this would be a 10 or 15 year period consistent with executed Purchase and Sale Agreements under the JCP&L SREC-based Financing Program and otherwise consistent with applicable records retention requirements. The meter reading and data entry should be completed by the utility on a monthly basis. This information could be made available to the Board upon request, as the Company does not believe that it is necessary to require periodic reporting of this information to the Board as opposed to making it available when requested.

Feel free to contact me with any questions.

Tom Donadio Jersey Central Power & Light Co NJ Rates & Regulatory Affairs

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From: howard@njsrec.com [mailto:howard@njsrec.com]

Sent: Wednesday, March 20, 2013 9:45 PM

To: Renewable Energy Committee (Notification); Hunter, B; charlie.j.garrison@honeywell.com

Cc: lyle@advancedsolarproducts.com

Subject: RE: Request for Comment followup to today's RE Committee discussion on agenda item VII. a.

RPS's SREC metering issues

Scott,

Per the items discussed at the RE meeting.

The GATs data entry system allows for periodic readings. GATs does not require system kWh generation to be entered every month. When a month or several months are skipped and data is entered into the current month area, the system will calculate a number to enter in to the missing months. Although those numbers estimated may not match actual kWh generation, the total at the point of entry, assuming entered accurately, will be the accurate total generation. On the last business day of the month following, SRECs will be minted accordingly and accurately.

The generator or the assigned owner of the SRECs would have those SRECs at that time. While there may be contracts in a minority of cases in the overall population of generators that require a monthly SREC reporting for interval meters or in situations where SREC revenue grade meters (RGM) cannot be read every month, the fact remains that the GATs system as it exists allows SRECs to be minted even if not reported monthly.

We would suggest that as in fact there will be no detrimental effect to any generators or SREC owners to periodic instead of monthly reporting, it would be much easier to amend any such agreements than change the rules in affect since 12/4/2012 or make exceptions.

Regarding meters with multipliers. Determining kWh generation should be a matter of doing the math and if not, the meter may not be designed for the required task.

Regarding estimates being calculated by GATs and appearing in the data entry module. We would suggest that the NJCEP should NOT ask for these to be removed. These estimates provide lay solar system owners the ability to cross check their solar production against expected solar production which is a useful tool in determining if their system/ RGM is functioning properly. The honest reporters should not be penalized for a few perceived bad apple reporters.

Regarding making sure honest meter readings are reported. Monthly logs could be kept accurately or inaccurately but a yearly picture of the meter would suffice and we think is the best idea. The meter should have an ID number assigned. If people really want to cheat they will find a way unless the data is entered electronically through a phone line but if small system owners are asked to pay for that after suffering through the RGM cost with low SREC values it may not be a cheerful undertaking. The other option is to hire a SREC RGM policeperson and make it known meters will be inspect meters on a random basis. It could be a part time position. The problem with the policeperson idea is that most meters are inside homes and buildings and as the majority of systems are residential, a surprise visit to read a meter probably would not work well.

On a separate issue, it was discussed and the RE meeting that perhaps adding broker documentation to the New Jersey CEP website would provide a better level of transparency to the market. We would take issue with that approach. It would be very difficult for the program to keep up with the daily information from all the broker/aggregator participants. The information when the document is published does not reveal what could be multiple changes in the NJ SREC market intraday. Broker documents are not necessarily updated daily and can be inaccurate. A large portion of the reason that documents are provided by brokers is to promote their business and the informational aspect is only a part of the intent of producing the document. In addition, prices that appear on documents are subject to market conditions, to transaction size, to completion status of projects and acceptable credit between varying counter parties. I suggest this information has significant reasons it should not be part of the New Jersey CEP website but rather remain available by individual companies. In addition, every buyer of NJ SRECs has the ability to post their prices and information on the GATs bulletin Board daily which is accessible to all New Jersey solar generators.

We hope you find this input useful.

Sincerely,



Howard L Fleischer
Managing partner
NJSREC.com, a 21st Century Sales Company
Howard@NJSREC.com
Phone-609-466-2020
Fax - 609-466-4444
Cell - 609-915-1101
www.NJSREC.com



CHRIS CHRISTIE

Governor

KIM GUADAGNO Lt. Governor DIVISION OF RATE COUNSEL 31 Clinton Street, 11th Fl P. O. Box 46005 Newark, New Jersey 07101

STEFANIE A. BRAND Director

March 22, 2013

Via Overnight Delivery and Electronic Mail

Honorable Kristi Izzo, Secretary New Jersey Board of Public Utilities 44 South Clinton Avenue, 9th Floor P.O. Box 350 Trenton, New Jersey 08625-0350

Re: New Jersey Clean Energy Program Clean Energy Committee-

Request for Comments on SREC Metering Issues

Dear Secretary Izzo:

Enclosed please find an original and ten copies of the Comments submitted on behalf of the New Jersey Division of Rate Counsel ("Rate Counsel") in connection with the abovecaptioned matter. Copies of the comments are being provided to all parties on the e-service list by electronic mail and hard copies will be provided upon request to our office.

We are enclosing one additional copy of the comments. <u>Please stamp and date the extra</u> copy as "filed" and return it in our self-addressed stamped envelope.

Honorable Kristi Izzo, Secretary March 22, 2013 Page 2 of 2

Thank you for your consideration and assistance.

Respectfully submitted,

STEFANIE A. BRAND

Director, Division of Rate Counsel

By:

Sarah H. Steindel, Esq.

Assistant Deputy Rate Counsel

c: OCE@bpu.state.nj.us
Elizabeth Ackerman, BPU
Michael Winka, BPU
Scott Hunter, BPU
Ann Marie McShea, BPU
Tricia Caliguire, Esq., BPU
John Teague, BPU
Marisa Slaten, DAG

Comments of the New Jersey Division of Rate Counsel Re. Request for Comments on SREC Metering Issues March 15, 2013

The Division of Rate Counsel ("Rate Counsel") would like to thank the Office of Clean Energy ("OCE" or "Staff") for the opportunity to present comments regarding solar metering challenges raised by Public Service Electric & Gas ("PSE&G"). Rate Counsel's response to Staff's follow-up to the March 13, 2013 meeting of the Renewable Energy Committee are provided below.

OCE Request:

"We discussed measures designed to enable SREC owners with interval meters or other meters that require a calculation involving a multiplier and index to arrive at a generation amount in MWh to comply with the RPS rule requirement at NJAC 14:8-2.9 (c). Specifically, "in measuring generation to determine the number of RECs or SRECs to issue, the Board or its designee shall only accept readings of a meter that records kWh production of electrical energy, and which meets all applicable requirements at (c) 1 and 2 below. The readings may be taken or submitted by any person, but shall be verified by the Board or its designee". Staff seeks input in developing a process to ensure that sufficient data is kept available by each SREC account holder with interval production meters to enable the Board or its designee to verify that the MWh data submitted to GATS is consistent with the amount of solar electricity produced by the system for which SRECs were generated. Specifically, we are looking for suggestions on the type of information to kept, in what form, the frequency of collection, and the retention time. Some suggestions from the meeting included a log of all production related data with descriptive information on the meter including the multiplier, kept for each meter reading entered, an annual photo of the meter faceplate or online aggregation screen..."

Rate Counsel Response:

Rate Counsel believes it is paramount for the ongoing viability of the State's SREC program that accurate generation information be available to verify accurate SREC certifications. To this end the Board of Public Utilities recently modified N.J.A.C. 14:8-2.9(c) requiring solar generators to utilize electric meters meeting the American National Standards Institute ("ANSI") Standard C12.1-2008. Understandable measures to accommodate unique situations where generation information must be arrived at through the use of multipliers and indexes should not lose sight of the Board's clear intention that all generation information used in the issuance of SRECs should be verifiable. Rate Counsel supports Staff's efforts to determine appropriate information needed to be retained by customers and utilities in these situations, and believes Staff's process should insure that such information is detailed enough to pass the most rigorous of audits if generation information submitted to GATS come into question.



March 22, 2013

B. Scott Hunter
Renewable Energy Program Administrator
Office of Clean Energy
Division of Economic Development and Energy Policy
New Jersey Board of Public Utilities
44 S. Clinton Ave., P.O. Box 350
Trenton, New Jersey 08625-0350

Dear Mr. Hunter,

The following comments are submitted by New Jersey Resources Clean Energy Ventures ("CEV") in response to the BPU staff solicitation for input on the topic of SREC metering.

CEV does not interpret any inconsistency between the requirements that SREC production be reported to PJM-GATS based on actual meter reads from ANSI-C12:1-2008 certified meters, and the use of interval meters to record the actual kWh generated. For our solar projects, we program our ANSI certified Itron meter to measure kWh production, which is what we report to GATS. Any interpolations or calculations made to derive this actual kWh production are internal to the meter, and not subject to subsequent modification or change. For each ANSI-C12 certified meter, BPU may wish to investigate the methodologies which are used to calculate actual kWh production, including any index calculations used, and provide further guidance to the industry if there is a preferred approach.

With regard to verification, CEV believes that BPU should distinguish between entities which own larger systems (>500kW), from those which own smaller systems. Larger systems, which can have a significant impact on the SREC market, have the greatest need for precision in reporting, and should be required to warehouse electronic meter data over the life of the system, and make this available to the BPU upon request. We suggest that any solar leasing companies or aggregators which own a large number of systems be subject to the same data warehousing requirements as larger system owners. Leasing companies should not be required to take annual pictures of meters given the administrative cost of doing so across potentially hundreds or thousands of systems.

For smaller systems, including those owned by individual residences, the GATS tolerances based on system size should be sufficient to monitor reported SREC production and guide BPU verification priorities. GATS may wish to consider tightening its tolerances provided it can adjust for weather conditions.

CEV appreciates the opportunity to comment on SREC metering. We would welcome the opportunity to discuss these ideas with the BPU and other interested stakeholders.

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Sincerely,

Larry Barth

Director, Business Development