DRAFT RPS Rules Revision Stakeholder Meeting Notes

March 12, 2010
Department of Environmental Protection Building
Public Hearing Room - 1st Floor
401 East State Street
Trenton, NJ
Call-in Number: 866.222.0917
Participant code: 913090

Solar Energy Advancement & Fair Competition Act (Section 38 P.L.1999, c.23 (C.48:3-87):

New Jersey Legislature passed new solar legislation called the **Solar Energy Advancement and Fair Competition Act** which was signed into law (P.L. 2009, c. 289) on January 17, 2010. The new law sets a fixed annual solar requirement for the state's Solar Renewable Portfolio Standard (RPS); extends the RPS to the year 2026; extends a REC life to three years; and establishes a 15 year SACP, among other things. BPU staff reviewed some of the key provisions in the new law, discussed rule revisions under consideration, and the process for rule adoption:

- 1. Rules subject to Special Adoption / Section d. paragraph (3) include among others:
 - NEW Fixed solar GWh requirements and schedule changes: NJ RPS Solar requirement changes from an annual percentage based requirement to an annual fixed GWh requirement. Solar RPS requirements were also extended out to 2025
 - (3) that the board establish a multi-year schedule, applicable to each electric power supplier or basic generation service provider in this State, beginning with the one-year period commencing on June 1, 2010, and continuing for each subsequent one-year period up to and including, the one-year period commencing on June 1, 2025, that requires that suppliers or providers to purchase at least the following number of kilowatt-hours from solar electric power generators in this State:

EY 2011	306 Gigawatthrs	EY 2019	1,858 Gwhrs
(Gwhrs)	-	EY 2020	2,164 Gwhrs
EY 2012	442 Gwhrs	EY 2021	2,518 Gwhrs
EY 2013	596 Gwhrs	EY 2022	2,928 Gwhrs
EY 2014	772 Gwhrs	EY 2023	3,433 Gwhrs
EY 2015	965 Gwhrs	EY 2024	3,989 Gwhrs
EY 2016	1,150 Gwhrs	EY 2025	4,610 Gwhrs
EY 2017	1,357 Gwhrs	EY 2026	5,316 Gwhrs
EY 2018	1.591 Gwhrs		

Discussion: Review of solar schedule and requirements as stated in law. Provisions for 20% increase as stated in the law is not subject to the Special Rule Adoption but will be included in the general rule proposal.

• Methodology for determining supplier obligations: the statute requires that the individual supplier solar obligation shall be equivalent to each supplier's or provider's proportionate share of the total number of kilowatt hours sold in this State by all suppliers and providers. (SEE DRAFT Methodology Handout)

Discussion: TPS Suppliers will bear undue risk in having to estimate their percentage of total retail sales for the year, in order to determine their proportional share of the statewide fixed GWh requirement, and then have to bear the burden of meeting the difference between estimated and actual at year end. Some commented that the new 3 yr SREC life will buffer the impact by allowing TPS to bank SRECs. BGS suppliers will employ a similar methodology and will also be subject to risk but not to the same extent at TPS suppliers. Prior to BGS Auction, BPU will determine what the estimated Solar GWh requirement is associated with each tranch of supply up for bid. An annual true up will be required at the end of the year. Although, TPS previously recommended against a fixed GWh requirement, the law is clear in moving from a percentage of load to a fixed GWh requirement. BPU is willing to consider suggestions for how to apply this to TPS. Some suggested a quarterly estimate and true up might work better for TPS.

Action: BPU welcomes additional comments / input on how best to determine supplier SREC obligation for TPS and other interested stakeholders. BPU will draft and circulate a methodology for further review and comment. (See Appendix 1: DRAFT Methodology for Determining Supplier Solar Obligation)

• Supplier Exemption for previously existing contracts. The statute exempts preexisting contracts within BGS Supply which would include bgs contracts for 2011 and 2012. The SRECs associated with load under contract would be exempt from the new requirements but still subject to the old RPS requirement. The statewide solar requirement, minus the exempted load / SRECs, would then be apportioned across all nonexempt suppliers which would include new BGS Suppliers and TPS suppliers.

Action: BPU will draft a methodology for factoring in exemptions (Appendix 2: Methodology for determining exempt supply per the Solar Energy Advancement & Fair Competition Act:)

• **Special Adoption:** 'the renewable energy portfolio standards adopted by the board pursuant to paragraph (3) of this subsection [shall] be effective as regulations immediately upon filing with the Office of Administrative Law and shall be effective for a period not to exceed 30 months after such filing, and shall, thereafter, be amended, adopted or readopted by the board in accordance with the "Administrative Procedure Act."

Discussion: Review of Special Adoption procedure and timelines. Rules are effective upon filing with OAL without necessity of public hearing and comment period. All other

provisions, unless stated otherwise, "shall take effect on the first day of the sixth month following enactment" unless the board takes action in advance of the effective date to implement the provisions of the act.

Action: BPU will reconvene a stakeholder meeting to review issues and proposed methodology discussed above prior to rule proposal.

- 2. Solar Energy Advancement & Fair Competition Act and other amendments: Rule Proposal (to take effect after normal rulemaking procedures)
 - **Definition of SREC**: "Solar renewable energy certificate" or "SREC" means a certificate issued by the board or its designee, representing one megawatt hour (MWh) of solar energy that is generated by a facility connected to the distribution system in this State and has value based upon, and driven by, the energy market.

Stakeholders discussed the meaning of the term "distribution" which can be defined according to multiple factors. The **FERC 7 Factor Test** outlines the factors used by the EDCs and PJM to determine whether a line is part of transmission or distribution. EDCs and industry stakeholders requested further clarification by BPU relative to behind the meter systems which may be considered "distribution' consistent with the law.

Action: BPU will clarify in the rule what is considered "a facility connected to the distribution system in this State."

• **3 yr SREC / REC Life**: The statute notes (p.) Class I RECs shall be eligible for use in renewable energy portfolio standards compliance in the energy year in which they are generated, and for the following two energy years. **SRECs** shall be eligible for use in renewable energy portfolio standards compliance in the energy year in which they are generated, and for the following two energy years. (cf: P.L.2007, c.340, s.12)

Discussion: Brief discussion on benefits of 3 yr REC life per the challenges for suppliers in estimating annual supplier obligations for a fixed GWh target. If a supplier procures more SRECs than needed for true-up in a given year, the SRECs can be banked for a future compliance period.

Action: The BPU will amend the SREC/REC life in the DRAFT rule proposal to be consistent with the Solar Energy Advancement and Fair Competition Act.

• 15 yr SACP and reimbursement of SACP to Ratepayers:

Discussion: S. Hunter is working with SACP committee to develop a 15 yr SACP schedule for recommendation to the Board. Once a draft is available it will be shared

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with RE Committee and interested stakeholders. A solar industry stakeholder commented that BPU should consider a fixed price for the next 7 yrs of the Solar Alternative Compliance Payment (SACP) to the end of 2016, instead of decreasing about 3% each year. To remain competitive and advance solar energy in the state, the stakeholder recommends BPU maintain a relatively higher price SACP over a longer term similar to the way a fixed price is set for Feed-in-Tariff (FIT) in EU.

The law also calls for all SACP to be reimbursed to the ratepayers. EDCs questioned how this would be implemented. BPU proposed that this be done by reducing the amount of SBC surcharge collected from ratepayers in the following year, relative to the amount of SACP funds received, similar to what is currently done for the low income programs.

Action: BPU will circulate a 15 yr SACP proposal and method for EDCs to reimburse SACP payments to ratepayers.

- SREC registration requirements Proposed SREC Registration Requirements were previously circulated and discussed. BPU Staff noted that the proposed requirements should help the Board understand what capacity is being built, what capacity is coming online when and when it came online. Board has obligation to report how much capacity is in pipeline and how many SRECs are available to the market. The draft rule will describe registration process and define what "Acceptance of Registration" means. (Appendix 3: Proposed Rule Changes on Solar Registration Requirements)
- Removal of engineering estimates for 10 kw or less (See prior DRAFT Solar Rule Proposal) (Appendix 4: Proposed Rule Changes on Engineering Estimates)

3. Net Metering Rules: Removal of 2MW limit on net metering

- **Discussion:** A rule proposal removing the 2 MW limit on net metering, consistent with the Solar Energy Advancement & Fair Competition Act, has already been proposed. Comments closed on the rule proposal March 5, 2010. The rule is ready for adoption by Board. BPU staff noted that the removal of the 2MW cap does NOT eliminate the limit on net metering based on onsite load. Once the law takes effect, net metering will be available to all 'customer generators' "....provided that the generating capacity of the customer generator's facility does not exceed the amount of electricity supplied by the electric power supplier or basic generation service provider to the customer over an annualized period."
- **Action:** Rule Proposal on Removal of the 2 MW limit on net metering has already been proposed and will be considered for adoption at the next available Board Agenda meeting. The law goes into effect July 1, 2010.

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4. Price disclosure of all REC trades on GATS

- PJM-GATS REC Pricing Data: Staff reviewed programmatic objectives to create greater transparency in marketplace by making REC/SREC pricing data available via PJM GATS-EIS and at NJCleanEnergy.com. K. Schuyler of PJM reviewed pricing data that is currently available on the PJM-GATs system and data reported to BPU. When a GATS Account Holder retires certificates for purposes of compliance with a state RPS, the Account Holder is able to enter the price paid per certificate. This field is mandatory only if the state requires price disclosure. PA and MD have required price disclosure. GATS was changed a few months ago to also make this a requirement for NJ. The price paid is displayed on the State Agency report entitled "My RPS Compliance." GATS also requires prices to be entered when Solar REC's are traded. The Solar Weighted Average Price Report shows prices for SREC's based on the state in which the generator is located. K. Schuyler noted that the same functionality, in reporting weighted average price reports, might not provide meaningful information for non-solar RECs, because RECs are usually eligible in multiple states, and RECs eligible for use in NJ might be traded for uses elsewhere. For example, over 6.6 million RECs designated as NJ Class I were created for RY2009, and less than half were retired for NJ RPS compliance.
- **Discussion:** Overall stakeholders support greater transparency on SREC/REC pricing data. PJM currently requests pricing data for NJ RECs/SRECs. RPS rule amendments requiring suppliers to disclose pricing data may be helpful. Some stakeholders questioned the reliance on the solar weighted average price noting that it can distort actual prices. For example, the January 2010 reported high is \$675 whereas the low is \$110. Staff noted that some of the discrepancies are due to long term contracts that were in effect before the new SACP was set. Concern was expressed that some may look at the price variance and conclude that the price of SRECs is too uncertain and decide not to pursue their solar investment or may use that variation in price to their advantage to procure clients' SRECs at below market rates. Staff noted that providing consistent SREC pricing data to create greater transparency is in everyone's interest and noted that pricing data is increasingly being reported by third parties such as the Chicago Climate Exchange and others. BPU welcomes input or recommendations on how best to provide pricing data to the market.

Action: Rule amendments to require EDC disclosure of pricing data on the PJM-GATS system will be considered.

5. NJ RPS Annual Report and Class I Renewable requirements

• NJ RPS Annual Report (See RPS Annual Report at www.njcleanenergy.com)

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• Class I Renewable requirements to meet 30% by 2020 including 900 MW biomass and 200 MW of small wind (See Rutgers CEEEP Analysis and Powerpoint, previously circulated)

EDC Solar Financing Stakeholder Meeting

March 12, 2010
Department of Environmental Protection Building
Public Hearing Room - 1st Floor
401 East State Street
Trenton, NJ
Call-in Number: 866.222.0917
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EDC Solar Financing 1pm – 3pm

Meeting with the solar industry stakeholders on the Electric Distribution Companies (EDCs) solar financing programs. The New Jersey Board of Public Utilities ('Board") has directed the EDCs including Jersey Central Power and Light Company ("JCP&L"), Atlantic City Electric Company ("ACE"), and Rockland Electric Company ("RECO") to file solar financing programs based on Solar Renewable Energy Credits ("SRECs") including certain mandatory design and filing requirements. In a Board Order dated January 21, 2010 the Board approved the results of the second round of SREC bids for these solar financing programs and set the amount of SRECs to be bid in the third round at 7,803.49 kW for ACE, 17,238.94 kW for JCP&L and 2,117.40 kW for RECO. Staff is seeking input on EDC solar financing programs, including PSEG, JCP&L, ACE and RECO's to assist in the evaluation of the programs and to report back to the Board.

• EDC Summary and Recommendations (PSEG, ACE, JCP&L, RECO)

PSE&G Solar Loan I was the first of EDC program to offer a fixed price contract (minimum \$475 per SREC) for the full 15 year SREC generation period. Solar Loan I set a ceiling or cap for projects at 2 MW. Solar Loan II set a cap at 500 kw. Both loan programs are based on a fixed price SREC value similar to other EDC financing programs, however PSE&G provides 50% of the capital which is the primary difference between PSEG program and the other EDC programs. PSEG also actively markets their programs to their customers and has noted that consumer education has been a key factor in driving growth.

ACE's SREC financing program recently completed the second round of bids and received 10 bids equal to about 2.2 MW. The Awards will be made 3/11 JCP&L completed the third round of bids, receiving 27 bids representing about 4.2 MW. Customer meters are being installed and are registering with PJM-Gats account. JCP&L notes that the sales function needs to be in sync with the engineering function. RECO has just initiated the programs 1st solicitation and received 2 bids representing the same customer. Customer education has been key for all.

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For discussion only.

The points of view expressed here do not represent the formal opinion or legal interpretations of the Board or BPU staff. The meeting notes are a general representation of the discussion and are provided as a courtesy to interested stakeholders.

• Solar Industry Experience (MSEIA / Alliance)

Lyle Rawlings of MSEIA provided comment noting that the solar industry experience has been positive and that the programs have been working reasonably well although there are not enough meters. MSEIA strongly favors a diverse market where small companies and small customers are able to participate. JCP&L and ACE programs are very cumbersome for small customers relative to being able to contract an installation based on a set SREC price. MSEIA would like to see a price set for a period of time (3-4 months) for a certain amount of capacity to serve this segment.

Fred Zalcman of Solar Alliance commented that the SREC financing program is critical to maintaining momentum in the marketplace. It has provided the 'training wheels' as intended by the Board. Timing is critical per the challenges with financing and credit worthiness. Solar Alliance is agnostic in terms of Solar Loan vs Solar Financing with SRECs Model. The Solar Alliance recommends a number of simple administration and process improvements to improve participation and ease of access: The requirement to have a signed contract without and SREC price has been very challenging as the price depends on the SREC value which isn't known until the auction has ended; landlord consent requirements could be a duplication of SREC program requirements; program rules should also be more amenable to the participation of Municipalities. Solar Alliance also recommends greater flexibility for the management of unsubscribed capacity so that in instances where segments may be under or over subscribed, adjustments can be made to help the EDC meet its targets.

Pam Frank of SunFarm Venture commented that strict enforcement of the administrative requirements in filling out the applications has been at times an impediment. There needs to be better guidance developed for developers and customers wishing to participate and better education and promotion for the consumer. Sun Farm also recommends that the auctions be more regular (e.g. 2 months) so that projects were not held up waiting for the next auction to occur. Also limits should be expanded to allow projects up to 2 MW to participate.

Chris McDermott of Hartz Mountain commented that they have had a very positive experience with PSE&G Solar Loan I / II. They recommend that the cap be lifted / increased above the current 500 kw cap, consistent with the BPUs policy goals. Concern was raised about the use of the SREC weighted average price which is a blended price spot market prices and longterm contracts and may not reflect the true value. Hartz Mountain recommends that NJCEP discontinue its use of the weighted average price and that the Market Managers provide more education about the SREC programs to improve consumer understanding and ease of access.

• Q&A - 60 mins

Staff reviewed the process for amending Solar Loan II and other EDC Solar Financing Programs. Solar Loan II can be amended IF ALL PARTIES AGREE to STIPULATION with a 20 day notice or PSEG can go to the Board for Approval of any proposed changes.

C.Siebens of JCP&L noted that they will be meeting with NEA on Round III of their solar financing program.

• NEXT STEPS: BPU Staff will draft a proposal for the continuation of the EDC Solar Financing Programs for comment

Appendix 1: DRAFT Methodology for Determining Supplier Solar Obligation

Beginning on June 1, 2010, each supplier/provider shall calculate its solar electric generation (SREC) obligation for each energy year as follows:

- 1. If as a result of participation in the Board's BGS auction, a BGS provider has, prior to January 17, 2010, executed a BGS contract to supply retail electricity, the BGS provider shall determine its SREC obligation for the electricity supplied pursuant to that contract using the provisions of this subchapter that were in effect at the time the contract was executed; and
- 2. For all retail supply of electricity not served pursuant to a BGS contract subject to (g)1 above, a particular supplier/provider shall determine its solar electric generation obligation for a subject energy year as follows:
- Consult the Board's NJCEP website to determine the actual cumulative retail supply
 of electricity in New Jersey that was served by all supplier/providers during the
 subject energy year;
- ii. Determine the amount of retail electricity supplied by the particular supplier/provider during the subject energy year;
- iii. Divide the supplier/provider's retail electricity supply determined under (g)ii above by the actual cumulative supply determined under (g)i above; and
- iv. Multiply the fraction determined under (g)iii above by the cumulative State-wide solar electric generation obligation for the subject energy year, found in Table B below.

TABLE C
State-wide Solar Electric Generation Obligations
Starting June 1, 2010

Energy Year	State-wide Solar Obligation in MWhs
June 1, 2010 – May 31, 2011	306,000
June 1, 2011 – May 31, 2012	442,000
June 1, 2012 – May 31, 2013	596,000
June 1, 2013 - May 31, 2014	772,000
June 1, 2014 - May 31, 2015	965,000
June 1, 2015 - May 31, 2016	1,150,000

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June 1, 2016 - May 31, 2017	1,357,000
June 1, 2017 - May 31, 2018	1,591,000
June 1, 2018 - May 31, 2019	1,858,000
June 1, 2019 - May 31, 2020	2,164,000
June 1, 2020 - May 31, 2021	2,518,000
June 1, 2021 - May 31, 2022	2,928,000
June 1, 2022 - May 31, 2023	3,433,000
June 1, 2023 - May 31, 2024	3,989,000
June 1, 2024 - May 31, 2025	4,610,000
June 1, 2025 - May 31, 2026	5,316,000

Appendix 2: Methodology for determining exempt supply per the Solar Energy Advancement & Fair Competition Act:

The board shall exempt providers' existing supply contracts that are: (a) effective prior to the date of P.L., c. (pending before the Legislature as this bill); or (b) effective prior to any future increase in the solar renewable portfolio standard beyond the multi-year schedule established in paragraph (3) of this subsection. This exemption shall apply to the number of SRECs that exceeds the number mandated by the solar renewable portfolio standards requirements that were in effect on the date that the providers executed their existing supply contracts. This limited exemption for providers' existing supply contracts shall not be construed to lower the Statewide solar purchase requirements set forth in paragraph (3) of this subsection. Such incremental new requirements shall be distributed over the electric power suppliers and providers not subject to the existing supply contract exemption until such time as existing supply contracts.

[TBD]

Appendix 3: Proposed Rule Changes on Solar Registration Requirements

14:8-2.13 Solar Registration Requirement

- (a) This section sets forth requirements for electricity from a New Jersey solar electric generating unit to be eligible for SRECs. To be eligible for SRECs, the system owner of a solar electric generating unit shall register the unit in accordance with this section, and shall obtain from Board staff a PJM-EIS GATS certification number authorizing PJM-EIS GATS to issue SRECs based on solar electric generation from the unit.
- (b) The system owner of a solar electric generating unit that is constructed in New Jersey after {effective date of this rule} shall ensure that the generating unit is registered in accordance with this section, within ten business days after execution of a contract for purchase and/or installation of the photovoltaic panels included in the unit.
- (c) If a solar electric generating unit is not registered within ten business days in accordance with this section, the electricity generated by the unit shall not be eligible for SRECs usable for compliance with this subchapter.
- (d) To register a solar electric generating unit, a person shall submit a registration package completed in accordance with the Board's registration materials and instructions, found on the Board's New Jersey Clean Energy Program website at www.???, within the ten-day deadline in (b) above.
- (e) The registration materials and instructions shall require the following types of information:
 - 1. <u>Basic information identifying and describing the solar electric generation unit and the system owner;</u>
 - 2. A technical worksheet detailing the technical specifications of the solar electric generating unit;
 - 3. A construction schedule for completion of the solar electric generating unit;
 - 4. A signed contract or other binding legal document providing for the solar electric generating unit to be constructed;
 - 5. Cost information and other data to enable Board staff to monitor and evaluate Board programs; and
 - 6. A site map of the land upon which the generating unit will be located.
- (f) Upon receipt of an initial registration package, Board staff shall review the package for completeness. If the initial registration package is incomplete or deficient, Board staff shall notify the registrant in writing of the deficiencies, and the registrant may resubmit a corrected package.
- (g) If the initial registration package is complete, Board staff shall issue a project acceptance letter. A project acceptance letter shall certify that, if the solar electric generating unit is

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constructed as described in the initial registration package, Board staff will issue a PJM -EIS GATS certification number for the unit.

- (h) After receiving the project acceptance letter, construction of the project as described in the initial registration package may proceed. Construction of the solar electric generating unit shall be completed within 12 months after the date upon which the project acceptance letter was issued.
- (i) If, during the 12 month period described at (h) above, the schedule for completion of the solar electric generating unit changes sufficiently to delay completion beyond the end of the 12-month period, the registrant shall update the schedule for completion that was included in the initial registration package. Board staff may authorize one six-month extension for the project on a case-by-case basis, based on the likelihood of timely completion of the project.
- (j) If a project acceptance letter expires, the system owner shall start a new registration in accordance with this section in order to be eligible for SRECs based on electricity from the solar electric generating unit.
- (k) If a solar electric generating unit has been registered in accordance with this section, and the system owner subsequently plans a change of more than 10% in the capacity of the solar electric generating unit, the system owner shall notify Board staff by e-mail within ten business days after execution of a contract for purchase and/or installation of the photovoltaic panels included in the unit. Board staff may require re-registration for a change in capacity on a case by case basis.
- (l) When construction of the solar electric generating unit is complete, the system owner shall submit the final documentation required under (m) below, and shall request an inspection of the unit by Board staff through the Board's NJCEP website at www.???.
- (m) The final documentation required under (1) above shall include all of the following:
 - 1. A copy of the project acceptance letter issued by the Board under this section;
 - 2. A final technical worksheet detailing the technical specifications of the solar electric generating unit, showing the unit as built, including any changes from the technical worksheet submitted with the initial registration package;
 - 3. Digital photographs of the site and the solar electric generating unit;
 - 4. A shading analysis;
 - 5. An estimate of the electricity production of the solar electric generating unit;
 - 6. Where applicable, documentation of compliance with relevant Federal, State, or local law, including eligibility for tax incentives or other government benefits; and
 - 7. A copy of the application for interconnection with the distribution system, in accordance with the Board's interconnection rules at N.J.A.C. 14:8-4.
- (n) After receiving the inspection request and complete final documentation required under (1)

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above, Board staff shall conduct an inspection, or shall notify the registrant that no inspection is required.

(o) If no inspection is required, or if the inspection indicates that the solar electric generating unit has been constructed in accordance with the project acceptance letter, and/or any Board-authorized modification, Board staff shall assign a certification number to the solar electric generating unit for use in obtaining RECs from PJM-EIS GATS.

Appendix 4: Proposed Rule Changes on Engineering Estimates

14:8-2.7 Requirements that apply to both class I and class II renewable energy

[(b)] (e) In measuring generation in order to determine the number of RECs to issue, the Board or its designee shall accept [either of the following measurement methods, as applicable:

- 1. Periodic periodic readings of a meter that records megawatt-hour production of electrical energy. The readings may be taken or submitted by any person, but shall be verified by the Board or its designee[;]. The meter shall, no later than the applicable deadline below, satisfy all requirements of the American National Standards Institute (ANSI) Standard C12.1-2008, Electric Meters Code for Electricity Metering (as amended or supplemented), and shall comply with any additional requirements established by PJM for meters used to measure energy generation for purposes of issuing RECs:
 - 1. For a generating facility that was in operation prior to {effective date of this rule}, the deadline shall be {one calendar year after effective date of this rule};
 - 2. For a [solar electricity system] generating facility with a capacity of less than 10 kilowatts, [annual engineering estimates and/or monitoring protocols approved by the Board. Acceptable estimation methodologies and monitoring protocols are located on the Board's website at www.njcleanenergy.com. This method is not applicable for class I RECs.] which was in operation as of {effective date of this rule}, the deadline shall be {six months after effective date of this rule}; and
 - 3. For a generating facility with a capacity of 10 kW or more, which begins operating after {effective date of this rule}, the deadline shall be {effective date of this rule}.