Agenda Date: 7/30/08 Agenda Item: 8E



STATE OF NEW JERSEY **Board of Public Utilities** Two Gateway Center Newark, NJ 07102 www.nj.gov/bpu

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CLEAN ENERGY

IN THE MATTER OF THE RENEWABLE ENERGY PORTFOLIO STANDARD

AMENDMENTS TO THE MINIMUM FILING REQUIREMENTS FOR ENERGY EFFICIENCY. **RENEWABLE ENERGY. AND**) CONSERVATION PROGRAMS: AND FOR ELECTRIC **DISTRIBUTION COMPANY** SUBMITTALS OF FILINGS IN CONNECTION WITH SOLAR FINANCING

DOCKET NO. EO06100744

(SERVICE LIST ATTACHED)

BY THE BOARD

This matter was opened to the New Jersey Board of Public Utilities ("Board") in connection with the Board's Clean Energy Program ("CEP") and the associated Renewable Portfolio Standards. As will be discussed in more detail below, the Board has determined: 1) the overall nature of the Solar Financing program; 2) that its Order issued May 12, 2008, establishing minimum filing requirements for energy efficiency, renewable energy, and conservation programs, should be amended to add minimum filing requirements for programs in connection with the financing of solar electric generation systems; 3) that Jersey Central Power and Light Company ("JCP&L") and Atlantic City Electric Company ("ACE") should be directed to submit filings under N.J.S.A. 48:3-98.1 by September 30, 2008, for solar financing consistent with the amended minimum filing requirements; 4) that Rockland Electric Company ("RECO") should be directed to work with JCP&L or ACE to submit its filing for solar financing in conjunction with either JCP&L's or ACE's filing by no later than January 31, 2009; and 5) that Public Service Electric and Gas Company ("PSE&G") should be directed to work with BPU Staff and stakeholders to revise its current solar loan program to be consistent and comparable with the requirements set forth in this Order and submit its plan by no later than March 31, 2009.

BACKGROUND AND PROCEDURAL HISTORY

The New Jersey Electric Discount and Energy Competition Act, <u>N.J.S.A.</u> 48:3-49 <u>et seq.</u> ("EDECA") provided for the Board to adopt New Jersey's renewable energy portfolio standards ("RPS"), and authorized the Board to amend those standards by regulation. The RPS requires retail electricity suppliers and providers to include a minimum percentage of qualified renewable energy in the electricity they sell during each one-year period ending May 31 (a "Reporting Year"; "Reporting Year 2008" is the one-year period ending May 31, 2008).

Effective May 17, 2006, the Board amended the RPS to set steadily increasing requirements for renewable energy through the Reporting Year ending May 31, 2021. In that Reporting Year, 20% of the electricity supplied to New Jersey customers by each supplier and provider must be generated from Class I renewable energy systems; 2.12% of the electricity must be supplied from solar electric generation systems connected to an electric distribution system serving New Jersey customers.

Suppliers and providers may comply with the 2.12% solar RPS in either of two ways, or by a combination of both. They may submit Solar Renewable Energy Certificates ("SRECs"), and/or pay a Solar Alternative Compliance Payment ("SACP"). An SREC represents the solar renewable energy attributes of one megawatt-hour of generation from an eligible solar renewable energy facility. The Board's RPS rules establish the requirements and conditions for the creation and use of SRECs. A supplier or provider who holds too few SRECs to comply with the RPS can make up for the shortfall by paying the SACP for each megawatt-hour of the shortfall. Since a supplier or provider has the option of either paying the SACP or obtaining SRECs to comply with the solar RPS, the amount of the SACP, in practice, becomes the upper limit on the price of an SREC in the market.

Immediately after the Board adopted the 2006 amendments to the RPS rules, BPU Staff began a stakeholder process to consider various models to enhance the ability of energy suppliers and providers to meet the targets for solar electric generation established in the RPS rules, and to support the continued growth of New Jersey's solar market. The Board believes that the electricity markets alone currently will not produce the necessary growth, primarily because solar electric generation currently requires a significantly larger capital investment for each kilowatt of capacity than more conventional means of generating electricity – even though, once installed, solar generates each kilowatt-hour of electricity at a much lower cost than the more conventional sources. In addition, a lack of familiarity with the technology and its benefits and performance, a limited (but growing) installation infrastructure, and long-term uncertainties about markets and their regulatory underpinnings have threatened to hamper the growth of the solar market.

For the time being, growth will continue to depend, in part, upon the availability of incentives above and beyond what the electricity markets can provide. The Board believes that to a limited extent, a solar electric generation system brings its own incentives. A customer who installs a system will see lower electricity bills, especially using net metering. The customer also has the satisfaction of meeting at least part of his or her electricity needs without causing emissions of greenhouse gases and other air pollutants, or other environmental impacts such as waste generation, wastewater discharges and water use.

However, additional incentives remain necessary to support the growth of the solar industry. Those incentives have historically included Federal tax credits available for some solar installations; rebates from the BPU's Clean Energy Program to help offset the cost of installation; and the monetary value of SRECs created when a solar installation generates electricity.

Following the stakeholder process that commenced in May 2006, the Board decided on September 12, 2007, to reduce reliance on rebates and to transition to a more market-based means of providing incentives towards achieving the solar RPS. In a December 6, 2007, Order in Docket No. EOO6100744 ("December 6 Order"), the Board set a course toward transition to that market-based model. The Board's primary considerations in that transition include: the cost that ratepayers bear; fairness and equity to all ratepayer classes; job growth; improved reliability and security of New Jersey's electricity infrastructure; the ability to achieve sustained orderly development of the solar portion of that infrastructure; reducing transaction costs; and supporting other policy goals, especially with respect to environmental protection and public health. The Board also ordered that rebates for small projects be continued for Reporting Years 2009-2012.

In the December 6 Order, the Board established a rolling eight-year SACP schedule, establishing the SACP for each of the eight Reporting Years up to and including the year ending May 31, 2016. The Board has also proposed rules to establish annually the SACP for the next Reporting Year after the end of the then current SACP schedule. The Board also provided more flexibility in the trading of SRECs by establishing a two-year SREC trading life, and allowed each solar electric generation system to continue generating SRECs over a 15-year qualification life. The Board also put controls in place to limit the overall cost of solar incentives.

The December 6 Order also noted the importance of "securitization," in which financing of a solar electric generation project can be supported by the cash flow expected from the project's ability to generate and sell SRECs. The Board noted that "the rolling 8 Year SACP schedule will send an important signal to financial markets that there will be a certain amount of predictability in the price of SRECs." This predictability is essential, because the SACP effectively caps the price of SRECs, and the SACP schedule showed that for a period of eight years, the SACP would not prevent SREC prices from rising to a level that would provide sufficient cash flow to support SREC-based financing.

However, SREC-based financing depends not only upon certainty about long-term maximum prices for SRECs; it depends also on greater certainty about the minimum cash flow that a project can generate from the creation and sale of SRECs. For that reason, the December 6 Order also stated that "there is a widespread consensus that an additional mechanism or mechanisms will be necessary for the market to achieve levels of growth sufficient to meet RPS requirements at an acceptable cost."

The Board therefore directed the Office of Clean Energy ("OCE") to initiate a proceeding to explore whether additional securitization is warranted, and if so, to provide specific recommendations regarding the methods and costs of providing such securitization. At its September 12, 2007 meeting, the Board directed staff to commence the solar securitization proceeding on or about November 1, 2007 and to report to the Board by February 1, 2008 and May 1, 2008 with a final recommendation to the Board by October 1, 2008.

As directed by the Board on September 12, 2007, on November 20, 2007, the OCE commenced a stakeholder proceeding to identify and evaluate ways to support SREC-based financing. The stakeholder meetings were attended by over 50 participants, including solar industry representatives, load-serving entities ("LSEs"), electric distribution companies ("EDCs"), environmental and business organizations, and the Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel").

The Board's stated goal at the September 12, 2007 meeting was "transitioning the solar renewable energy market from rebates to market-based incentives." Accordingly, in identifying and evaluating proposals in the stakeholder proceeding, one of the factors that staff and the stakeholders considered was the ability of each particular proposal to support a transition to market-based delivery of incentives or measures that would continue such a transition.

Absent the proposed modifications set forth in this Order, there may be an expectation of shortfalls in the number of SRECs available in Reporting Year 2009 and 2010 that led Commissioner Fiordaliso to request an acceleration of the schedule for the stakeholder proceeding, with staff presenting the Board with final recommendations in July 2008 rather than October 2008. Specifically, the Board received information indicating that the total number of SRECs generated by the spring of Reporting Year 2008 were less than the level needed to meet the solar requirements of the RPS, resulting in some payments of SACPs. OCE further projects that a shortfall of about 41,000 MWh of SRECs will occur in Reporting Year 2009, resulting in payments by LSEs of about \$28,000,000 in SACPs.

Several proposals were offered to support SREC-based financing. PSE&G suggested an expansion of its solar loan pilot program, under which the company is making loans to customers to support the installation of about 30 megawatts of solar capacity. Under the pilot, some or all of the customer's repayment of the loan is in the form of SRECs generated by the customer's project. SRECs are credited toward repayment at or above a minimum price, and the revenue requirements will still be met if PSE&G's resale of SRECs is at a price less than that minimum price. Representatives of different segments of the solar industry offered three additional proposals:

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- Including a renewable energy tranche within the overall Basic Generation Service ("BGS") auction;
- 2 Directing EDCs to offer either PSE&G-style loans or long-term contracts for SRECs to solar projects, with competitive pricing of SRECs for projects over 400 kW and fixed pricing of SRECs for projects under 400 kW, with the EDCs assuming at least part of the solar RPS compliance obligation that is currently borne entirely by LSEs, but with EDCs not being held responsible for shortfalls in meeting the RPS goals; and
- 3. Having the EDCs enter into long-term contracts to purchase SRECs from solar project customers/developers, for a portion of the new construction required to meet the annual RPS. Projects seeking the long-term contracts would be grouped into classes based on size, with contract prices within each class based on competition among the projects in the class. The EDCs would sell the aggregated SRECs to the LSEs to recover costs associated with contract payouts.

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A working group was formed to review and comment upon these proposals and identify other options. During May and June of 2008, Commissioner Fiordaliso chaired three working group meetings, where representatives from Rate Counsel, Board Staff, EDCs, LSEs, solar installers and project developers reviewed the proposals and provided feedback regarding a proposed method for securitizing SRECs for consideration by the Board.

The three solar industry proposals were discussed at the May 28, 2008 stakeholders meeting. Each of the three EDCs that attended the meetings indicated support for a different approach. PSE&G indicated a willingness to expand its recently approved solar loan program. ACE indicated that it intended to submit a proposed solar loan program to the Board in June 2008. JCP&L indicated its willingness to embrace, in concept, the competitive long-term contract model (the third proposal listed above), provided that certain components were changed from the initial proposal.

While no consensus was reached regarding any of the EDC proposals put forth, the majority of the non-utility attendees felt that the competitive long-term contract model represented a workable approach subject to resolution of issues related to some of the specific components of the proposal. OCE requested that the final comments and suggested components of the EDC proposals be submitted by the June 4th working group meeting. Twelve companies or organizations provided comments and these are posted on the CEP website (http://www.njcleanenergy.com/misc/renewable-energy/srec-securitization).

On May 30, 2008, the Board's Secretary issued a notice that a public hearing would be held on June 23, 2008 in the Board's Hearing room with Commissioner Fiordaliso presiding on the issue of SREC Securitization (now known as "SREC-Based Financing" to avoid confusion with EDECA's use of the term "securitization"). The notice further stated the purpose of the hearing and that a Staff straw proposal would be distributed and posted on the website by no later than June 13, 2008. Staff took the comments presented and discussed in the work group as well as written comments and developed an SREC-based financing Straw Proposal dated June 13, 2008. This straw proposal was distributed to the Clean Energy Council and the Renewable Energy Committee listserve and was posted on the BPU and Clean Energy websites.

At the June 13, 2008 Board agenda meeting, Staff briefed the Board in public session on the status of the SREC-based financing proceeding. Staff summarized the Straw Proposal and the process and procedures for bringing a final recommendation to the Board in July.

Staff held an informational meeting for any interested stakeholder on June 18, 2008 in the Board's hearing room. The purpose of the meeting was to discuss the staff's understanding of the working group discussions, staff's reasoning in selecting the key parameters, and the terms of the straw proposal.

At the June 23, 2008 hearing, 13 individuals representing 11 organizations or companies provided testimony and 14 individuals submitted written comments. These comments are posted on the CEP website.

The Board's consideration of action on SREC-based financing has also been informed by recent changes in New Jersey law. On January 13, 2008, Governor Corzine signed P.L. 2007, c.340 ("Chapter 340"). Chapter 340 authorizes electric and gas public utilities to provide energy efficiency, conservation, and Class I renewable energy programs in their service territory on a regulated basis and to invest in Class I renewable energy resources on a regulated basis. N.J.S.A. 48:3-98.1. Chapter 340 further authorizes the Board to direct electric and gas public

utilities to undertake energy efficiency, conservation and renewable energy improvements, and provides for the Board to allow the recovery of program costs and incentive rate treatment.

Chapter 340 also gave the Board 120 days to issue an Order that allows electric public utilities and gas public utilities to offer energy efficiency and conservation programs, to invest in Class I renewable energy resources, and to offer Class I renewable energy programs in their respective service territories on a regulated basis. N.J.S.A. 48:3-98.1(c). The Board issued such an Order ("120-Day Order") on May 12, 2008, Docket No. EO08030164. In the 120-Day Order, the Board also set forth procedures and minimum filing requirements for petitions and other procedures required by N.J.S.A. 48:3-98.1(a). The minimum filing requirements were set forth in Appendix A of the 120-Day Order.

DISCUSSION AND FINDINGS

As an initial matter, the Board wishes to express its appreciation for the dedication, thoughtful consideration, and hard work that stakeholders brought to this proceeding. The Board recognizes that the issues discussed in the proceeding have the potential to affect the solar marketplace in general and many of the solar businesses that have taken root in New Jersey in the past few years.

The Board is also cognizant of the impact of our decision in this matter on other businesses and industries in the State, as well as the State's residential and low-income customers. New Jersey's businesses must remain competitive, and diversifying the State's electricity supplies to become less dependent on fossil fuels, with its associated volatile prices, will help preserve that competitiveness.

The Board also recognizes the significant benefits associated with the expansion of local, distributed, renewable, non-polluting sources of energy. Some of the benefits of solar energy include reduced emissions and the associated health benefits; reduction of emissions that contribute to global warming, reliance on local sources of energy which reduce the flow of energy dollars out of State, and mitigating the need to site and build new power plants, as well as transmission and distribution facilities.

The Board has reviewed the record in this proceeding regarding proposed changes to the policies and regulations that guide New Jersey's solar marketplace. The Board has carefully considered the three proposals made by representatives of various sectors of the solar industry, staff's straw proposals, the positions taken by the EDCs in response to the solar industry proposals and to staff's straw proposal, and the written comments and public hearing testimony.

Written comments were received from the following

- 1. Dr. John Macklin, Clean Energy Advocates
- 2. Divesh Gupta, Constellation Energy
- 3. Fred Hauber, Eastern Energy Services Inc.
- 4. Michael Connolly, Thelen Reid Brown Rayman and Steiner LLP, for JCPL
- 5. Bill Hoey, NJ Solar Power LLC
- 6. Joanne Raphael, PPL
- 7. Jodi Moskowitz, PSEG Services Corp.
- 8. Felicia Thomas-Friel, for State of New Jersey, Public Advocate Ronald K Chen, and for Stefanie A. Brand, Director, Division of Rate Counsel
- 9. Fred Zalcman, Sun Edison LLC

- 10. Robert Simpson, Brother Sun Solar
- 11. Jesse Grossman and Vanessa Stewart, Soltage
- 12. Susan LeGros, Stevens and Lee, for Solar Alliance
- 13. Mark Warner, Sun Farm Network
- 14. Jim Torpey, Sun Power
- 15. Tom Ryan, Vanguard Energy Partners LLC

In addition, the following entities/individuals provided comments at the public hearings

- 1. Mark Warner, Sun Farm Network
- 2. Scott Schultz, Evco
- 3. Bob Simpson, Brother Sun Solar
- 4. Jodi Moskowitz, PSE&G
- 5. Alfed Matos PSE&G
- 6. Bill Hoey, NJ Solar Power
- 7. Fred Zalcman, Sun Edison
- 8. Jack Carley, Rockland Electric
- 9. Howard Thompson, PPL
- 10. Joanne Raphael, PPL
- 11. Susan LeGros, Stevens and Lee, for Solar Alliance
- 12. Lyle Rawlings, Mid-Atlantic Solar Energy Industries Association

Based on its careful review of the record in this proceeding, the Board <u>FINDS</u> that requiring each electric public utility to submit a filing under Chapter 340 that sets forth the electric public utility's commitment to undertake renewable energy improvements by facilitating SREC-based financing in a manner that supports the transition to a market-based approach of delivering incentives for solar electric generation will serve the State policies expressed in the <u>N.J.S.A.</u> 48:3-50. Specifically, the Board <u>FINDS</u> that such a transition will help to deliver cost-effective incentives necessary to increase solar electric generating capacity in the State, thereby furthering efforts to provide diversity in the supply of electric power throughout the State, to promote economic development, and to preserve the reliability of power supply and delivery systems.

The Board further <u>FINDS</u> that SREC-based financing should be founded on a competitive longterm contract model, under which EDCs would periodically enter into long-term contracts to purchase SRECs, with the contracts awarded based on the price at which the seller offers to sell SRECs over the contract term.

In making this finding, the Board determined that the other approaches considered by the working group to support SREC-based financing with the possible exception of PSE&G's solar loan program, if modified as discussed below, would be less effective in serving the goals outlined in the December 6 Order.

One approach would have included a renewable energy tranche within the overall Basic Generation Service (BGS) auction. This approach offered a possible path to market-based delivery of incentives to promote solar installations. However, the BGS auction already procures from successful bidders a "full requirements" product that includes all RECs needed for compliance with the RPSs, including the solar RPS. The working group established no clear way to add to that full requirements product a further obligation to contract for the purchase of SRECs for a longer term than the three-year term of the BGS contract, above and beyond existing obligations to supply the SRECs needed for RPS compliance over the three-year term.

Accordingly, the general consensus of the working group was that implementing this approach would be complicated and could not be done in time for the next BGS auction. The Board agrees, and has not adopted this approach.

A second approach would have directed EDCs to enter into long-term contracts for SRECs to solar projects, with competitive pricing of SRECs for projects over 400 kW and fixed pricing of SRECs for projects under 400 kW, with the fixed price determined annually based on prior-year results at meeting the RPS targets, econometric models targeted toward a reasonable rate of return, and market index pricing for PV modules and/or complete systems. Under this approach, beginning June 1, 2008, all new RPS SREC responsibility would be assumed by the EDCs, but with EDCs not being held responsible for shortfalls in meeting the RPS goals. Without a competitive process for the awarding of contracts to projects under 400 kW, and with a fixed price set for all projects under 400 kW without distinguishing between projects in that class based on their cost-effectiveness, this approach appears similar to the feed-in tariff that the Board rejected in the December 6 Order (see December 6 Order, page 20). The Board has not changed its position on the feed-in tariff, and therefore has not adopted this approach. The Board further notes that this approach would conflict with the current BGS auction process, which as stated above requires suppliers in the BGS auction to provide a "full requirements" product that complies with the solar RPS. Transferring that compliance obligation to the EDCs. would require a significant redesign of the BGS auction process, making it especially difficult to implement.

A third approach would be to expand the current PSE&G loan program, which offers loans to finance solar projects, with some or all of the repayment accepted in the form of SRECs, which the EDC values at or above a price specified in the loan agreement. If the EDC incurs a loss when it resells the SRECs, the EDC is made whole through funds provided by the ratepayers.

Although the current loan program has been in place for only a period of months, it already appears to have achieved significant successes. However, as currently designed and implemented, it may lack some of the elements the Board believes necessary in a market-based system of delivering incentives to support solar development. As currently constituted, the Board does not expect that any non-utility lender can offer a loan on terms that can compete with what the EDC can provide, with the guarantee of a floor value for SRECs supported by ratepayer funds. As a result, the loan program, at present, appears to provide minimal encouragement for non-utility lenders to enter the solar loan market, and possibly discourages that entry because the attractiveness of the EDC's loan is so difficult for a non-utility lender to match.

At the public hearing, PSE&G suggested that the loan program does offer a path to a marketbased system. Specifically, PSE&G noted that the EDC loan does not fund the entire cost of the solar project, and that non-utility lenders can enter the market to finance this unfunded portion of the cost. However, the EDC loan is secured by a first lien on the solar electric generation system and the SRECs it generates, leaving a non-utility loan for the remaining cost essentially unsecured. The Board therefore has not adopted an expansion of the current loan program to support a transition to market-based financing as the overall solution, but has instead agreed to consider PSE&G's modifications to bring the solar loan program into agreement with the elements set out in this Order. The Board instead is adopting a competitive long-term contracting approach, for a period to cover three full reporting years, plus a partial reporting year if implementation of this approach begins after the beginning of a reporting year. Under this approach, EDCs will enter into long-term contracts to purchase SRECs from solar project customers/developers for part of the new construction required to meet the annual RPS. Prices will be set based on competition among projects divided into classes based upon size. The EDCs would sell the aggregated SRECs to the LSEs to recover costs associated with contract payouts, and recover from ratepayer funds losses incurred upon resale.

The Board believes that this approach supports a transition to non-utility SREC-based financing. The Board has already made a substantial commitment to the solar RPS as it was established by regulation in May 2006. Governor Corzine's draft Energy Master Plan, and the greenhouse gas reduction requirements of the Global Warming Response Act, further reinforce New Jersey's commitment to achieving the solar RPS. The Board is further amplifying that commitment, and making clear that going backward on the solar RPS is not an option, by requiring EDCs to enter into long-term contracts to purchase SRECs for a substantial portion of the new solar capacity that will be needed for RPS compliance. Any reversal of the commitment would be especially unattractive, considering that such a reversal would undermine significant investments made by the EDCs.

The Board believes that the clarity of its commitment will help provide financiers with a greater level of certainty that the solar RPS will remain at least as strong as the current regulations provide. That certainty will create a climate in which long-term investments in solar projects will become increasingly attractive.

The Board will closely monitor the results of the long-term contracting effort, and will obtain periodic reports from Staff regarding the amount of solar electric generation capacity covered by long-term contracts for the purchase of SRECs, the number of SRECs purchased under the long-term contracts, the range of contract prices for each EDC, and various size ranges of solar electric generation systems, the number of sellers to each EDC, and the number of sellers in various size ranges.

Staff's June 13, 2008 straw proposal, and the comments on the straw proposal, are summarized below, followed by the Board's findings and its amendments to the minimum filing requirements attached to the 120-Day Order.

A. Contract Term

Straw Proposal: 10 years. The 10-year term was selected, rather than a 15-year term that was also discussed, because it was consistent with the PSE&G Solar Pilot loan term for residential systems, and because over a longer term there is a greater risk that the market price of SRECs will fall below the contract price, with the shortfall made up from ratepayer funds in that circumstance.

1. **Rate Counsel** commented that the market is currently based on 15-year terms. The Rate Counsel recommended that the Board should promote a 15-year contract duration and reject any proposal for a shorter term. Otherwise this aspect of the proposal will drive up the annual cost to the ratepayers and overall solar development costs that will eventually cause the cost-based circuit breaker to "kick- in".

2. **The Soar Alliance** commented that a 10-year term is acceptable but a 15-year term should be considered.

3. **JCP&L** commented that 10 years is reasonable and Board should adopt the 10-year initial term, but should not preclude flexibility for the EDCs to add a call option for SRECs in the 11th to 15th years similar to the option in the PSE&G Solar Pilot.

4. **Sun Farm Network** strongly urged a 15-year term consistent with the 15-year SREC qualification life, in order to reduce the SREC prices needed to fund projects and help keep the total cost of solar incentives under the 2% cap. Sun Farm calculated, using the Summit Blue Model, that a \$555 SREC value is needed under a 10-year term versus a \$465 SREC under a 15-year term. This was assuming a \$7.00 per watt installed cost, 12% internal rate of return, commercial tax credits with a 28% tax bracket, a production factor of 1 kWh/watt DC and a 20-year life.

5. **NJ Solar** supported a 15-year term. NJ Solar commented that 100% of the SREC contracts need to be known and visible to the market. This must be for a 15-year period of time and not 10 years as recommended in the Straw:

6. **SunPower** supports a 10-year period as a reasonable starting point that mirrors the longest contract term commercially available today in the bilateral market.

The Board **<u>FINDS</u>** that a 15-year contract term is preferable to a 10-year term, because (i) a longer-term contract with a lower SREC contract price than a shorter-term contract can provide the same level of incentive as the shorter-term contract, thereby reducing the risk that the EDCs revenues from SREC sales will be insufficient to cover the cost of acquiring the SRECs, and (ii) the 15-year contract term is consistent with the 15-year qualification life established in the December 6 Order for solar electric generation systems.

B. EDC Contracting Percentage of the Total Annual Incremental SREC Market

Straw Proposal: In the first year the EDC would enter into long-term contracts for 60% of the EDC's new incremental SREC allocation. The percentage would decline to 50% and 40% in years two and three. This percentage would not include the current SREC requirements for third-party suppliers ("TPSs").

1 **Rate Counsel** supports the OCE straw proposal in this provision

2. **The Solar Alliance** commented that the decline in the percentage in years 2 and 3 should only occur when there is evidence that bilateral contracting for 10 years or longer is occurring in the market. The EDC contracting percentage should include the TPS percentage since all systems will have access to the EDC SRECs. This percentage should recognize the need for catch up for the shortfall and should include 2008 and 2009.

3. **JCP&L** commented that the declining percentages are not necessary but are workable. JCP&L commented that it is not wise to exclude the TPS load from the calculation of the new incremental SREC allocation eligible to participate in the program. JCP&L believes it is critically important that here be enough projects to provide sufficient MW to support credible achievement of the Solar RPS targets. All customers including TPS customers will be expected to pay the cost and the 40% leaves an appropriate amount for market-based or TPS projects. 4. **Sun Farm Network** commented that the numbers were debated in the working group as applied to the entire increment. Pulling out the TPS fraction essentially changes the 60/40 balance on top of its additional complexity. Sun Farm urged that the computation be simplified.

5. **Sun Power** commented that the straw is very unclear and obscure about the methodology used to determine the amount of EDC load. The BPU should specify the amount of total MW eligible in each year. Eliminating the TPS supply only serves to reduce the percentage of the total load covered by the EDC program. There is no reason to exclude the TPS load.

6. **Vanguard and Eastern Energy Services, Inc**. commented that the legacy projects should be the percentage contracted for by the LSEs and the new capacity should be contracted for by the EDCs.

7. **Soltage** commented that the 60% SREC allocation in the first year and declining to 50% and 40% in the following two years should be reduced and applied to the less than 20 kW market segment only. This would allow for a subset of the market to be forced to recognize specific contracting periods while at the same time allowing for the larger majority of the market to function along pure market dynamics.

The Board **FINDS** that the contracting percentage will be 60% of the EDC's new incremental SREC allocation through the end of the first full Reporting Year in which the EDCs are entering into long-term contracts pursuant to this Order. That percentage will decline to 50 percent for the second full Reporting Year, and 40 percent for the third full Reporting Year; that this percentage will include the full Reporting Year 2008 shortfall and 60% of the projected Reporting Year 2009 shortfall; and that this percentage will also encompass the stated percentage of the SREC needs for third party suppliers. This declining percentage is in accordance with the Board's intention that the SREC-based financing under consideration in this proceeding is intended as an interim step that is required to transition from a rebate-based incentive approach to a fully market-based approach. The Board further **FINDS** that the periodic reviews discussed above will provide an opportunity to assess the status of the development of market-based, long-term SREC contracts, and that the Board can consider, as part of these annual reviews, whether the timeframes and percentage requirements for transitioning to a fully market-based approach need to be extended, based on the status of the development of market-based contracts.

C. Market Segments

Straw Proposal: There would be two market segments, to reduce administrative costs and improve competitiveness. One segment would be for projects less than or equal to 20 kW to coincide with staff's straw proposal for new 2009 through 2012 rebates. The other segment would be for projects greater than 20 kW and less than or equal to 500 kW. This upper limit would decline to 400 kW and 300 kW in years 2 and 3, respectively.

1. **Rate Counsel** supports the establishment of two market segments but disagrees with the initial installation of the cap of 500 kW. Rate Counsel also disagrees with decreasing the cap by 100 kW over the last two years. Rate Counsel supports a cap of 700 kW held constant over the pilot period. Rate Counsel recommends increasing the cap to at least 1 MW for public installation projects.

2. **The Solar Alliance** recommends three market segments rather than two. Further, the BPU should provide guidance regarding the relative percentage within each segment. The Solar Alliance recommends 25% of under 20 kW; 25% for 21 to 200 kW and 50% for all others. The Solar Alliance suggest that the maximum system size be raised to 2 MW and sees no reason why the system size should decline over time.

3. **JCP&L** recommends development of a market segment for grid supply projects located in selected congestion areas or in capacity constrained areas. JCP&L recommended that the cap be enlarged to the MW cap for customer sited projects, or eliminated. JCP&L recommended the following market segments: less than 20 kW, 20 to 100 kW, over 100 kW and grid supply (no cap).

4. **Sun Farm Network** recommended that the proposal be amended to include three segments: less than 20 kW; 20 to 100 kW, and 100 to max kW. Sun Farm recommended soft caps under which contracts are awarded with the segment structure in the first pass of each allocation cycle but any left over kWs are automatically allocated to a second pass without consideration of segment quotas.

5. **NJ Solar Power** commented that are two (three) separate and distinct markets, Public; Private and Non-profit and within these classes there are different size requirements; under 20 kW, 20 – 200 kW, 200 – 1 MW and 1 MW (utility scale).

6. **Sun Power** commented that smaller projects should be able to compete in the large system allocation process if they can provide SRECs at competitive prices with the larger projects they should be allowed to exceed the 20% of total program allocation. Sun Power recommends that the Board should maintain the flexibility to alter the size decline based on the diversity of projects that are built via bi-lateral contracting.

7. **Sun Edison** commented that while they support the basic thrust and direction of the staff straw proposal, there are critical elements of the straw that will undermine these objectives. Specifically Sun Edison opposed the extremely rigid and restrictive developer cap in the straw. Restricting low cost solar developers to a miniscule share of any market segment will inevitably result in higher Solar RPS compliance cost and will frustrate efforts to meet escalating RPS requirements.

8. **Clean Energy Advocates** recommended that the Board set the total amount of SRECs used as the basis for allocating the fraction for EDC contracts in a given year equal to the total SREC required for the current and following year. The 60% would apply to EY 2010 and 2011 because of the two year trading provision in the purposed rule and this would be a rolling 2 year sum.

9. **Brother Sun Solar** recommended the need for a base level floor price. Without a fixed dollar amount on the return on one's investment this noble solar project as an investment may be an extravagant leap of faith at best and pure gambling at worst. There is plenty of room for free enterprise to negotiate, haggle and agree anywhere between \$475 and \$711 but setting a securitization level, a safety net floor, is an absolute necessity if an SREC only financing program and a state run and supported business is to be trusted as an investment.

10. **Vanguard and Eastern Energy Services, Inc**. recommended that caps within segments are not productive, and the BPU instead needs to ensure market accessibility for integrators.

11. **Sun Edison** commented that the overall per market developers cap should be removed or in the alternative applied only to the small customer segment.

The Board <u>FINDS</u> that two market segments, one for projects less than or equal to 50 kW and one for projects greater than 50 kW and less than or equal to 500 kW, will best serve to reduce administrative costs and preserve competitiveness in the market for the sale of SRECs. The Board further <u>FINDS</u> that the 500 kW upper limit need not decline before the end of the third full Reporting Year in which the EDCs are entering into long-term contracts to purchase SRECs pursuant to the filings required under this Order. Such a decline before the end of that Reporting Year is not necessary to spur the transition to a fully market-based delivery of incentives supporting the development of solar electric generation, but the Board may reevaluate whether a decline in the upper limit thereafter is necessary.

The Board further **FINDS** that, with respect to the Board's finding in the December 6 Order that rebates remain necessary for the smaller solar systems, that rebates should remain available for projects with capacity less than or equal to 50 kW, and that this rebate structure should be tiered in a declining amount to reflect the lower rebate amount needed for larger projects (greater than 10 kW) within the small project market segment and the difference in federal incentives for residential and non-residential projects. The Board will include these findings in its deliberations in the ongoing CRA proceeding referenced in the December 6 Order and in the annual budgets established for calendar years 2009-2012.

D. Developer Cap

Straw Proposal: No one entity, as defined as the holding company, can acquire or control more than 20% of the EDC's long term contracts (calculated based on kW) in any one year. In addition, no one entity, as defined as the holding company, can acquire or control more than 10% of the EDC's long term contracts (calculated based on kW) in any one year in any of the above two market segments. This amount would be subject to annual review by the Board and may be changed during the program timeframe. The intent of this recommendation is to provide for more diversity in participation by solar companies.

1 Rate Counsel supports the straw proposal for developer caps.

2. **The Solar Alliance** believes that the percentage limitation for developers in the EDC program should balance two competing principles of the program, but an excessively low developer cap will likely lead to higher SRECs and higher ratepayer costs. The Solar Alliance believes an appropriate balance has previously determined by the Board to be 33% in the BGS auction process. The Solar Alliance recommended a developer cap set between 25 – 30% per segment and would reset the cap to be a lower percentage after the first year.

3. **JCP&L** recommended that the developer cap be increased to 50% for all contracted markets for any year and that no developer cap should apply to grid supply type projects.

4. **Sun Farm Network** commented that if a developer is limited to 10% per segment even if they participate in every segment they can never achieve more than 10% of the EDC contracting market. Sun Farm Network recommends a single developer maximum within each segment of 20%.

5. **Sun Power** recommends that no one entity defined as the holding company can get more than 30% of the EDC contracts in any one year and can get more than 10% on the small market and 30% in the large segment. This amount would be subject to annual review.

6. **Sun Edison** recommends that the overall and per market developer caps should be removed or in the alternative apply only to the small customer segment.

7. **Vanguard and Eastern Energy Services, Inc**. recommended 20% for the whole market for 9 years and no more than 10% in any segment.

The Board <u>FINDS</u> that no one entity, and no combination of affiliated entities under the same majority ownership, can obtain more than 20% of the EDC's long term contracts (calculated based on kW) in any one year. The Board will review the experience with SREC-based financing annually.

E. Program Timeframe

Straw Proposal: The EDC Program will have a 3 year timeframe for the large segment and 4 years for the small segment. The longer timeframe for the small segment matches with the next four year funding cycle.

1. **Rate Counsel** believes that a uniform pilot period for all market segments in this program. Rate Counsel supports the 3 year timeframe but could also support a 4 year trail period. The pilot period should not be differentiated by market segment size.

2. **The Solar Alliance** supports the 3 year timeframe and the longer term for the small segment.

3. **JCP&L** supports the 3 years. The Board should schedule a formal process review in late 2010 to determine whether to continue in 2012. In addition, the Board should also include provision of appropriate actions including early termination.

4. **Sun Power** supports the timeframes.

5. **Vanguard and Easter Energy Services, Inc.** recommends that the program be long term. They are concerned about the vacuum created by sunsetting of a stable program.

The Board <u>FINDS</u> that a transition to market-based delivery of solar incentives would be served by an EDC long-term contracting effort that includes three full Reporting Years ending May 31, 2012, plus a partial reporting year if the EDCs implementation of this approach begins after the beginning of a reporting year.

F. Legacy Projects

Straw Proposal: This program is strictly for new projects defined as operational in Reporting Year 2009 and those served in the SREC pilot. No system that received a rebate from the CORE program in 2001 through 2008 will be eligible for the program. Small systems that receive a rebate from the new solar rebate program to be developed as approved by the Board in 2009 will be eligible for the EDC Contract program.

- 1 Rate Counsel supports the straw proposal.
- 2. JCP&L supports the straw proposal.

3. **Sun Farm Network** objected to the straw proposal suggestion that EDC contracts be offered only to projects that are in operation after May 31, 2009.

4. **Sun Power** believes that there is a potential conflict since additional rebate monies under the CORE program will be available in 2008. Sun Power suggests that the eligibility criteria should be all projects installed under the SREC pilot, all projects except those owned by EDC or EDC holding companies and installed and operational in EY 2009 or later that do not receive any state rebate and all small projects.

5. **Vanguard and Eastern Energy Services**, **Inc.** recommended that Legacy system not be eligible for EDC contracts.

The Board <u>FINDS</u> that projects that received or will receive a rebate from the CORE program in 2001 through 2008 were sufficiently supported by a rebate-based method of delivering solar incentives, and that as a result, EDC long-term contracts for those projects would not serve the Board's goal of transitioning to market-based delivery of solar incentives.

G. Sale of SRECs by EDCs to LSEs

Straw Proposal: SRECs procured by the EDCs through the competitive long term contract program will be sold to any LSE or Third Party Suppliers through an auction process.

1. **Rate Counsel** supports the straw proposal.

2. **The Solar Alliance** believes that programs should be available via auction to any LSE or TPS.

3. JCP&L recommends using a statewide auction process with other EDCs.

The Board **FINDS** that selling SRECs procured by the EDCs through the competitive long term contract program through the same auction process being used for SRECs obtained through the PSE&G solar loan program is administratively efficient and will not disrupt the functioning of the existing SREC market.

H. Existing Systems

Straw Proposal: To the extent it is cost effective, the competitive long term contract program will use existing administrative systems either through the OCE or joint utility systems

1. **Rate Counsel** as a general rule supports the use of mechanisms that will create efficiency to ratepayers but does not understand the proposal being offered by OCE and takes no position on this proposal at this time.

2. **The Solar Alliance** supports to the extent possible that there should be a common set of applications, rules and processes across all EDCs in the state.

3. **JCP&L** recommends leveraging existing state processes for SREC application review, inspection, etc.

4. **Sun Power** agrees with the need to build on existing OCE systems.

The Board **<u>FINDS</u>** that it will be administratively efficient to use existing administrative systems, either through the OCE or joint utility systems, to the extent it is cost effective to do so.

In accordance with the FINDINGS set forth above, the Board hereby <u>SUPPLEMENTS</u> the minimum filing requirements attached to the 120-Day Order to add minimum filing requirements with respect to filings by EDCs regarding the undertaking of solar renewable energy improvements through long-term contracts to purchase the SRECs generated by the solar electric generation facility that is the subject of each contract, to specify that such filings shall provide for the following:

- 1 A contract term of 15 years, unless the EDCs elects to consider a portfolio approach in which the EDC enters into contracts with terms between 10 and 15 years;
- 2. A commitment to enter into contracts to procure 60% of the EDC's new incremental SREC allocation through the end of the first full Reporting Year in which the EDCs are entering into long-term contracts pursuant to this Order. That percentage will decline to 50 percent for the second full Reporting Year, and 40 percent for the third full Reporting Year; that this percentage will include the full Reporting Year 2008 shortfall and 60% of the projected Reporting Year 2009 shortfall; and that this percentage will also encompass the stated percentage of the SREC needs for third party suppliers;
- 3 Applying the percentage requirements under 3 above to two market segments, one for projects less than or equal to 50 kW and one for projects greater than 50 kW and less than or equal to 500 kW;
- 5 No one entity, and no combination of affiliated entities under the same majority ownership, can obtain more than 20% of the EDC's long term contracts (calculated based on kW) in any one year;
- 6 The EDC long-term contracting effort will include the three full Reporting Years ending May 31, 2012, plus a partial reporting year if the Board's order approving the EDC's program sets an implementation date that is after the beginning of a reporting year;
- 7 Solar electric generation projects that received or will receive a rebate from the CORE program in 2001 through 2008 are not eligible for long-term contracts with the EDCs;
- 8. The EDC will resell SRECs procured under the long-term contracts through the same auction process being used for SRECs obtained through the PSE&G solar loan program; and

9 Existing administrative systems, either through the OCE or joint utility systems, will be used to the extent it is cost effective to do so.

Pursuant to <u>N.J.S.A.</u> 48:3-98.1(a)(3), the Board <u>DIRECTS</u> the EDCs to undertake renewable energy improvements by facilitating SREC-based financing of solar electric generation projects, in a manner that supports the transition to a market-based approach of delivering incentives for solar electric generation. The Board specifically <u>DIRECTS</u> each EDC as follows:

1. JCP&L shall commence discussions with Board Staff, Rate Counsel, and RECO regarding the development of a proposed SREC-based financing plan. JCP&L may include in discussions, as it deems appropriate, representatives of the solar industry, LSEs, and other EDCs. JCP&L shall submit its proposed solar financing plan to the Board by September 30, 2008, as a petition under <u>N.J.S.A.</u> 48:3-98.1(b). JCP&L shall include in the petition the items specified in the list of minimum filing requirements attached to the 120-Day Order, and the items specified in the additional minimum filing requirements set forth in this Order;

2. ACE shall commence discussions with Board Staff, Rate Counsel, and RECO regarding the development of a proposed SREC-based financing plan. ACE may include in discussions, as it deems appropriate, representatives of the solar industry, LSEs and other EDCs. ACE shall submit its proposed SREC-based financing plan to the Board by September 30, 2008, as a petition under <u>N.J.S.A.</u> 48:3-98.1(b). ACE shall include in the petition the items specified in the list of minimum filing requirements attached to the 120-Day Order, and the items specified in the additional minimum filing requirements set forth in this Order;

3. No later than January 31, 2009, RECO shall submit a petition under <u>N.J.S.A.</u> 48:3-98.1(b) for its participation in an SREC-based financing plan submitted by either JCP&L or ACE.

4. PSE&G shall commence discussions with Board Staff and Rate Counsel regarding the development of a proposed SREC-based financing plan. PSE&G may include in discussions, as it deems appropriate, representatives of the solar industry, LSEs and other EDCs. PSE&G's proposed SREC-based financing plan shall provide for implementation in the Reporting Years ending May 31, 2011 and May 31, 2012. The plan may be structured as a modification of the solar loan program approved by the Board in an Order dated April 16, 2008 in Docket No. EO07040278, provided that the modifications are sufficient to enable the loan program to support the transition to a market-based approach of delivering incentives for solar electric generation. PSEG shall submit its plan no later than March 31, 2009 as a petition under N.J.S.A. 48:3-98.1(b). PSE&G shall include in the petition elements sufficient to satisfy the items specified in the list of minimum filing requirements attached to the 120-Day Order, and the items specified in the additional minimum filing requirements set forth in this Order.

The Board further <u>DIRECTS</u> that JCP&L, ACE, RECO and PSE&G work together to ensure that the various EDC programs complement each other and, to the extent feasible, are consistent across the State; utilize existing NJCEP program policies and procedures to the extent practicable; give due consideration in their filings to supporting SREC-based financing for solar electric generation installations in all customer sectors, including the affordable housing sector; and coordinate with each other to the extent practicable to reduce administration costs, for example, by jointly managing any auctions to sell SRECs to LSEs.

The Board, in its December 6, 2007 Order, directed the OCE to commence a stakeholder process and to develop specific recommendations regarding a proposed community based solar program to be included in the RPS and the net metering/ interconnection regulations. The Board believes that the development of community based systems could create a way for smaller customers to participate in the solar market place at a lower cost than building small systems on every residence. The Board **REAFFIRMS** its findings and directives in that Order. The Board **DIRECTS** the OCE to commence a stakeholder process and to develop specific recommendations regarding a proposed community based solar program to be included in the RPS regulations in accordance with the rulemaking schedule set forth in the December 6, 2007 Order.

DATED: 8/7/08

BOARD OF PUBLIC UTILITIES BY:

OSEPH L. FIORDALISO

OMMISSIONER

ELIZABETH RANDALL

COMMISSIONER

EANNE M. FOX RESIDENT

FREDERICK F. BUTLER

NICHOLAS ASSELTA COMMISSIONER

ATTEST:

SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities

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