# BEFORE THE STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF	) BPU Docket No. EO12080726
PUBLIC SERVICE ELECTRIC AND GAS	)
COMPANY FOR APPROVAL OF A	)
SOLAR LOAN III PROGRAM AND AN	)
ASSOCIATED COST RECOVERY	)
MECHANISM AND FOR CHANGES IN THE	)
TARIFF FOR ELECTRIC SERVICE,	)
B.P.U.N.J. NO. 15 ELECTRIC PURSUANT	)
TO <u>N.J.S.A.</u> 48:2-21 AND <u>N.J.S.A.</u> 48:2-21.1	)

# DIRECT TESTIMONY OF ANDREA C. CRANE ON BEHALF OF THE STATE OF NEW JERSEY DIVISION OF RATE COUNSEL

STEFANIE A. BRAND, ESQ. DIRECTOR, DIVISION OF RATE COUNSEL

DIVISION OF RATE COUNSEL 31 CLINTON STREET, 11<sup>TH</sup> FLOOR P.O. BOX 46005 NEWARK, NJ 07101

Email:njratepayer@rpa.state.nj.us

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Appendix A - List of Prior Testimonies

Appendix B - Referenced Data Requests

## 1 I. STATEMENT OF QUALIFICATIONS

- 2 Q. Please state your name and business address.
- 3 A. My name is Andrea C. Crane and my business address is 90 Grove Street, Suite 211,
- 4 Ridgefield, Connecticut 06877. (Mailing address: PO Box 810, Georgetown,
- 5 Connecticut 06829)

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- 7 Q. By whom are you employed and in what capacity?
- 8 A. I am President of The Columbia Group, Inc., a financial consulting firm that specializes
- 9 in utility regulation. In this capacity, I analyze rate filings, prepare expert testimony, and
- undertake various studies relating to utility rates and regulatory policy. I have held
- several positions of increasing responsibility since I joined The Columbia Group, Inc. in
- January 1989. I became President of the firm in 2008.

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- 14 Q. Please summarize your professional experience in the utility industry.
- 15 A. Prior to my association with The Columbia Group, Inc., I held the position of Economic
- Policy and Analysis Staff Manager for GTE Service Corporation, from December 1987
- to January 1989. From June 1982 to September 1987, I was employed by various Bell
- Atlantic (now Verizon) subsidiaries. While at Bell Atlantic, I held assignments in the
- 19 Product Management, Treasury, and Regulatory Departments.

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- Q. Have you previously testified in regulatory proceedings?
- 22 A. Yes, since joining The Columbia Group, Inc., I have testified in over 350 regulatory
- proceedings in the states of Arizona, Arkansas, Connecticut, Delaware, Hawaii, Kansas,

1 Kentucky, Maryland, New Jersey, New Mexico, New York, Oklahoma, Pennsylvania,
2 Rhode Island, South Carolina, Vermont, Washington, West Virginia and the District of
3 Columbia. These proceedings involved electric, gas, water, wastewater, telephone, solid
4 waste, cable television, and navigation utilities. A list of dockets in which I have filed
5 testimony since January 2008 is included in Appendix A.

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# Q. What is your educational background?

8 A. I received a Master of Business Administration degree, with a concentration in Finance,
9 from Temple University in Philadelphia, Pennsylvania. My undergraduate degree is a
10 B.A. in Chemistry from Temple University.

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## II. PURPOSE OF TESTIMONY

# 13 Q. What is the purpose of your testimony?

On or about July 31, 2012, Public Service Electric and Gas Company ("PSE&G" or "Company") filed a Petition with the New Jersey Board of Public Utilities ("BPU" or "Board") requesting approval to implement a Solar Loan Program ("Solar Loan III"). The Company is proposing to make loans of up to \$193 million over a three-year period to parties interested in developing up to 97.5 MW of solar generation systems.

The Columbia Group, Inc. was engaged by The State of New Jersey, Division of Rate Counsel ("Rate Counsel") to review PSE&G's filing and to provide recommendations to the BPU with regard to the issue of cost recovery and other financial issues. David Dismukes, of Acadian Consulting Group, is also filing testimony on behalf of Rate Counsel with regard to policy and program design issues.

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### II. SUMMARY OF CONCLUSIONS

- 3 Q. Please summarize your conclusions and recommendations.
- 4 A. Based on my analysis of the Company's filing and other documentation in this case, my conclusions are as follows:
- The BPU should deny the Company's request to implement the Solar Loan III

  Program as proposed by PSE&G.
  - 2. The cost of the Solar Loan III Program is excessive, especially the Company's proposal to earn a pre-tax return of 11.852% on its investment, resulting in a return requirement of \$145.5 million and a windfall for shareholders.
    - 3. The proposed Solar Loan III Program is inconsistent with the BPU's directive in the May 23, 2012 Order in BPU Docket No. EO11050311V, whereby the BPU indicated that administrative costs of Electric Distribution Company ("EDC") Solar Renewable Energy Certificate ("SREC") programs should not be paid by ratepayers, but instead should be paid by solar developers and generators.

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### IV. DISCUSSION OF THE ISSUES

### A. Introduction

- 19 Q. Please provide a brief summary of the Solar Loan III Program proposed by 20 PSE&G.
- A. In the Petition dated July 31, 2012, PSE&G proposed a Solar Loan III Program as a continuation of its Solar Loan I and Solar Loan II Programs that were previously approved by the BPU. The proposed Solar Loan III Program, like its two predecessors,

would issue loans to third parties to support the development of solar photovoltaic generating facilities. Borrowers would have the option of repaying the loans in cash, or using solar renewable energy certificates ("SRECs") generated by the solar facilities,

The Petition states that the Solar Loan III Program is specifically designed to meet the recommendations of the Office of Clean Energy ("OCE") as contained in the Order issued by the Board on May 23, 2012 in Docket No. EO11050311V ("May 2012 Order"). The May 2012 Order expanded the Electric Distribution Company ("EDC") Solar Renewable Energy Certificate ("SREC") financing programs by 180 MW over a three-year period starting in 2013.

In the Solar Loan III Program, PSE&G proposes to loan up to \$193 million to third parties to develop 97.5 MW of solar generation capacity. Of the 97.5 MW of total new capacity, the Petition earmarks 9.8 MW for residential projects and the balance of 87.7 MW across three non-residential customer segments. In response to RCR-A-16, the company stated that "[t]he allocations are based on the actual historical experience of the Solar Loan I & II programs." There have been no defaults under either Solar Loan I or Solar Loan II to date. 1

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# Q. How does the Solar Loan III program differ from the Solar Loan I and Solar Loan II programs that were previously approved by the BPU?

Paragraphs 7 and 8 of the Petition detail several differences between the Solar Loan III program and the earlier programs. These include: "market-based" methodologies for determining the "Floor Price," a minimum guaranteed value to be attributed to the SRECs used for loan repayment; a new method for determining the market price of SRECs used

<sup>1</sup> Response to RCR-A-20.

for loan repayment; an increase in the loan application fee and borrower's administration fee; and the introduction of a new SREC processing fee. In addition, in response to the Company receiving negative feedback from residential borrowers, call options on SRECs generated after a residential loan has been paid off will be eliminated. The call option will remain for non-residential projects. The Program Rules also provide for a "Missed Milestone Fee", which may be imposed if project timeline goals are not met, and for third-party inspections of 100% of the Solar Loan III projects.

A.

# Q. How is the Company proposing to change the determination of the SREC Floor Prices?

In both the Solar Loan I and Solar Loan II program, the SREC Floor Prices were administratively determined. For the Solar Loan III program, PSE&G is proposing two different methodologies.

Non-residential applicants will submit proposals that include a proposed SREC floor price for each project. Non-residential borrower applications will include a bid for the SREC floor price capped at \$310, including a new \$10 SREC Processing Fee, which will be discussed in greater detail later in this testimony. Projects will be ranked from lowest SREC bid price to highest until the capacity block for the auction segment is filled. According to the response to RCR-A-21, there is no minimum SREC floor price for the non-residential segment in the proposed program.

The initial residential SREC floor price will be \$310, including the \$10 SREC Processing Fee. If, however, the total capacity in the solicitation is exceeded by 25%, then the floor price will decrease by \$25 per SREC in subsequent solicitations. "PSE&G

will timestamp applications when they are received and will award capacity on a first come basis."<sup>2</sup>

As stated in the response to RCR-A-13, "The \$193 million represents the maximum investment at an average SREC Floor price of \$300 (net of SREC processing fee). If the actual average SREC Floor Price is less than \$300 then the total investment will also be less." Loans will be repaid in SRECs or cash, at the borrower's option over ten years at an interest rate of 11.852%, according to the Petition.

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# Q. How will new loan applications be solicited?

Loan applications will be solicited through PSE&G's website, webinars, mailings and newsletters to previous borrowers and developers, press releases, local solar conferences, and notices in industry publications.<sup>3</sup> Applications will continue to be received under the Solar Loan II Program until the Solar Loan III Program is approved by the BPU. Upon commencement of the Solar Loan III Program, any remaining unawarded capacity from the Solar Loan II program will be rolled into the new program.

A.

### Q. What are the total estimated costs of the program?

The total costs of the program are \$359.1 million. These include \$193.1 million of loans, \$145.5 million in interest on outstanding loans paid to PSE&G, and \$20.5 million of administrative costs. Under the Company's proposal, SREC sales would cover \$212.4 million of these costs and administrative fees would recover \$20.1 million, with the remaining \$126.6 million paid by ratepayers.

<sup>2</sup> Response to RCR-A-18.

<sup>3</sup> Response to RCR-A-17.

Table 1

	Costs (Millions \$)	Recovery (Millions \$)
Loans Issued	\$193.1	
Return to Investors	\$145.5	
Administrative Costs	\$20.5	
Paid by Ratepayers		\$126.6
SREC Sales		\$212.4
Administrative Fees		\$20.1
Total	\$359.1	\$359.1

A.

### Q. How did the Company determine its claim for administrative costs?

As shown in JAF-SLIII-4 to Mr. Forline's testimony, administrative costs are estimated to be \$20,507,670 over the life of the program. This includes \$11,386,600, which is the Solar Loan III Program's allocation of common costs associated with the three Solar Loan Programs, and \$9,121,070 in rebate processing, inspection, and other quality control expenditures that are specific to the Solar Loan III Program. The common administrative costs are based on allocated forecasted capacity for each of the Solar Loan programs. The 2013 allocation for Solar Loan III is expected to be 5.1%. This allocation would increase to 55% by 2017. It should be noted that PSE&G did not include costs related to the sale of the SRECs in its administrative cost claim. The Company projects SREC disposition costs of \$970,951 over the life of the Solar Loan III Program, and it has proposed to recover these costs directly from SREC sale proceeds.

# 1 Q. How does PSE&G propose to recover its administrative costs?

The Company is proposing that applicants pay an Application Fee of \$20 per kW, up to a maximum of \$7,500, at the time of application. In addition, an Administration Fee equal to 4% of the loan would be deducted from the loan proceeds at the time the loan is issued to the borrower. The Company is also proposing a Processing Fee of \$10 per SREC to be credited to administrative costs as the SRECs are received from the borrower and sold. PSE&G designed its administrative cost recovery so that the initial Application Fees and 4% Administration Fees would cover most of the \$9,121,070 in rebate processing, inspection, and other quality control expenditures that are specific to the Solar Loan III Program, while the \$10 SREC Processing Fee would cover most of the common costs allocated to the Solar Loan III program. Based on the Company's filing, PSE&G estimates that these three charges will result in total offsetting revenue of \$20,051,399, as shown in Schedule JAF-SLIII-4, leaving a balance of \$456,271 that would be paid for ratepayers. However, as discussed below, the actual cost to ratepayers could be considerably higher.

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# Q. How does the Company propose to recover the costs of the Solar Loan III Program?

A. The proposed cost recovery mechanism is described in the testimony of PSE&G witness

Stephen Swetz and his proposed revenue requirement calculation is shown in Schedule

SS-SLIII-3. PSE&G proposes to determine a monthly revenue requirement, based on the following formula:

<sup>4</sup> Schedule JAF-SLIII-2.

Revenue Requirement = (Cost of Capital \* Net Investment) - Net Loan Accrued Interest
+ Amortization and/or Depreciation + Operation and Maintenance Costs - Net Proceeds
from the Sale of SRECs - Cash Payments in lieu of SRECs - Proceed from the SREC
Processing Fee

PSE&G proposes to recover the revenue requirement associated with the Solar Loan III Program costs through a Solar Loan III component ("SLIIIc") of the Company's Regional Greenhouse Gas Initiative Recovery Charge ("RRC"). Beginning in Energy Year 2016, the established Board-approved auction process will be used to sell the SRECs that PSE&G receives in repayment of the loans. Auction proceeds will be credited towards the revenue requirement. The Company assumed an SREC market value of \$200 in its analysis.

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### Q. What impact will the proposed program have on customer rates?

PSE&G is requesting that the BPU approve initial rates that are sufficient to recover \$1.75 million on an annual basis, based on the projected revenue requirement from January 1, 2013 through September 30, 2014.<sup>5</sup> The revenue requirement increases to a maximum of \$12.85 million by 2017, and recoveries would continue through 2027.<sup>6</sup> The total revenue requirement projected to be recovered through electric rates over the 15-year period is \$126.56 million.<sup>7</sup> It should be noted that these estimates are based on a market price of \$200 per SREC. If market prices fall below \$200 per SREC, then the overall costs to ratepayers would be higher.

<sup>5</sup> Schedule SS-S4AE-4.

<sup>6</sup> Schedule SS-S4AE-3, page 2 of 2, col. 23.

<sup>7</sup> Id.

In year one of the Solar Loan III Program, the SLIIIc portion of the electric RRC would be \$0.000025 per kWh (including SUT). The average residential customer using 780 kWh in each summer month and 7,360 kWh annually would initially experience an increase in their annual bill from \$1,336.60 to \$1,336.76, an increase of \$0.16, or 0.012% based on rates and charges effective July 1, 2012. The maximum impact to the typical residential customer would occur in the rate period October 1, 2018 through September 30, 2019, when the average residential customer would experience an increase of \$2.36 or 0.177%. The Solar Loan III component of the RRC would be reviewed and modified in the annual filing that PSE&G makes with the BPU.

# Q. What cost of capital is the Company proposing to utilize for the return on its investment balance?

A. PSE&G is proposing to utilize a weighted average cost of capital ("WACC") of 8.21%, as shown in Schedule SS-SLIII-2 of Mr. Swetz's testimony. In addition, the equity portion would be grossed-up for taxes, resulting in a pre-tax cost of capital of 11.852%. This cost of capital is based on the following capital structure and cost rates:

Table 2

	Percent	Cost	WACC	Revenue Conversion Factor	WACC Including Tax Effects
Long Term Debt	48.80%	6.0172%	2.9364%	1 40101	2.9364%
Common Equity	51.20%	10.3000%	5.2736%	1.6906	8.9156%
Total	100.00%		8.2100%		11.8520%

- 1 Q. Does the Company also propose to charge ratepayers interest on monthly over/under recoveries?
- A. Yes, PSE&G's filing includes interest on monthly over/under recoveries based upon the
  Company's interest rate for commercial paper and/or bank credit lines utilized in the
  preceding month. If both commercial paper and bank credit lines have been utilized, the
  weighted average of both sources of capital would be used.

8 Q. Do you support the Solar Loan III Program as proposed by PSE&G?

9 No. I do not. I believe that the proposed Solar Loan III Program should be rejected by A. the BPU, for two reasons. First, the proposed Solar Loan III Program is far too costly for 10 11 ratepayers and would result in excessive returns for PSE&G shareholders. Second, the 12 Solar Loan III program would put ratepayers at risk for a significant share of administrative costs, contrary to the May 2012 Order of the BPU. For both of these 13 14 reasons. I recommend that the BPU reject the Company's proposal, as discussed in further detail below. Mr. Dismukes discusses additional concerns about other elements of the 15 proposed Solar Loan III Program in his testimony. 16

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- B. PSE&G's Currently Authorized Equity Return Is Excessive
- Q. Why do you believe that the Company's currently authorized equity return of 10.3% is excessive?
- 21 A. The currently authorized return on equity of 10.3% was the result of a complex settlement in a base rate case that reflected compromises by several parties on many different issues. Moreover, that case was filed in May 2009 and new rates were effective

in July 2010. Since the Company's last base rate case, market conditions have changed substantially, a fact not reflected in the Company's request to earn its currently authorized WACC on investment made in the Solar Loan III Program.

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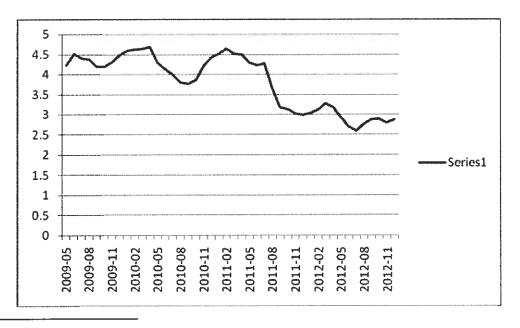
# Q. What has generally happened to capital costs since the BPU approved the settlement in BPU Docket No. GR09050422?

Capital costs declined between the time that the Company's last base rate case was filed and the issuance of an Order approving a return on equity of 10.3%. In addition, capital costs have continued to decline since that Order was issued in mid 2010. For example, 30-year U.S. Government bonds fell from a rate of 4.23% in May 2009 to 3.99% in July 2010, and continued to decline to a rate of 2.88% in December 2012, as shown below:<sup>9</sup>

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30-Year U.S. Government Bonds

Table 3



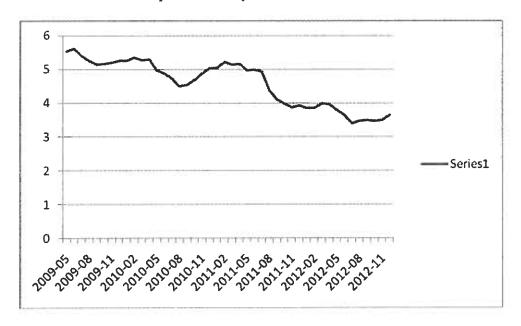
<sup>8</sup> I/M/O the Petition of Public Service Electric and Gas Company for Approval of an Increase in Electric and Gas Rates and For Changes in the Tariffs for Electric and Gas Service B.P.U.N.J. No. 14 Electric and B.P.U.N.J. No. 14 Gas Pursuant to N.J.S.A.48:2-21 and N.J.S.A. 48:2-21.1 and for Approval of a Gas Weather Normalization Clause, a Pension Tracker and for Other Appropriate Relief, BPU Docket No. GR09050422.

<sup>9</sup> All rates are from the Federal Reserve Statistical Releases per www.federalreserve.gov.

A similar trend can be found with corporate bonds. AAA-rated corporate bonds fell from a rate of 5.54% at May 2009 to 4.72% at July 2010. Rates for AAA-rated corporate bonds continued to decline through 2011 and 2012, reaching a rate of 3.65% in December 2012, as shown below:

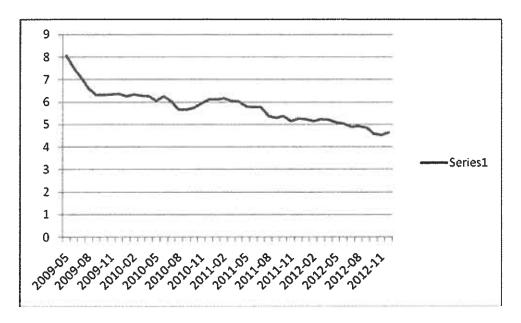
Table 4

Corporate Moody's AAA-Rated Bonds



A similar trend can also be found with other corporate bonds. Baa-rated bonds declined from 8.06% in May 2009 to 6.01% in July 2010, and to 4.63% by December 2012:

1 Table 5
2 Corporate Moody's Baa-Rated Bonds



Finally, dividend yields have generally declined as stock prices have increased since the Company's last case. The Dow Jones Industrial Index increased from 8,212.41 on May 1, 2009 to 9,732.53 on July 1, 2010, and further increased to 13,412.55 by January 2, 2013. The Dow Jones Utility Index has also increased significantly over this period, from 343.03 on May 1, 2009 to 356.46 by July 1, 2010, and to 461.46 on January 2, 2013. These increases in stock prices have generally outpaced increases in utility dividends, resulting in lower dividend yields and an overall decline in equity returns evaluated based on the Discounted Cash Flow ("DCF") model.

# Q. Has the Company's embedded cost of debt declined as well?

A. Yes, it has. The Company's embedded cost of debt has fallen from 6.21%, which was the embedded cost of debt claimed by PSE&G in its last base rate case filing, to 5.05% by

October 2012.<sup>10</sup> Moreover, the current embedded cost of debt is a weighted average that includes some debt incurred at rates that are higher than current market rates. Thus, the substantial fall in the Company's embedded cost of long-term debt is indicative of an even greater decline in the marginal costs of more recently-incurred debt.

A.

## Q. What is the significance of these declines in capital costs since the last case?

The message is clear. While the parties can debate the specific impact of these reductions on the Company's overall cost of capital, the fact is that capital costs have declined substantially since the decision in BPU Docket No. GR09050422. Regardless of how a party chooses to determine the cost of capital, it is clear that the 10.3% cost of equity reflected in the WACC is no longer appropriate. It is also clear that a reduction to the cost of debt approved in the last base rate case is also warranted. These reductions in capital costs alone provide sufficient rationale for rejecting the Company's proposed Solar Loan III Program as currently structured, which would require ratepayers to pay returns based on a WACC that no longer reflects the Company's actual cost of capital.

# Q. Have there been lower returns on equity approved by the BPU since the Order in the last PSE&G rate case?

19 A. Yes, there have. In its most recent Order approving a return on equity for an electric 20 utility, the BPU approved a cost of equity of 9.75% for the Atlantic City Electric

<sup>10</sup> Response to RCR-A-35 in I/M/O The Petition of Public Service Electric and Gas Company for Approval of a Solar Generation Investment Program and Associated Cost Recovery Mechanism and for Changes in the Tariff for Electric Service, B.P.U.N.J. No. 15 Electric Pursuant to N.J.S.A. 48:2021 and N.J.S.A. 48:21.1, BPU Docket No. EO12080821.

1	Company ("ACE"), which represents a substantial reduction from the equity return being
2	proposed by PSE&G in this case. <sup>11</sup>

- 4 Q. How does the Company's requested return of 10.3% compare to equity returns
  5 being awarded in other jurisdictions?
- Although regulatory awards tend to lag behind movements in the financial markets, the 6 A. 7 10.3% claimed by PSE&G is high relative to recent returns. In addition, many cases are settled and it is sometimes difficult to draw conclusions about equity returns that are 8 included in regulatory settlements. However, the most recent equity award of which I am 9 aware was 9.5% awarded by the Kansas Corporation Commission ("KCC") to Kansas 10 City Power and Light Company in December 2012. 12 It should be noted that this award 11 was at the high end of the recommendation made by the KCC's Staff, and thus even this 12 award is likely to be higher than a reasonable return on equity for current cases. 13

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- Q. Didn't the BPU approve the use of the WACC in the Solar Loan I and Solar Loan II programs?
- Yes, it did. However, these programs were the subject of Settlement Agreements among
  the parties and reflected various compromises that are not present in this case. Moreover,
  the Solar Loan I and Solar Loan II programs were intended to jump-start New Jersey's
  solar energy market. While the state's Energy Master Plan currently calls for the
  continued development of renewable energy in New Jersey, there is no evidence that the

<sup>11</sup> I/M/O The Petition of Atlantic City Electric Company for Approval of Amendments to its Tariff to Provide for an Increase in Rates and Charges for Electric Service Pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1 and for Other Appropriate Relief, BPU Docket No. ER11080469.

<sup>12</sup> I/M/O The Application of Kansas City Power & Light Company to Make Certain Changes in Its Charges for Electric Service, KCC Docket No. 12-KCPE-764-RTS, Order (December 13, 2012).

proposed Solar Loan III Program is needed in order to comply with that objective, as further discussed in the testimony of Mr. Dismukes. As currently proposed, the Solar Loan III Program would provide PSE&G shareholders with a guaranteed revenue stream at the expense of ratepayers, while shielding the shareholders from any risk of underrecovery. Since the Petition lacks any evidence to support the establishment of a reasonable rate of return, it should be rejected.

# Q. If the BPU decides to go forward with the Solar Loan III Program, what return on investment would you recommend be applied?

A. I would recommend a return on equity of <u>no higher</u> than 9.75%, consistent with the most recent equity award by the BPU in an electric utility case. However, given the significant differences in risk between the Company's proposed program and a utility's traditional investment in electric plant, it may be reasonable to adopt a significantly lower return on equity. In addition, I would recommend that the BPU update the Company's return on debt to reflect the current embedded debt cost, as well as the current capital structure.

A.

# Q. Why do you recommend that the Company's return on equity be established at no higher than the return on equity recently approved for ACE?

I am making this conservative recommendation because it may be appropriate to utilize a lower carrying charge to reflect the lower risk to shareholders of investment that is recovered through a surcharge mechanism. The Company's program, which guarantees the Company recovery of 100% of its costs through the RRC, is obviously of lower risk to PSE&G than its investment in traditional distribution plant. Accordingly, the return

awarded to PSE&G for this program should be commensurate with this lower risk. If the BPU finds that the Company's shareholders are bearing no risk, then the Company's cost of debt would be an appropriate return to use as its cost of capital. If the BPU finds that the Company's shareholders are incurring some risk, then it may be appropriate to include a return on equity that is higher than the Company's cost of debt, but lower than the return awarded on electric distribution plant recovered in base rates.

A.

## C. Administrative Cost Recovery

Q. Has the Company accurately stated the administrative costs that could be charged to New Jersev ratepayers?

No, it has not. As shown on Schedule JAF-SLIII-3, PSE&G claims that all but \$456,271 of the Company's administrative costs will be paid by various fees imposed on borrowers. These fees include an Application Fee of \$20 per kW, up to a maximum of \$7,500; an Administration Fee equal to 4% of the loan; and an SREC Processing Fee of \$10 per SREC. While the Application Fee and the Administration Fee will, in fact, be paid by borrowers, the SREC Processing Fee will be included in the Company's revenue requirement and a substantial portion of this fee is likely to be ultimately paid by New Jersey ratepayers. In fact, ratepayers will be at risk for all administrative costs not recovered by the initial Application Fee or 4% Administration Fee. According to the Company's estimate of administrative costs, this could put ratepayers at risk for recovery of up to \$11.5 million, as well as for recovery of approximately \$970,000 in SREC disposition costs.

A.

# Q. How does PSE&G propose to actually recover the \$10 per SREC Processing Fee?

As explained above, borrowers under the Solar Loan III Program would have the option of using either cash or SRECs to repay loans. The value attributed to the SRECs would be the greater of a market price, determined in accordance with a methodology specified in the Petition ("Market Price") and the SREC Floor Price. Under the Company's proposal, if the Market Price is greater than the SREC Floor Price, then loans will be credited with the Market Price less the \$10 SREC Processing Fee. In this scenario, borrowers are indirectly paying the \$10 Processing Fee.

However, if the Market Price is less than the Floor Price, then the loans are credited with the Floor Price, less the \$10 SREC Processing Fee, while the SREC Floor Price Cost is included in the Company's revenue requirement. That SREC Floor Price Cost would equal the difference between the <u>full Floor Price</u> (without the subtraction of the \$10) and the <u>Market Price</u>. Mr. Forline provides an example on page 8 of his testimony, assuming a Floor Price of \$250 and a Market Price of \$200. In that example, the loan is credited with \$240, administrative costs are credited with \$10, and ratepayers are responsible for an SREC Floor Price cost of \$50.<sup>13</sup> Thus, ratepayers are responsible for the full difference between the Floor Price and the Market Price, including the \$10 per SREC Processing Fee that would otherwise have been recovered through the Market Price. It is important to recognize that once the loan is issued, there are only two sources of revenue: SREC sale proceeds and ratepayers. SREC sales will, by default, be recovered from ratepayers under the Company's proposal.

<sup>13</sup> Note that Mr. Forline's testimony on page 8, line 14, should read "SREC Floor price cost.." as noted in response to RCR-A-12.

<sup>14</sup> If borrowers decide to repay in cash instead of with SRECs, there would be potentially a third source of revenue.

This could put ratepayers at risk for \$11.5 million in administrative costs not recovered through the initial Application Fees or 4% Administration Fees.

In addition, under the Company's proposal, ratepayers will also be responsible for paying the administrative costs associated with disposition of the SRECs. These costs are estimated by PSE&G to be approximately \$970,000.

A.

# Q. Is the Company's proposal consistent with the requirements of the May 2012 Order which stated that administrative costs should not be paid for by ratepayers?

No, it is not. While ratepayers have been responsible for paying all of the administrative costs for most of the solar programs that have been introduced over the past several years, one of the objectives of the May 2012 Order was to mitigate the cost of SREC financing programs on New Jersey ratepayers. In its May 2012 Order in BPU Docket No. EO11050311V, which approved extensions of the SREC financing programs, the BPU found that for new programs "... all administrative fees would be paid for by the solar developer or the generation customer." The Company's proposal in this case to recover a portion of administrative costs from New Jersey ratepayers is inconsistent with this directive. One of the objectives of Staff in developing the proposals that were ultimately adopted by the BPU in the May 2012 Order was to "wean the solar industry from ratepayer subsidies." One way to begin to wean the industry from ratepayer subsidies is to require solar developers or generators to absorb administrative costs associated with these programs, which is what the BPU required in its May 2012 Order. Thus, the Company's proposed recovery mechanism for administrative costs is inconsistent with

<sup>15</sup> I/M/O The Review of Utility Supported Solar Programs, BPU Docket No. EO11050311V, Order at page 27 (May 23, 2012).

<sup>16</sup> Id., page 12.

the overall intent of programs designed to promote the development of solar energy in New Jersey while minimizing the cost to ratepayers. In addition, requiring solar developers or generators to absorb administrative costs associated with other SREC financing programs but permitting PSE&G to collect a large portion of administrative costs of the Solar Loan III Program from ratepayers would provide PSE&G with an unfair advantage in the development of the solar energy market. The fact that the BPU has found that administrative costs should be borne by solar developers or generators is another reason to reject the Solar Loan III Program. as currently proposed by PSE&G.

- Q. If the Board decides to proceed with the Solar Loan III Program, what would you recommend with regard to recovery of administrative costs?
- A. If the Board wants to proceed with the Solar Loan III Program, then all administrative costs, including costs associated with disposition of the SRECs, should be charged to solar developers or generators, or borne by PSE&G shareholders. In no case should any of these costs be charged to ratepayers.

- Q. Do you have other concerns about how administrative costs are reflected in the Company's revenue requirement?
- 19 A. Yes, I do. Mr. Swetz's Schedule SS-SLIII-3 reflects Administrative Costs of \$11,577,689

  20 instead of the total claimed Administrative Costs of \$20,507,670. This is because Mr.

  21 Swetz only included those costs that were not recovered through the initial Application

  22 Fee or 4% Administration Fee. In addition, as noted, the Company has proposed that the

  23 Floor Price include a \$10 per SREC Processing Fee. The inclusion of this Processing Fee

in the Floor Price bid by customers has created the situation described above, whereby ratepayers are ultimately responsible for paying these administrative costs to the extent that the Floor Price is below the Market Price.

In order to clarify the treatment of administrative costs, the Company should separately identify and track <u>all</u> administrative costs. This would include the Solar Loan III Program's share of common costs, as well as the costs for rebate processing, inspection, other quality control activities, and disposition of the SRECs. In addition, it should keep administrative costs, and the recovery of such costs, completely separate from the SREC Floor Price. In this way the BPU can ensure that the revenue requirement charged to ratepayers does not include any portion of administrative costs, consistent with the intent of the May 2012 Order.

A.

### D. Concluding Comments

# Q. Do you have any additional comments?

Yes, I do. The proliferation of surcharge mechanisms in utility tariffs has had a detrimental impact on the ratemaking process. These surcharge mechanisms have added millions of dollars to ratepayer bills without being subject to the level of scrutiny found in a base rate case, which includes a comprehensive examination of investment, expenses, revenues, costs of capital, and other items. Moreover, these surcharge mechanisms are much more profitable for PSE&G, especially if PSE&G can convince the BPU to guarantee shareholders a return based on the currently authorized WACC while avoiding all risk associated with the corresponding investment. Surcharge mechanisms have become big business for the electric and gas utilities in New Jersey and

there is every indication that the utilities will attempt to continue this trend unless the BPU takes steps to control the proliferation of surcharges.

Given the significant financial benefits that these programs provide to the utilities, it is imperative that the BPU seek ways to minimize the financial impact on ratepayers. In the proposed Solar Loan III Program, ratepayers would be at risk for the difference between the Floor Price bid by borrowers and actual market prices for SRECs. This could result in millions of dollars of costs to ratepayers, as discussed more fully in Mr. Dismukes's testimony. Ratepayers should not also be required to pay returns that are based on excessive and outdated capital costs, nor should ratepayers be required to pay administrative costs associated with these programs. Accordingly, I recommend that if the BPU approves a Solar Loan III Program for PSE&G, the BPU should reduce the return proposed by the Company and exclude all administrative costs from the costs to be paid by ratepayers.

A.

### Q. Does this conclude your testimony?

Yes, it does at this time. Rate Counsel reserves the right to present supplemental testimony based on any updated and/or new information.

# APPENDIX A

List of Testimonies Filed Since January 2008

Company	<u>Utilit</u>	y <u>State</u>	<u>Docket</u>	Date	<u>Topic</u>	On Behalf Of
Public Service Electric and Gas Co.	E	New Jersey	EO12080726	1/13	Solar Loan III Program	Division of Rate Counsel
Lane Scott Electric Cooperative	E	Kansas	12-MKEE-410-RTS	11/1	2 Acquisition Premium, Policy Issues	Citizens' Utility Ratepayer Board
Kansas Gas Service	G	Kansas	12-KGSG-835-RTS	9/12	Revenue Requirements	Citizens' Utility Ratepayer Board
Kansas City Power and Light Company	E	Kansas	12-KCPE-764-RTS	8/12	Revenue Requirements	Citizens' Utility Ratepayer Board
Woonsocket Water Division	W	Rhode Island	4320	7/12	Revenue Requirements	Division of Public Utilities and Carriers
Atmos Energy Company	G	Kansas	12-ATMG-564-RTS	6/12	Revenue Requirements	Citizens' Utility Ratepayer Board
Delmarva Power and Light Company	E	Delaware	110258	5/12	Cost of Capital	Division of the Public Advocate
Mid-Kansas Electric Company (Western)	E	Kansas	12-MKEE-491-RTS	5/12	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Atlantic City Electric Company	Ε	New Jersey	ER11080469	4/12	Revenue Requirements	Division of Rate Counsel
Mid-Kansas Electric Company (Southern Pioneer)	Ε	Kansas	12-MKEE-380-RTS	4/12	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Delmarva Power and Light Company	G	Delaware	11-381F	2/12	Gas Cost Rates	Division of the Public Advocate
Atlantic City Electric Company	Ε	New Jersey	EO11110650	2/12	Infrastructure Investment Program (IIP-2)	Division of Rate Counsel
Chesapeake Utilities Corporation	G	Delaware	11-384F	2/12	Gas Service Rates	Division of the Public Advocate
New Jersey American Water Co.	www	/ New Jersey	WR11070460	1/12	Consolidated Income Taxes Cash Working Capital	Division of Rate Counsel
Westar Energy, Inc.	E	Kansas	12-WSEE-112-RTS	1/12	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Puget Sound Energy, Inc.	E/G	Washington	UE-111048 UG-111049	12/11	Conservation Incentive Program and Others	Public Counsel
Puget Sound Energy, Inc.	G	Washington	UG-110723	10/11	Pipeline Replacement Tracker	Public Counsel
Empire District Electric Company	E	Kansas	11-EPDE-856-RTS	10/11	Revenue Requirements	Citizens' Utility Ratepayer Board
Comcast Cable	С	New Jersey	CR11030116-117	9/11	Forms 1240 and 1205	Division of Rate Counsel
Artesian Water Company	W	Delaware	11-207	9/11	Revenue Requirements Cost of Capital	Division of the Public Advocate
Kansas City Power & Light Company	E	Kansas	10-KCPE-415-RTS (Remand)	7/11	Rate Case Costs	Citizens' Utility Ratepayer Board
Midwest Energy, Inc.	G	Kansas	11-MDWE-609-RTS	7/11	Revenue Requirements	Citizens' Utility Ratepayer Board
Kansas City Power & Light Company	E	Kansas	11-KCPE-581-PRE		Pre-Determination of Ratemaking Principles	Citizens' Utility Ratepayer Board

Company	<u>Utility</u>	State	<u>Docket</u>	Date	Topic	On Behalf Of
Public Service Electric and Gas Co.	Ε	New Jersey	EO12080726	1/13	Solar Loan III Program	Division of Rate Counsel
Lane Scott Electric Cooperative	E	Kansas	12-MKEE-410-RTS	11/12	Acquisition Premium, Policy Issues	Citizens' Utility Ratepayer Board
United Water Delaware, Inc.	W	Delaware	10-421	5/11	Revenue Requirements Cost of Capital	Division of the Public Advocate
Mid-Kansas Electric Company	E	Kansas	11-MKEE-439-RTS	4/11	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
South Jersey Gas Company	G	New Jersey	GR10060378-79	3/11	BGSS / CIP	Division of Rate Counsel
Chesapeake Utilities Corporation	G	Delaware	10-296F	3/11	Gas Service Rates	Division of the Public Advocate
Westar Energy, Inc.	E	Kansas	11-WSEE-377-PRE	2/11	Pre-Determination of Wind Investment	Citizens' Utility Ratepayer Board
Delmarva Power and Light Company	G	Delaware	10-295F	2/11	Gas Cost Rates	Attorney General
Delmarva Power and Light Company	G	Delaware	10-237	10/10	Revenue Requirements Cost of Capital	Division of the Public Advocate
Pawtucket Water Supply Board	W	Rhode Island	4171	7/10	Revenue Requirements	Division of Public Utilities and Carriers
New Jersey Natural Gas Company	G	New Jersey	GR10030225	7/10	RGGi Programs and Cost Recovery	Division of Rate Counsel
Kansas City Power & Light Company	E	Kansas	10-KCPE-415-RTS	6/10	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Atmos Energy Corp.	G	Kansas	10-ATMG-495-RTS	6/10	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Empire District Electric Company	E	Kansas	10-EPDE-314-RTS	3/10	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Delmarva Power and Light Company	E	Delaware	09-414 and 09-276T	2/10	Cost of Capital Rate Design Policy Issues	Division of the Public Advocate
Delmarva Power and Light Company	G	Delaware	09-385F	2/10	Gas Cost Rates	Division of the Public Advocate
Chesapeake Utilities Corporation	G	Delaware	09-398F	1/10	Gas Service Rates	Division of the Public Advocate
Public Service Electric and Gas Company	E	New Jersey	ER09020113	11/09	Societal Benefit Charge Non-Utility Generation Charge	Division of Rate Counsel
Delmarva Power and Light Company	G	Delaware	09-277T	11/09	Rate Design	Division of the Public Advocate
Public Service Electric and Gas Company	E/G	New Jersey	GR09050422	11/09	Revenue Requirements	Division of Rate Counsel
Mid-Kansas Electric Company	Ε	Kansas	09-MKEE-969-RTS	10/09	Revenue Requirements	Citizens' Utility Ratepayer Board
Westar Energy, Inc.	E	Kans <b>as</b>	09-WSEE-925-RTS	9/09	Revenue Requirements	Citizens' Utility Ratepayer Board

			<u> </u>			
Company	Utility	<u>State</u>	<u>Docket</u>	<u>Date</u>	Topic	On Behalf Of
Public Service Electric and Gas Co.	E	New Jersey	EO12080726	1/13	Solar Loan III Program	Division of Rate Counsel
Lane Scott Electric Cooperative	E	Kansas	12-MKEE-410-RTS	11/12	Acquisition Premium,	Citizens' Utility
Jersey Central Power and Light Co.	E	New Jersey	EO08050326 EO08080542	8/09	Policy Issues Demand Response Programs	Ratepayer Board Division of Rate Counsel
Public Service Electric and Gas Company	E	New Jersey	E009030249	7/09	Solar Loan II Program	Division of Rate Counsel
Midwest Energy, Inc.	E	Kansas	09-MDWE-792-RTS	7/09	Revenue Requirements	Citizens' Utility Ratepayer Board
Westar Energy and KG&E	E	Kansas	09-WSEE-641-GIE	6/09	Rate Consolidation	Citizens' Utility Ratepayer Board
United Water Delaware, Inc.	W	Delaware	09-60	6/09	Cost of Capital	Division of the Public Advocate
Rockland Electric Company	E	New Jersey	GO09020097	6/09	SREC-Based Financing Program	Division of Rate Counsel
Tidewater Utilities, Inc.	W	Delaware	09-29	6/09	Revenue Requirements Cost of Capital	Division of the Public Advocate
Chesapeake Utilities Corporation	G	Delaware	08-269F	3/09	Gas Service Rates	Division of the Public Advocate
Delmarva Power and Light Company	G	Delaware	08-266F	2/09	Gas Cost Rates	Division of the Public Advocate
Kansas City Power & Light Company	E	Kansas	09-KCPE-246-RTS	2/09	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Jersey Central Power and Light Co.	Ε	New Jersey	E008090840	1/09	Solar Financing Program	Division of Rate Counsel
Atlantic City Electric Company	E	New Jersey	EO06100744 EO08100875	1/09	Solar Financing Program	Division of Rate Counsel
West Virginia-American Water Company	W	West Virginia	08-0900-W-42T	11/08	Revenue Requirements	The Consumer Advocate Division of the PSC
Westar Energy, Inc.	E	Kansas	08-WSEE-1041-RTS	9/08	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Artesian Water Company	W	Delaware	08-96	9/08	Cost of Capital, Revenue, New Headquarters	Division of the Public Advocate
Comcast Cable	С	New Jersey	CR08020113	9/08	Form 1205 Equipment & Installation Rates	Division of Rate Counsel
Pawtucket Water Supply Board	W	Rhode Island	3945	7/08	Revenue Requirements	Division of Public Utilities and Carriers
New Jersey American Water Co.	www	New Jersey	WR08010020	7/08	Consolidated Income Taxes	Division of Rate Counsel
New Jersey Natural Gas Company	G	New Jersey	GR07110889	5/08	Revenue Requirements	Division of Rate Counsel
Kansas Electric Power Cooperative, Inc.	Ε	Kansas	08-KEPE-597-RTS	5/08	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Public Service Electric and Gas Company	E	New Jersey	EX02060363 EA02060366	5/08	Deferred Balances Audit	Division of Rate Counsel
Cablevision Systems Corporation	С	New Jersey	CR07110894, et al	5/08	Forms 1240 and 1205	Division of Rate Counsel

Company	<u>Utility</u>	State	Docket	<u>Date</u>	Topic	On Behalf Of
Public Service Electric and Gas Co.	Ε	New Jersey	EO12080726	1/13	Solar Loan III Program	Division of Rate Counsel
Lane Scott Electric Cooperative	E	Kansas	12-MKEE-410-RTS	11/12	Acquisition Premium, Policy Issues	Citizens' Utility Ratepayer Board
Midwest Energy, Inc.	E	Kansas	08-MDWE-594-RTS	5/08	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Chesapeake Utilities Corporation	G	Delaware	07-246F	4/08	Gas Service Rates	Division of the Public Advocate
Comcast Cable	С	New Jersey	CR07100717-946	3/08	Form 1240	Division of Rate Counsel
Generic Commission Investigation	G	New Mexico	07-00340-UT	3/08	Weather Normalization	New Mexico Office of Attorney General
Southwestern Public Service Company	E	New Mexico	07-00319-UT	3/08	Revenue Requirements Cost of Capital	New Mexico Office of Attorney General
Delmarva Power and Light Company	G	Delaware	07-239F	2/08	Gas Cost Rates	Division of the Public Advocate
Atmos Energy Corp.	G	Kansas	08-ATMG-280-RTS	1/08	Revenue Requirements Cost of Capital	Citizens' Utility Ratepayer Board

# **APPENDIX B**

# **Referenced Data Requests**

RCR-A-12

RCR-A-13

**RCR-A-16** 

**RCR-A-17** 

RCR-A-18

**RCR-A-20** 

RCR-A-21

RCR-A-35 (BPU Docket No. EO12080721)

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-12 WITNESS(S): FORLINE PAGE 1 OF 1 SOLAR LOAN III

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY <u>SREC FLOOR PRICES</u>

### **QUESTION:**

Regarding page 8, lines 14-15, of Mr. Forline's testimony, please a) explain the significance of the \$500 SREC Floor price referenced on line 15, b) state how this SREC Floor price would be utilized in the calculation of the revenue requirement, and c) explain the difference between this \$500 SREC Floor price and the floor price of \$250 referenced in line 10 of page 8.

#### ANSWER:

Line 14 contained a typographical error. The sentence should be: "In this example, \$2,000 (10 \* 200) would be transferred into the SREC inventory and the SREC Floor price **cost** would be calculated at \$500 (10 \* (\$250 - \$200))". The \$500 is the amount of the SREC Floor price cost as defined in lines 6 - 8 of page 10, not an actual SREC Floor price.

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-13 WITNESS(S): FORLINE PAGE 1 OF 1 SOLAR LOAN III

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY MAXIMUM INVESTMENT

# QUESTION:

Regarding page 10 of Mr. Forline's testimony, is the Company seeking approval for a <u>maximum</u> investment of \$193 million (depending on Average SREC Floor Price), or is it seeking approval for investment of \$193 million regardless of the Average SREC Floor Price?

### ANSWER:

The \$193 million represents the maximum investment at an average SREC Floor price of \$300 (net of SREC processing fee). If the actual average SREC Floor Price is less than \$300 then the total investment will also be less.

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-16 WITNESS(S): FORLINE PAGE 1 OF 1 SOLAR LOAN III

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY ALLOCATION OF CAPACITY

### QUESTION:

Please explain how the Company determined the allocation of capacity among the three segments discussed on page 13 of Mr. Forline's testimony, beginning at line 18.

### ANSWER:

The allocations are based on the actual historical experience of the Solar Loan I & II programs. Residential loans comprise 8% of the available capacity and loans for projects less than 150 kW represent 12% of the total capacity. Based on this experience, 10% was chosen for residential, 15% for small non-residential and the balance for large non-residential and landfills.

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-17 WITNESS(S): FORLINE PAGE 1 OF 1 SOLAR LOAN III

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY SOLICITATION

# QUESTION:

Regarding Schedule JAF-SLIII-2, page 2, other than a posting on its website, will PSE&G utilize other means to notify potential borrowers of the solicitation? If so, please explain how PSE&G plans to provide this notification.

#### ANSWER:

In addition to posting on its website, PSE&G will use various methods to notify potential borrows of the solicitations. These may include webinars, mailings and newsletters to previous borrowers and developers, press releases, participation in local solar conferences, and notices in industry publications.

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-18 WITNESS(S): FORLINE PAGE 1 OF 1 SOLAR LOAN III

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY FLOOR PRICES

# QUESTION:

Regarding Schedule JAF-SLIII-2, page 4, if the Residential Floor price and the Maximum SREC Floor price are both \$310, how will PSE&G rank bids that are all priced at \$310?

### ANSWER:

PSE&G will timestamp applications when they are received and will award capacity on a first come basis.

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-20 WITNESS(S): FORLINE PAGE 1 OF 1 SOLAR LOAN III

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY BORROWER DEFAULTS

## QUESTION:

Have any borrowers under the Solar Loan I or Solar Loan II programs defaulted? If so, please identify, for each borrower that has defaulted, a) the date of the initial loan, b) the amount of the initial loan, c) the date of the default, and d) the outstanding amount of the loan at default.

### ANSWER:

There have been no defaults under either Solar Loan I or Solar Loan II, to date.

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-21 WITNESS(S): FORLINE PAGE 1 OF 1 SOLAR LOAN III

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY MINIMUM FLOOR PRICE

## QUESTION:

Please state if there is a minimum proposed floor price for SRECs generated by the Solar Loan III program.

### ANSWER:

There is no minimum proposed SREC floor price in the proposed program.

RESPONSE TO RATE COUNSEL REQUEST: RCR-A-35 WITNESS(S): POWELL PAGE 1 OF 3 SOLAR4ALL EXTENSION

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY AFUDC CALCULATIONS

### QUESTION:

Please provide all underlying calculations for the debt and equity rates shown in the response to RCR-A-21, and show how short-term debt was factored into the AFUDC calculation.

### ANSWER:

Please see attached calculations for the debt and equity rates shown in RCR-A-21, which shows how short-term debt was factored into the AFUDC calculation.

PSE&G AFUDC Rate Calculation for 2011

								Eff. 06/30/2010, per BPU order #GR09050422	•									Debt Rate									Equity Rate	
Dec-2011	84,833,333	0.30%	4,283,776,399	5.05%		0.00%	4,424,787,817	10.30%	388,146,691		0.30%	0.218560	0.000656	5.05%	0.491904	0.024841	0.78144	0.020068	rtion)	3	0.78144	0.000000	0.000000	10.30%	0.508096	0.052334	0.040896	6.10%
П	Т	П	T	d Long-term debt interest rate	P Preferred stock	р Preferred stock cost rate	C Common equity	c Common equity cost rate	W Average CWIP balance	Borrowed funds: $s (S/W) + d^*[D / (D+P+C)] * (1 - S/W)$	S	(x / x)	s(S/W)	70	D/(D+li+C)	d*[D / (D+P+C)]	(1-S/W)	s(S/W) + d*[D/(D+P+C)]*(1-S/W)	Other Funds: (Equity Portion)	{\(\frac{1}{2}\\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(M/5-1)	P / (D+P+C)	p [P / (D+P+C)]	0	C/(D+P+C)	c [C/(D+h+C)]	$(1-S/W) * \{p [P/(D+P+C)] + c [C/(D+P+C)]\}$	Gross AFUDC Calculated Rate

PSE&G AFUDC Rate Calculation for 2012

								Eff. 06/30/2010, per BPU order #GR09050422																		
Oct-2012	4,441,667	0.32%	4,270,460,139	2.05%	,	0.00%	4,646,621,227	10.30%	846,457,756		0.32%	0.005247	0.000017	8:05%	0.478908	0.024207	0.99475	0.024097	0.99475	0.00%	0.00000	0.000000	0.521092	0.053672	0.053391	7.75%
	S Average short-term debt (Estimate)	s Short-term debt interest rate (Estimate)	D Long-term debt (Actual End of Prior Year Balance)	d Long-term debt interest rate (Actual - Weighted Average Cost)	P Preferred stock cost rate (Actual End of Prior Year Balance)	p Preferred stock cost rate (Actual - Weighted Average Cost)	C Common equity (Actual End of Prior Year Balance)	П	W Average CWIP balance (Estimated Current Year 13 Month Average)	Borrowed funds: s (S/W) + d*[D / (D+P+C)] * (1 - S/W)		(X / X)	s(S/W)	P	D / (D+B+C)	d*[D / (D+P+C)]	(N /S-I)	s (S/W) + d*[D / (D+P+C)] * (1 - S/W)	Other Funds: (Equity Portion) (1- S/W) * {p [P / (D+P+C)] + c [C / (D+P+C)]} (1- S/W)			[(¬++++c) / J] d	C/(D+b+C)	c [C / (D+P+C)]	(1- S/W) * {p [P / (D+P+C)] + c [C / (D+P+C)]}	Gross APUDC Calculated Rate