

BEFORE THE STATE OF NEW JERSEY

BOARD OF PUBLIC UTILITIES

**I/M/O THE PETITION OF PUBLIC)
SERVICE ELECTRIC AND GAS COMPANY)
FOR APPROVAL OF A SOLAR ENERGY) BPU DKT. NO. EO07040278
PROGRAM AND AN ASSOCIATED COST)
RECOVERY MECHANISM)**

**SURREBUTTAL TESTIMONY OF ROBERT M. FAGAN
ON BEHALF OF THE
NEW JERSEY DEPARTMENT OF THE PUBLIC ADVOCATE,
DIVISION OF RATE COUNSEL**

**RONALD K. CHEN
PUBLIC ADVOCATE OF NEW JERSEY**

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FILED: NOVEMBER 30, 2007

1 **Q. Please state your name and business address.**

2 A. My name is Robert M. Fagan. I am a Senior Associate with Synapse Energy
3 Economics, Inc., 22 Pearl Street, Cambridge, MA 02139.

4 **Q. On whose behalf are you testifying in this case?**

5 A. I am testifying on behalf of the New Jersey Department of the Public Advocate,
6 Division of Rate Counsel (Rate Counsel).

7 **Q. Are you the same Robert M. Fagan who submitted Direct Testimony in this
8 case on September 21, 2007?**

9 A. Yes.

10 **Q. What is the purpose of your testimony?**

11 A. I address the rebuttal testimony of Mr. Frederick A. Lynk concerning the
12 allocation of SRECs to LSEs.

13 **Q. Please summarize your testimony.**

14 A. First, Mr. Lynk indicates that “there is no guarantee that a sale of SRECs will
15 generate enough revenue to offset the Company’s revenue requirements
16 associated with the program”.¹ However, the direct sale of SRECs will generate
17 enough revenue over the 15-year term of the program to offset on the order of
18 87% to 95% of the costs of PSE&G’s proposed program given a range of prices
19 between PSE&G’s floor of \$475 per SREC and the Office of Clean Energy’s
20 target SREC prices², and given PSE&G’s proposed program costs.

21 Second, Mr. Lynk has not provided any evidence in support of his claim
22 that “allocat[ing] the SRECs to LSEs on a pro rata basis for the customers’ benefit
23 will result in reduced electric commodity charges”.

¹ Rebuttal Testimony of Frederick A. Lynk, page 13 lines 7-9.

² As noted in the Office of Clean Energy’s August 24, 2007 memo on the solar market transition.
http://www.njcleanenergy.com/files/file/OCESolarMarketStrawUpdate_82407.pdf

1 Lastly, Mr. Lynk has not offered any evidence that allocating a substantial
2 majority of SRECs in the early years of RPS compliance, rather than allowing
3 them to be sold in a transparent manner, is in the best interests of ratepayers.
4 PSE&G's proposal would allocate (rather than sell via the marketplace) 66
5 percent of the total SRECs required for RPS compliance in 2009.³

6 **Q. How much revenue will SRECs generate?**

7 A. It depends on the price of SRECs. At a floor price of \$475 per SREC, 30 MW of
8 installed solar panels would generate approximately \$15.7 million per year of
9 revenue for each year in which SRECs are registered. PSE&G estimates that
10 thirty MW of installed solar panels generates approximately 33,086,700 kWh in
11 "bill reduction", and thus 33,087 annual SRECs (1 SREC = 1 MWh of solar-
12 generated electricity).⁴ 33,807 x \$475 = \$15.7 million. Using the Office of Clean
13 Energy target prices for SRECs, 2009 revenue would be \$20.2 million, and future
14 years' revenues would decline by approximately 3% per year to \$13.2 million in
15 2023.

16 **Q. What percentage of PSE&G's proposed program revenue requirements**
17 **could be covered by the direct sale of SRECs?**

18 A. The range of revenue requirements that could be covered by the sale of SRECs is
19 approximately 87% to 95%, depending on the per unit value of SRECs chosen.
20 The table below shows streams of revenue from the SRECs at a floor price of
21 \$475, and at an alternative price equal to that targeted by the Office of Clean
22 Energy in its August 24, 2007 memo. The net present value of the revenue
23 requirements and of the SREC value is computed in \$2008 using a discount rate
24 of 7.12%, the same as used by PSE&G in schedule FAL-5.

³ Response to discovery request RCR-RE-47 (a).

⁴ Direct Testimony of Gerald W. Schirra, Exhibit GWS-3, page 2 of 2. This level of SREC generation equates to an average annual capacity factor of 12.6%, slightly different than that used by PSE&G in its distribution revenue loss computation (12.5%).

SREC and PSE&G RevRqmt Revenue Streams

	year 0 2008	year 1 2009	year 2 2010	year 3 2011	year 4 2012	year 5 2013
SREC Price Floor, PSE&G		\$475	\$475	\$475	\$475	\$475
SREC Quantity (from GWS-3 p.2 of 2)		33,086.7	33,086.7	33,086.7	33,086.7	33,086.7
SREC value	-	\$15,716,183	\$15,716,183	\$15,716,183	\$15,716,183	\$15,716,183
PSE&G Revenue Requirements (FAL-3)	\$11,094,290	\$21,789,133	\$21,213,133	\$19,956,079	\$18,762,012	\$18,064,708
OCE SREC Target per unit values (8-24-07)		\$611	\$593	\$575	\$558	\$541
OCE SREC total value		\$20,215,974	\$19,620,413	\$19,024,853	\$18,462,379	\$17,899,905
	year 6 2014	year 7 2015	year 8 2016	year 9 2017	year 10 2018	
SREC Price Floor, PSE&G	\$475	\$475	\$475	\$475	\$475	
SREC Quantity (from GWS-3 p.2 of 2)	33,086.7	33,086.7	33,086.7	33,086.7	33,086.7	
SREC value	\$15,716,183	\$15,716,183	\$15,716,183	\$15,716,183	\$15,716,183	
PSE&G Revenue Requirements (FAL-3)	\$17,370,513	\$16,679,519	\$15,991,827	\$15,307,543	\$14,626,767	
OCE SREC Target per unit values (8-24-07)	\$525	\$509	\$494	\$479	\$465	
OCE SREC total value	\$17,370,518	\$16,841,130	\$16,344,830	\$15,854,485	\$15,378,850	
	year 11 2019	year 12 2020	year 13 2021	year 14 2022	year 15 2023	
SREC Price Floor, PSE&G	\$475	\$475	\$475	\$475	\$475	
SREC Quantity (from GWS-3 p.2 of 2)	33,086.7	33,086.7	33,086.7	33,086.7	33,086.7	
SREC value	\$15,716,183	\$15,716,183	\$15,716,183	\$15,716,183	\$15,716,183	
PSE&G Revenue Requirements (FAL-3)	\$13,949,609	\$13,276,186	\$12,606,607	\$11,940,996	\$5,082,455	
OCE SREC Target per unit values (8-24-07)	\$451	\$437	\$424	\$411	\$399	
OCE SREC total value	\$14,917,485	\$14,469,960	\$14,035,861	\$13,614,786	\$13,206,342	
Discount Rate	7.12%					
NPV PSE&G RevRqmt \$2008 (PSE&G FAL-3)	\$163,725,565					
NPV SRECs using \$475 price, \$2008	\$142,062,998					
Share of RevRqmt by SREC value at \$475 price	86.8%					
NPV SRECs using OCE target value, \$2008	\$154,744,755					
Share of RevRqmt by SRECs at OCE Target Value	94.5%					

2 Note: OCE SREC value for post 2016 based on a 3% price decline in each subsequent year.

3 **Q. What evidence has Mr. Lynk provided that commodity costs will be lower if**
4 **SRECs are directly allocated to PSE&G territory LSEs?**

5 A. None. On the other hand, under Rate Counsel's proposal, the proceeds from the
6 sale of the SRECs, will be directly allocated to reduce the cost of the program to
7 ratepayers. Under the PSE&G proposal, any benefit to ratepayers is based on the
8 speculation that the LSEs will reflect the gifted SRECs in BGS prices. According
9 to PSE&G, "tracking cost reductions related to the provision of no-cost SRECs to
10 LSEs is impracticable." (RCR-RR-70.) Conversely, under Rate Counsel's
11 proposal, the benefit to ratepayers is directly measurable and is not dependent on
12 the pricing methodology of the LSEs.

1 **Q. What percentage of the New Jersey “marketplace” for SRECs would be**
2 **represented by SRECs directly allocated by PSE&G under their proposed**
3 **program?**

4 A. In 2009, 66 percent of the total SREC marketplace, or SREC compliance
5 obligation, would be from the PSE&G program, according to Mr. Lynk.⁵

6 **Q. Please explain why and how this reduces the transparency and/or**
7 **effectiveness of the marketplace for SRECs.**

8 A. The overall liquidity of the infant SREC market will be dramatically affected –
9 reduced - by a decision to directly allocate, or remove from the marketplace, 66%
10 of the SREC obligation in 2009. A smaller marketplace for SRECs would be an
11 outcome that would be in direct opposition to New Jersey’s intention to transition
12 to a marketplace for SRECs.

13 **Q. Does this conclude your testimony?**

14 A. **Yes.**

15

⁵ Response to discovery request RCR-RE-47 (a).