

1 expenses incurred for program years 2009 through 2014. As noted in the Schedule, the Total
2 Costs (column 4) are below the Adjusted Annual Program Cap in all years. Accordingly, the
3 administrative costs shown in Schedule JEM-SLII-2 have been incorporated into the revenue
4 requirements contained in the testimony and supporting schedules of Stephen Swetz.

5

6 **D. Additional Program Information**

7 **Loans Closed by Segment**

8 Schedule JEM-SLII-5 shows the number of Solar Loan II loans closed by
9 segment.

10 **Capacity of Solar Systems by Segment**

11 Schedule JEM-SLII-6 shows the capacity of solar systems supported by Solar
12 Loan II loans by segment.

13 **Energy Generated**

14 Schedule JEM-SLII-7 shows the actual kWh generated by solar systems
15 supported by Solar Loan II by segment.

16 **Loans Closed by Quarter**

17 Schedule JEM-SLII-8 shows the number of loans closed by quarter.

18 **Emission Reductions**

19 Schedule JEM-SLII-9 shows the estimated emissions reductions attributed to
20 solar systems supported by Solar Loan II loans by segment.

1

2 **SREC's Received through the Program**

3 Schedule JEM-SLII-10 shows the actual SRECs received by segment through
4 March 31, 2014 for the Solar Loan II Program.

5

6 **E. Issues and Discussions**

7 **Loan Defaults**

8 As of March 31, 2014 there have been no de faults by any borrower in the
9 Solar Loan II Program.

10 **Call Option**

11 To be consistent with the Board's Order in the Solar Loan III Program,
12 PSE&G no longer plans to exercise the Call Option for loans that have been paid prior to the
13 end of their term.

14 Appendix A-SLII contains the Minimum Filing Requirements along with a
15 mapping to the appropriate Schedules and testimony.

1 this program shall be available for sale prior to Energy Year 2016 unless the SREC market
2 comes into balance or is under-supplied or the Board otherwise orders.

3 **Segments**

4 The Solar Loan III Program contains five segments. The Residential-
5 Individual ("Res-Individual") segment contains net metered projects that are individually bid
6 by a residential customer or the customer's developer. The segment size is 9.75 MW. The
7 Residential-Aggregated segment ("Res-Aggregated") consists of third parties that aggregate
8 residential net-metered projects but are treated as non-residential applicants under the Solar
9 Loan III Program. For the solicitations, they will be required to bid individual residential
10 projects including individual SREC Floor Prices. After review by the Solicitation Manager
11 described below, the final group of selected residential projects submitted by a third party
12 aggregator will be combined, and the third party aggregator will be assigned the capacity of
13 the combined residential projects selected and from then on will be treated as a non-
14 residential application for credit review and loan management. The segment size is 9.75
15 MW. The Small Non-Residential ("Small Non-Res") segment is for non-residential net-
16 metered projects less than or equal to 150 kW in size and the segment size is 13.14 MW.
17 The Large Non-Residential ("Large Non-Res") segment is for non-residential net-metered
18 projects greater than 150 kW but less than or equal to 2 MW in size and the segment size is
19 59.86 MW. The last segment is the Landfill / Brownfield ("Landfills") segment, which
20 consists of either net-metered or grid connected projects that meet the requirements of
21 subsection (t) of the Solar Act of 2012. The segment size is 5 MW.

1 Capacity will be made available for each solicitation as follows:

Class	% of Total	Total MW	Solicitation				
			#1	#2	#3	#4 - #12	#13 - #18
Residential	10.00%	9.75	0.300	0.500	0.850	0.900	TBD
Res- Aggregated	10.00%	9.75	0.300	0.500	0.850	0.900	TBD
Small Non-Res	13.48%	13.14	2.628	1.314	1.314	0.876	TBD
Large Non-Res	61.39%	59.86	11.972	5.986	5.986	3.991	TBD
Landfills	5.13%	5.00	5.000	0.000	0.000	0.000	TBD
Total		97.50	20.200	8.300	9.000	6.667	TBD

2

3 The allocations to the Res-Individual and Small Non-Res segments are
4 deemed set-asides for those market segments. No capacity shall be allocated away from
5 those segments unless and until unused capacity remains in either or both of these segments
6 at the time of the final solicitation under the Solar Loan III program.

7 **Solicitation Manager**

8 In accordance with the Solar Loan III stipulation and Board Order approving
9 the stipulation, PSE&G has hired an independent Solicitation Manager ("SM"), selected
10 through a competitive bid process, who independently reviews and ranks the bids received
11 and provides guidance to the Company regarding competitive SREC floor prices and the
12 competitiveness of individual segments based on such factors as the number of bidders, a
13 statistical analysis of bids to identify and reject outliers, kW bid size, and range of pricing.
14 The SM also provides its guidance to the Board Staff and Rate Counsel for review and
15 comment.

1 **Fees**

2 An Application fee of \$20 per kW, with a maximum fee of \$7,500, is required
3 at the time of application. Once an applicant has been notified that the application has been
4 conditionally accepted into the program, the application fee becomes non-refundable. If an
5 applicant is not accepted, the application fee will be returned. Res-Aggregators may receive a
6 partial refund if the full capacity bid is not accepted.

7 There will be an Administration fee of \$85 per kW. The Administration fee
8 will be deducted from the loan proceeds at the time the loan is issued to the borrower.

9 There will be an SREC Processing Fee charged for the processing and
10 management of the SRECs generated by the borrower's solar generation facility. For the
11 Residential Segment, the SREC Processing Fee will be \$120 per kW and will be deducted
12 from the loan proceeds at the time the loan is issued to the borrower. For all other segments,
13 the SREC Processing Fee will initially be set at \$10.18 per SREC and then will be reset on an
14 annual basis to ensure that, over the life of the Solar Loan III Program, all PSE&G
15 administrative costs will be paid by borrowers. The SREC Processing Fee will be billed
16 annually as set forth in the borrower's loan agreement and will be determined by multiplying
17 the SREC Processing Fee in affect at the time times the number of SRECs generated by the
18 borrower's project for the previous year.

19

20 **B. Solar Loan III Program Status**

21 PSE&G conducted a competitive solicitation to select the Solicitation
22 Manager for the Solar Loan III program and NERA was awarded the contract.

1 The first Solar Loan III solicitation occurred in November 2013. The
 2 following are the results of this solicitation.

Program Segment	Available Capacity kW (dc)	Capacity Received kW (dc)	Applications Received	Weighted Average SREC Floor Bid Price
Large Non-Residential Segment (> 150kW ≤ 2MW)	12,092	8,105	12	\$178.79
Small Non-Residential Segment (≤ 150kW)	2,628	438	7	\$234.93
Residential Segment	300	157	20	\$256.44
Res-Aggregated Segment	300	0	0	N/A
Landfill & Brownfield Segment (≤ 5MW)	5,000	9,093	4	\$167.64

3
 4 The second Solar Loan III solicitation was held in February 2014. The
 5 following are the results of this solicitation.

Program Segment	Available Capacity kW (dc)	Capacity Received kW (dc)	Applications Received	Weighted Average SREC Floor Bid Price
Large Non-Residential Segment (> 150kW ≤ 2MW)	10,277	6,277	10	\$205.19
Small Non-Residential Segment (≤ 150kW)	3,513	0	0	N/A
Residential Segment	663	285	30	\$266.61
Res-Aggregated Segment	800	0	0	N/A
Landfill & Brownfield Segment (≤ 5MW)	5,000	9,091	4	\$179.07

6
 7 The third solicitation has been announced to occur in July 2014.

1 Through March 31, 2014, no loans have closed and no SRECs have been
2 received under the Solar Loan III program.

3

4 **C. Solar Loan III Administrative Costs**

5 The Solar Loan III Program monthly administrative costs for the period June
6 1, 2013 through March 31, 2014 along with projections through September 30, 2015 are
7 shown on Schedule JEM-SLIII-2. This Schedule details Solar Loan I Program, Solar Loan II
8 Program, and Solar Loan III Program Total Common Costs (column 1), the Solar Loan III
9 Program's share of Common Costs (column 2), Solar Loan III Program Volume costs
10 (column 3), Solar Loan III SREC Auction costs (column 4), Solar Loan III Application and
11 Administration Fees from Borrowers (column 5), Total Solar Loan III Program
12 Administrative Costs (column 6), Solar Loan III SREC Processing Fees from Borrowers
13 (column 7) and Solar Loan III Net Recoverable Administrative Costs (column 8).

14 Certain administrative costs are common to Solar Loan I, Solar Loan II, and
15 Solar Loan III. Such costs are allocated to the Solar Loan I Program, Solar Loan II Program,
16 and the Solar Loan III Program in accordance with the formula established in the Solar Loan
17 III Program Settlement. As specified in paragraph 74 of the Solar Loan III Program
18 stipulation, Common Costs shared by all three of PSE&G's solar loan programs will be
19 allocated based on forecasted MW capacity installed for the upcoming year, and the ratio of
20 the forecasted installed capacity for each program to total forecasted installed capacity for all
21 of the solar loan programs will be applied to all common costs for the following year starting
22 on January 1. Currently the Solar Loan III Program receives 7.48% (6.54 MW/87.39 MW)

1 of the total Common Costs. The total allocated Solar Loan III Common Costs for the period
2 June 1, 2013 through March 31, 2014 were \$12,515 and the total Volume Costs were
3 \$723,702. Fees collected from borrowers for this period were \$186,775, resulting in a Net
4 Recoverable Administrative cost of \$549,442 for the period.

5 Schedule JEM-SLIII-3 shows the Program administrative cost details
6 allocated to the categories used by the Board for the NJCEP. Administration and Program
7 Development includes the costs to develop and manage the program along with program
8 tracking and reporting. Rebate Processing, Inspections and Other QC Expenditures include
9 the cost of PSE&G incremental employees and contractors engaged in the administration of
10 the loan program, including program application processing, SREC processing and the cost
11 of credit information acquired through Experian, along with other costs associated with
12 program administration. In addition to the standard NJCEP categories, the schedule also
13 shows the application and administrative fees received from borrowers as a credit in a
14 separate column. For the period June 1, 2013 through March 31, 2014, Administration and
15 Program Developments costs were \$300,687; Rebate Processing, Inspections and Other QC
16 Expenditures were \$410,012; Marketing and Sales costs were \$25,518; and Application and
17 Administrative Fees received were \$186,775. As indicated above, the Net Total
18 Administrative costs for the period were \$549,442.

19 The Board Order approving the program provides that, over the term of the
20 Solar Loan III program, borrowers pay all Solar Loan III administrative costs. Schedule
21 JEM-SLIII-4 provides a forecast of PSE&G administrative costs along with all forecasted

1 fees indicating that by the end of the program the net between PSE&G administrative costs
2 and program fees is zero.

3

4 **D. Additional Program Information**

5 **Loans Closed by Segment**

6 Schedule JEM-SLIII-5 shows the number of Solar Loan III loans closed by
7 segment.

8 **Capacity of Solar Systems by Segment**

9 Schedule JEM-SLIII-6 shows the capacity of solar systems supported by Solar
10 Loan III loans by segment.

11 **Energy Generated**

12 Schedule JEM-SLIII-7 shows the actual kWh generated by solar systems
13 supported by Solar Loan III by segment.

14 **Loans Closed by Quarter**

15 Schedule JEM-SLIII-8 shows the number of loans closed by quarter.

16 **Emission Reductions**

17 Schedule JEM-SLIII-9 shows the estimated emissions reductions attributed to
18 solar systems supported by Solar Loan III loans by segment.

19 **SRECs Received through the Program**

20 Schedule JEM-SLIII-10 shows the actual SRECs received by segment through
21 March 31, 2014 for the Solar Loan III Program.

1 **Reporting**

2 The Solar Loan III Board Order requires PSE&G to submit a Monthly
3 Activity Report (“MAR”) containing the information outlined in Appendix A – Solar Loan
4 III Monthly Activity Report of the Order. The MAR is to be electronically transmitted to the
5 Board’s Office of Clean Energy and Energy Division and the NJ Division of Rate Counsel on
6 or before the 20th day of the month following the reporting period. PSE&G has complied
7 with this requirement and the last report was provided for May 2014.

8

9 **E. Issues and Discussions**

10 There currently are no issues associated with the Solar Loan III program.

11 Appendix A-SLIII contains the Minimum Filing Requirements along with a
12 mapping to the appropriate Schedules and testimony.

1 CA, EEE AND EEE EXTENSION PROGRAMS

2 A. Description

3 PSE&G's energy efficiency programs consist of five CA sub-programs; eight
4 EEE sub-programs; and three EEE Extension sub-programs, many of which have concluded
5 the delivery of program services.

6 There is overlap in the work done under sub-programs that have been
7 approved in multiple filings. Three EEE Stimulus sub-programs are identical to, and provide
8 additional funding for, three Carbon Abatement sub-programs (Residential Whole House
9 Efficiency, Small Business Direct Install, and Hospital Efficiency). These three Carbon
10 Abatement and EEE Stimulus sub-programs provide nearly identical customer benefits and
11 have been operated as single sub-programs utilizing the same sub-program management,
12 marketing, and operational resources. In addition, the three EEE Extension sub-programs
13 (Hospital Efficiency, Multi-Family Housing and Municipal Direct Install) are similar and
14 provide additional funding for three of the EEE Stimulus sub-programs with some program
15 modifications incorporated to improve program delivery. These three EEE Stimulus and EEE
16 Extension sub-programs have also been operated as single sub-programs utilizing the same
17 sub-program management, marketing, and operational resources.

18 Recognizing the coordinated implementation of the CA, EEE, and EEE
19 Extension Programs, there is a combined section within this testimony for the Carbon
20 Abatement and EEE Stimulus Residential Whole House Efficiency, Small Business Direct
21 Install, and Hospital Efficiency Sub-Programs. There also is a combined section for the EEE
22 Stimulus and EEE Extension Hospital Efficiency, Multi-Family Housing and Municipal

1 Direct Install Sub-Programs. However, sub-program results have been tracked separately
2 and those results are provided in separate Schedules attached to this testimony. All of these
3 sub-programs are described in greater detail below.

4

5 **B. Carbon Abatement and EEE Stimulus Residential Whole House Efficiency Sub-**
6 **Program**

7

8 **Whole House Efficiency Sub-Program Description**

9 The Carbon Abatement and EEE Stimulus Residential Whole House Efficiency Sub-
10 Programs (“Whole House Sub-Program”), originally filed as the Residential Home Energy
11 Tune-Up Sub-Program as part of the Carbon Abatement Program, is now closed. The sub-
12 program provided free energy audits and direct installation of energy savings measures to
13 residential customers residing in 25 municipalities containing UEZs. The free in-home
14 energy audit identified all cost-effective energy efficiency retrofit opportunities, and
15 provided direct installation of measures along with financial incentives for customers, to
16 encourage the replacement of existing equipment with higher efficiency alternatives. The
17 Whole House Sub-Program also provided comprehensive, personalized customer energy
18 education and counseling. The sub-program services were provided in three stages or “tiers.”
19 Participants would repay their share of the sub-program installation costs as determined by
20 their gross annual household income, on their PSE&G monthly utility bill.

1 **Whole House Sub-Program Status**

2 In the third quarter 2011, PSE&G stopped accepting applications for the sub-
3 program and the last Tier Three installation was completed in January 2013. The Whole
4 House Sub-Program had 12,696 participants.

5 **Whole House Sub-Program Participants**

6 The CA and EEE Whole House Sub-Program participants are detailed in
7 Schedules JEM-CA-3 and JEM-EEE-3.

8 **Whole House Sub-Program Budget**

9 The investment budget for the EEE Stimulus Whole House Sub-Program was
10 fully committed by the end of 2010; all subsequent projects were funded through the CA
11 Whole House Sub-Program budget.

12 **Whole House Sub-Program Energy Savings**

13 The CA and EEE Whole House Sub-Program energy savings are detailed in
14 Schedules JEM-CA-4E, 4G, 5E and 5G and JEM-EEE-4E, 4G, 5E and 5G.

15 **Whole House Sub-Program Emission Reductions**

16 The CA and EEE Whole House Sub-Program emissions impacts are detailed
17 in Schedules JEM-CA-6 and 7 and JEM-EEE-6 and 7.

1 C. Carbon Abatement Residential Programmable Thermostat Installation Sub-
2 Program

3
4 Thermostat Sub-Program Description

5 The Carbon Abatement Residential Programmable Thermostat Installation
6 Sub-Program (“Thermostat Sub-Program”) is now closed. The sub-program had been
7 designed to reduce carbon emissions by lowering the energy consumption of residential
8 customers, capture lost opportunities for energy efficiency savings, and educate consumers
9 about the benefits of energy efficient equipment.

10 During routine utility-related gas service calls, PSE&G service technicians
11 replaced existing standard thermostats with programmable thermostats. The service
12 technicians also provided each customer with five compact fluorescent light bulbs (“CFLs”)
13 if needed. The Thermostat Sub-Program was targeted at all residential customers residing in
14 25 UEZ municipalities in PSE&G’s service territory.

15 Thermostat Sub-Program Status

16 Under this sub-program, 19,642 programmable thermostats were installed and
17 approximately 495,000 CFLs were provided to customers.

18 Thermostat Sub-Program Participants

19 The CA Thermostat Sub-Program participants are detailed in Schedule JEM-
20 CA-3.

21 Thermostat Sub-Program Energy Savings

22 The CA Thermostat Sub-Program energy savings are detailed in Schedules
23 JEM-CA-4E, 4G, 5E and 5G.

1 **Thermostat Sub-Program Emission Reductions**

2 The CA Thermostat Sub-Program emissions impacts are detailed in Schedules
3 JEM-CA-6 and 7.

4

5 **D. EEE Stimulus and EEE Extension Residential Multi-Family Housing Sub -**
6 **Program**

7

8 **Multi-Family Sub-Program Description**

9 The objective of the EEE Stimulus and EEE Extension Residential Multi-
10 Family Housing Sub-Program (“Multi-Family Sub-Program”) is to increase energy
11 efficiency and reduce carbon emissions of existing residential multifamily housing
12 developments by providing cost-effective retrofit energy efficiency
13 opportunities. Customers receive an energy audit of their building(s), and all measures
14 identified by the audit that have a simple payback of 15 years or less, are screened for retrofit
15 or replacement opportunities. PSE&G has incorporated a flexible audit structure for its
16 Multi-Family Housing Sub-Program to allow the use of more cost effective Level I walk-
17 through audits, as defined by the American Society of Heating, Refrigerating and Air-
18 Conditioning Engineers (“ASHRAE”), for smaller, simpler projects with limited
19 measures. Based on PSE&G’s experience with this sub-program, a Level I audit may
20 adequately provide building owners with information required to invest in cost-saving energy
21 efficiency measures and maintain sub-program eligibility. More complex projects undergo a
22 Level II or III ASHRAE audit. The sub-program buys-down project costs such that the
23 simple payback of each measure is reduced by seven years but not to less than two years, and

1 remaining costs are provided by PSE&G and repaid interest free on the PSE&G bill, or in
2 one payment if the customer chooses. For New Jersey Housing and Mortgage Finance
3 Agency (NJHMFA) financed projects, the energy efficiency upgrade plan is reviewed and
4 approved by PSE&G and NJHMFA.

5 The sub-program, as originally developed, contemplated a ten-year period for
6 eligible customers to repay their contribution to their energy efficiency project. For EEE
7 Extension, consistent with the Board's July 14, 2011 approval Order in BPU Docket No.
8 EO11010030, to further facilitate Multi-Family Housing Sub-Program participation by
9 entities other than NJHMFA, Public Service has also been providing funding for non-
10 NJHMFA participants. However, pursuant to the July 14, 2011 Board Order, non-NJHMFA
11 participants in the Multi-Family Housing Sub-Program were to have three years to repay
12 their contribution to their projects while NJHMFA participants would continue to have ten
13 years to repay their contribution. During the course of EEE Extension sub-program
14 implementation, PSE&G inadvertently afforded non-NJHMFA participants five years to
15 repay their contribution. In the 2012-2013 Green Programs Cost Recovery Proceeding,
16 PSE&G agreed that it would calculate its revenue requirement to reflect a three-year
17 repayment for ratemaking purposes even though actual payments are received by the
18 Company over five years. Carrying costs related to the delay in repayment will not be
19 charged to ratepayers.

20 **Multi-Family Sub-Program Status**

21 In total, through March 2014, 137 project applications have been received. Of
22 those, 100 have had an energy audit and represent 808 buildings with 23,984 living units. For

1 those 100 projects, 27 projects have been completed, 14 are in construction, 3 are proceeding
2 through the sales cycle, 35 were closed because there were no viable energy conservation
3 measures (“ECMs”), 5 were closed because the customer was not interested in moving
4 forward, and 16 are on hold due to lack of additional program funding. Of the 37 applications
5 that have not had an audit, 28 are on hold, and 9 had a “walk through” audit where we
6 determined there was no opportunity for energy efficiency improvements.

7 The EEE and EEE Extension Multi-Family Sub-Programs are operated as one
8 program where a project can begin the process with an energy audit funded under the EEE
9 sub-program and complete construction under the EEE Extension sub-program.

10 **Multi-Family Participants**

11 The number of EEE and EEE Extension Multi-Family Sub-Program
12 participants for the twelve months ending March 31, 2014 is detailed in Schedule JEM-EEE-
13 3 and JEM-EEE Ext-3.

14 **Multi-Family Energy Savings**

15 The Multi-Family Sub-Program energy savings are detailed in Schedules
16 JEM-EEE-4E, 4G, 5E and 5G and JEM-EEE Ext-4E, 4G, 5E and 5G.

17 **Multi-Family Emission Reductions**

18 The Multi-Family Sub-Program emissions impacts are detailed in Schedules
19 JEM-EEE-6 and 7 and JEM-EEE Ext-6 and 7.

1 **E. Carbon Abatement and EEE Stimulus Small business Direct Install Sub-Program**

2
3 **Small Business Sub-Program Description**

4 The Carbon Abatement and EEE Stimulus Small Business Direct Install Sub-
5 Program (“Small Business Sub-Program”) is now closed. The sub-program was designed to
6 reduce energy use and costs for small businesses as well as reduce carbon emissions and
7 other non-carbon pollutants. The Small Business Sub-Program was targeted at small
8 businesses located in 25 UEZ municipalities in PSE&G’s service territory including both
9 owner occupied and leased facilities (landlord approval was required for leased facilities).

10 The Small Business Sub-Program provided seamless service to small business
11 customers, from opportunity identification, to direct installation of measures, through
12 repayment of the customer’s share of the project cost as a part of their PSE&G bill. PSE&G
13 offered a walk-through energy evaluation to eligible businesses and provided a report of
14 recommended energy savings improvements. The Small Business Sub-Program provided
15 100% of the cost to install the recommended energy savings improvements and upon
16 completion of the work the customer repaid 20% of the total cost to PSE&G over two years,
17 interest free, on their PSE&G bill (or in one payment if they chose). Eligible energy savings
18 improvements included energy-using systems such as lighting, controls, refrigeration,
19 HVAC, motors, and variable speed drives. Customers participating in the Small Business
20 Sub-Program may not have received or applied for incentives under the NJCEP Program for
21 the same measures.

1 **Small Business Sub-Program Status**

2 The CA and EEE Small Business Sub-Program completed EEE funding in
3 2010 and CA funding in 2012. In total, the sub-program completed 642 projects.

4 **Small Business Sub-Program Participants**

5 The CA and EEE Small Business Sub-Program participants for the twelve
6 months ending March 31, 2014 are detailed in Schedules JEM-CA-3 and JEM-EEE-3.

7 **Small Business Sub-Program Energy Savings**

8 The Small Business Sub-Program energy savings are detailed in Schedules
9 JEM-CA-4E, 4G, 5E and 5G and JEM-EEE-4E, 4G, 5E and 5G.

10 **Small Business Sub-Program Emission Reductions**

11 The Small Business Sub-Program emissions impacts are detailed in Schedules
12 JEM-CA-6 and 7 and JEM-EEE Ext- 6 and 7.

13

14 **F. EEE Stimulus and Extension Municipal Direct Install Sub-Program**

15 **Municipal Sub-Program Description**

16 The EEE Stimulus and EEE Extension Direct Install Sub-Program for
17 Government and Non-Profit Facilities (“Municipal Sub-Program”) is designed to reduce
18 carbon emissions by lowering the energy consumption of municipal and other government
19 entities and non-profit customers. The sub-program provides seamless service to its
20 participants from opportunity identification to direct installation of measures, through
21 financing of the customer’s share of the project cost as a part of its PSE&G bill. The
22 Municipal Sub-Program identifies all cost-effective energy efficiency retrofit opportunities
23

1 and provides direct installation and financial incentives to encourage the replacement of
2 existing equipment with high efficiency alternatives. PSE&G offers a walk-through energy
3 evaluation to eligible facilities and provides a report of recommended energy savings
4 improvements. The sub-program provides 100% of the cost to install the recommended
5 energy savings improvements and upon completion of the work, the customer must repay
6 20% of the total cost to PSE&G over two years, interest free, on their PSE&G bill or in one
7 payment designated on the bill, if they choose. The EEE Stimulus Municipal Sub-Program
8 was originally open to eligible customers with annual peak demands of less than 200 kW.
9 Customers with annual peak demands in excess of 200 kW were eligible for an investment
10 grade audit if the complexity of the facility required that level of analysis. In its EEE
11 Extension filing, PSE&G requested and was granted a modification to sub-program
12 participation criteria. The EEE Extension Municipal Sub-Program targets facilities with
13 annual peak demands of 150 kW or less. Facilities with annual peak demands in excess of
14 150kW will be considered for sub-program participation on a case-by-case basis. Eligible
15 energy savings improvements available through the Municipal Sub-Program include energy-
16 using systems such as lighting, controls, refrigeration, HVAC, motors, and variable speed
17 drives. Customers participating in the Municipal Sub-Program may not have received or
18 applied for incentives under the NJCEP Program for the same measures.

19 **Municipal Sub-Program Status**

20 The EEE Stimulus Municipal Sub-Program began operation throughout
21 PSE&G's electric and gas service territory in July 2009. PSE&G subsequently filed the EEE
22 Extension Sub-Program to address the customer backlog, as well as any potential new sub-

1 program applicants. Currently the EEE Extension Sub-Program is fully subscribed and any
2 additional interested customers are being added to the waiting list. To date through March
3 2014, 308 EEE Extension Sub-Program projects have been completed.

4 **Municipal Sub-Program Participants**

5 The Municipal Sub-Program participants for the twelve months ending March
6 31, 2014 are detailed in JEM-EEE-3 and JEM-EEE Ext-3.

7 **Municipal Sub-Program Energy Savings**

8 The Municipal Sub-Program energy savings are detailed in Schedules JEM-
9 EEE-4E, 4G, 5E and 5G and JEM-EEE Ext-4E, 4G, 5E and 5G.

10 **Municipal Sub-Program Emission Reductions**

11 The Municipal Sub-Program emissions impacts are detailed in Schedules
12 JEM-EEE-6 and 7 and JEM-EEE Ext-6 and 7.

13

14 **G. Carbon Abatement Large Business Best Practices and Technology Demonstration**
15 **Warehouse Pilot Sub-Program**

16

17 **Warehouse Pilot Sub-Program Description**

18

19 The Carbon Abatement Large Business Best Practices and Technology
20 Demonstration Warehouse Pilot Sub-Program (“Warehouse Pilot Sub-Program”) is now
21 closed. The sub-program was designed to reduce carbon emissions by lowering the energy
22 consumption of warehouse facilities in PSE&G’s electric service territory through the
23 installation of integrated lighting systems. PSE&G, working with General Electric (“GE”) and Orion Energy Services, provided a holistic warehouse lighting system for high-bay
24

1 applications that included advanced fixtures with high-intensity fluorescent lighting, day
2 lighting “light pipes” with automated controls, fixture level lighting controls, and real-time
3 measurement and verification of performance.

4 All audit and installation work was performed by Orion Energy Services and
5 PSE&G paid a lighting system incentive to the customer that effectively reduced the simple
6 payback period for the system to two years for projects with a pay back of seven years or
7 less. A performance baseline for each project was established during the audit phase.
8 Customers who participated in the Warehouse Pilot Sub-Program may not have received, or
9 applied for, incentives under the NJCEP for the same measures.

10 **Warehouse Pilot Sub-Program Status**

11 The Warehouse Pilot Sub-Program concluded with a total of five warehouse
12 projects participating. The lighting installations were completed in 2010 and the completed
13 projects received their first of three annual sub-program incentive payments in 2011, a
14 second payment in 2012 and final annual payment in 2013.

15 **Warehouse Pilot Sub-Program Participants**

16 The Warehouse Pilot Sub-Program participants for the twelve months ending
17 March 31, 2014 are detailed in Schedule JEM-CA-3.

18 **Warehouse Pilot Sub-Program Energy Savings**

19 The Warehouse Pilot Sub-Program energy savings are detailed in Schedules
20 JEM-CA-4E 4G, 5E and 5G.

1 **Warehouse Pilot Sub-Program Emission Reductions**

2 The Warehouse Pilot Sub-Program emissions impacts are detailed in
3 Schedules JEM-CA-6 and 7.

4

5 **H. Carbon Abatement, EEE Stimulus and EEE Extension Hospital Efficiency Sub**
6 **Program**

7

8 **Hospital Sub-Program Description**

9 The Carbon Abatement, EEE Stimulus and EEE Extension Hospital
10 Efficiency Sub-Program (“Hospital Sub-Program”) is designed to reduce carbon emissions
11 by lowering the energy consumption of hospitals and healthcare facilities.

12 The sub-program is targeted to existing hospitals and hospital new
13 construction in PSE&G’s electric and/or gas service territory and is targeted specifically to
14 in-patient hospitals and other in-patient medical facilities that operate 24 hours a day, 7 days
15 a week. Hospitals receive an Investment Grade Audit (“IGA”) of their hospital campus at no
16 cost. Audit results identify all energy conservation measures appropriate to the hospital
17 facility based on its operating parameters. It determines the potential savings derived
18 through a variety of recommended measures and technologies targeting HVAC,
19 humidification, building envelope, motors, lighting, and other energy consuming equipment
20 (collectively “ECM”s).

21 Energy efficiency measures with a payback of 15 years or less are considered
22 for incentives and the Hospital Sub-Program provides an incentive by buying down the
23 project payback by seven years, down to a level not less than two years. PSE&G reviews the

1 hospital facility audit results with the customer to establish baseline performance information
2 and projected savings, and assists the customer in preparing bid-ready documents to facilitate
3 the preparation of a project scope of work, to be used to obtain contractor cost estimates for
4 ECM installation. Hospitals are responsible for obtaining services for the installation of the
5 approved measures from qualified service providers. Based on the audit results, overall
6 project cost-effectiveness, and approved project pricing, PSE&G enters into contracts with
7 hospitals to provide funding of eligible measures.

8 **Hospital Sub-Program Status**

9 As of the end of March 2014, 64 applications have been received and 38
10 projects have been approved. Of those, 24 projects have been completed.

11 The Hospital Sub-Program was designed to overcome barriers to energy
12 efficiency retrofits in a critical customer and market sector. As projects have been completed,
13 knowledge of the advantages of the sub-program has spread throughout the healthcare sector.
14 Hospitals that initially thought they could not afford the energy efficiency improvements are
15 now applying to the sub-program and starting their projects and other eligible sectors such as
16 nursing homes and rehabilitation facilities have also participated in the sub-program. The
17 sub-programs are operated as one program where a project can begin the process with an
18 IGA funded under the EEE Stimulus sub-program and complete construction under the EEE
19 Extension sub-program. Similarly, projects could receive initial funding under Carbon
20 Abatement and be completed under EEE Stimulus. For example, the Carbon Abatement
21 Program funded all of the IGAs completed or in progress during 2009 and the initial Stage
22 One incentive payments for some of the Hospital Sub-Program projects. After the Carbon

1 Abatement Program funding was allocated, customers that completed their IGAs and moved
2 to the RFP stage were eligible for funding under the EEE Stimulus Hospital Sub-Program.

3 The entire CA, EEE Stimulus and EEE Extension investment funding for the
4 Hospital Sub-Program has been committed. Incentive payments will be made as the
5 approved projects progress. If a project is not completed, then the committed funding will
6 become available for another project in queue for funding.

7 Among the projects included in the program is approximately \$2.5M in
8 energy efficiency initiatives that have been undertaken at Hoboken University Medical
9 Center ("HMC") in response to an application submitted to PSE&G by HMC in 2009 under
10 the EEE Stimulus program. Although the bulk of the ECMs associated with the project
11 (\$1.9M) have been completed including lighting upgrades, steam trap replacement, chiller
12 replacement, and other building weatherization and lighting initiatives, completion of the
13 ECMs has been delayed by the transition of HMC to new ownership necessitated by its July
14 2011 bankruptcy filing followed by flooding damage sustained to the hospital as a result of
15 Superstorm Sandy in October 2012. Throughout this period, PSE&G has continued to
16 coordinate with the new HMC ownership and efforts have recommenced to complete all
17 outstanding ECMs, in particular final installation of upgraded HVAC controls and
18 refurbishments and completion of boiler controls upgrades. These remaining ECMs are
19 scheduled to be completed within the next six to nine months.

1 **Hospital Sub-Program Participants**

2 The CA, EEE Stimulus, and EEE Extension Hospital Sub-Program
3 participants for the twelve months ending March 31, 2014 are detailed in Schedules JEM-
4 CA-3, EEE-3 and EEE Ext-3.

5 **Hospital Sub-Program Energy Savings**

6 The Hospital Sub-Program energy savings are detailed in Schedules JEM-CA-
7 4E, 4G, 5E, JEM-EEE-4E, 4G, 5E and 5G and JEM-EEE Ext-4E, 4G, 5E and 5G.

8 **Hospital Sub-Program Emission Reductions**

9 The Hospital Sub-Program emissions impacts are detailed in Schedules JEM-
10 CA, EEE & EEE Ext 6 and 7.

11

12 I. **EEE Stimulus Data Center Efficiency Sub-Program**

13 **Data Center Sub-Program Description**

14 The EEE Stimulus Data Center Efficiency Sub-Program (“Data Center Sub-
15 Program”) is now closed. The sub-program was designed to reduce carbon emissions by
16 lowering the energy consumption of data center facilities where natural gas and/or electricity
17 are provided by PSE&G. The sub-program provided facility audits for existing data centers
18 and performed a design review for proposed new data center sites. Audits consisted of
19 meeting the data center management team, reviewing the overall operation of the data center,
20 and collecting information regarding the energy consuming devices. PSE&G paid for the
21 cost of the audit for existing data centers and the design review for proposed new data
22 centers. Based on the audit results, PSE&G entered into contracts with data centers to

1 provide funding of eligible measures based on reduction in total natural gas and electricity
2 usage and/or demand. Data centers obtained services for the installation of the approved
3 measures from qualified service providers subject to approval by PSE&G. Energy efficiency
4 measures that have received incentives from other ratepayer funded programs such as the
5 NJCEP were not eligible for incentives under the Data Center Sub-Program for the same
6 measures.

7 **Data Center Sub-Program Status**

8 PSE&G received 16 applications for the Data Center Sub-Program and
9 ultimately a total of eight customers received an audit. Two of the eight projects cancelled
10 before project construction began and the remaining six projects were completed by the end
11 of July 2013.

12 **Data Center Sub-Program Participants**

13 The Data Center Sub-Program participants for the twelve months ending
14 March 31, 2014 are detailed in Schedule JEM-EEE-3.

15 **Data Center Sub-Program Energy Savings**

16 The Data Center Sub-Program energy savings are detailed in Schedule JEM-
17 EEE-4E, 4G, 5E and 5G.

18 **Data Center Sub-Program Emission Reductions**

19 The Data Center Sub-Program emissions impacts are detailed in Schedule
20 JEM-EEE-6 and 7.

1 **J. EEE Stimulus Building Commissioning O&M Sub-Program**

2 **Building Commissioning O&M Sub-Program Description**

3 The EEE Stimulus Building Commissioning O&M Sub-Program (“RCx Sub-
4 Program”) is now closed. The sub-program was a pilot that offered technical and financial
5 assistance to identify and implement low cost tune-ups and adjustments that improve the
6 efficiency of a building’s operating systems by bringing them to the intended operation or
7 design specifications and/or maximizing current operating conditions, with a focus on
8 building controls and HVAC systems. Energy conservation measures identified by
9 commissioning activities typically represent no-cost to low-cost measures that may be
10 accomplished with minimal capital investment.

11 In order to develop a significant amount of data that could be analyzed, the
12 RCx Sub-Program was concentrated on one high energy use business sector; grocery stores
13 and supermarkets in excess of 30,000 square feet. Eligible facilities had to be PSE&G
14 electric and/or gas customers and their primary systems could not have exceeded their
15 anticipated design service life; for HVAC – 20 years, refrigeration – 15 years, and lighting
16 systems - 15 years.

17 **Retro-Commissioning Sub-Program Status**

18 The RCx Sub-Program completed in the first quarter of 2013 with 35
19 supermarkets participating. All participants completed the RCx implementation phase
20 including an ASHRAE Tier I energy audit, EnergyStar benchmarking, completion of on-site
21 RCx upgrades and one year of measurement and verification. NJIT’s Center for Architecture
22 and Building Science Research has developed a report of the sub-program that reviews the

1 merits and challenges of the sub-program, potential models for wider implementation, and
2 the potential savings attributable to further sub-program expansion.

3 **Retro-Commissioning Sub-Program Participants**

4 The EEE Retro-Commissioning Sub-Program participants for the twelve
5 months ending March 31, 2014 are detailed in Schedule JEM-EEE-3.

6 **Retro-Commissioning Sub-Program Energy Savings**

7 The Retro-Commissioning Sub-Program energy savings are detailed in
8 Schedules JEM-EEE-4E, 4G, 5E and 5G.

9 **Retro-Commissioning Sub-Program Emission Reductions**

10 The Retro-Commissioning Sub-Program emissions impacts are detailed in
11 Schedules JEM-EEE-6 and 7.

12

13 **K. EEE Stimulus Technology Demonstration Sub-Program**

14 The EEE Stimulus Technology Demonstration (“Tech Demo Sub-Program”)
15 is now closed to new participants with the funding of one project pending as well as the
16 completion of two active projects. The sub-program provided grant funding for
17 demonstration and proof of concept projects for innovative technologies that will enhance
18 and improve the efficiency and sustainability of New Jersey energy generation and
19 consumption. New Jersey based companies and organizations that were funded under the
20 sub-program must have a product, service, or process that is based on a qualifying
21 technology, that could be commercially available within two years, and that addresses a New
22 Jersey market need. Incentives were structured as grants, with a minimum grant of \$50,000

1 and subject to funding availability; grants were approved for up to 100% of the project cost
2 with no repayment requirements. PSE&G engaged the Rutgers Center for Energy,
3 Environment and Economic Policy ("Rutgers CEEEP") to assist in developing and managing
4 the sub-program project selection process.

5 **Technology Demonstration Sub-Program Status**

6 The Tech Demo Sub-Program awarded grants to 18 projects. One small
7 project withdrew and one project was removed from the sub-program. All funded projects
8 have been completed except for two, and they are expected to complete in 2014. The last
9 unfunded project is a demonstration of an innovative commercial heat pump technology at a
10 nursing home facility and was committed in 2010. In mid-2011 the nursing home withdrew
11 from the project and the technology vendor, NovaThermal Energy, requested time to find a
12 new host facility. By the end of 2011 a new host, Camden County Municipal Utility District
13 ("CCMUD"), was identified. Being a governmental entity, CCMUD had to competitively
14 bid the project, which they did in April 2012. NovaThermal Energy was awarded the
15 contract. Over the course of the next year, there were numerous delays, technical issues and
16 scope changes, and NovaThermal Energy was never able to finalize a project design. In
17 October 2013, the Director of the CCMUD informed PSE&G that CCMUD wished to reissue
18 the RFP in order to ascertain if other companies could provide the original scope of work at a
19 lower cost. Since so much time had passed since the original award, PSE&G decided to
20 consult with BPU Staff to determine if they were comfortable with PSE&G moving forward
21 with the project. After several discussions between PSE&G, BPU Staff and the Director of
22 the CCMUD, all concluded that the Camden County project remained beneficial and there

1 was no impediment to CCMUD's issuance of a new vendor RFP. Based on this, PSE&G is
2 continuing to support the CCMUD project. Initial funding for this project is expected to be
3 issued in third quarter of 2014.

4 **Technology Demonstration Sub-Program Participants**

5 The EEE Technology Demonstration Sub-Program participants to date are
6 detailed in Schedule JEM-EEE-3.

7 **Technology Demonstration Sub-Program Energy Savings**

8 The Technology Demonstration Sub-Program energy savings are detailed in
9 Schedules JEM-EEE-4E, 4G, 5E and 5G.

10 **Technology Demonstration Sub-Program Emission Reductions**

11 The Technology Demonstration Sub-Program emissions impacts are detailed
12 in Schedules JEM-EEE-6 and 7.

13

14 **L. General Comments Applying to All CA, EEE and EEE Extension Sub-Programs**

15 **Green Jobs**

16 Schedule JEM-CA, EEE and EEE Ext-1 details the green jobs associated with
17 implementation of the CA, EEE Stimulus and EEE Extension sub-programs.

1 **PJM Capacity Market**

2 PSE&G is required by the Board to offer energy efficiency attributes, derived
3 as a result of implementing PSE&G's energy efficiency sub-programs, into the PJM
4 Reliability Pricing Model ("RPM") auctions. For this reporting period, PSE&G offered and
5 cleared 13.9 MW Unforced Capacity ("UCAP") of EE Resources to PJM in the First
6 Incremental Auction for Delivery Year 2013-2014, 15.3 MW UCAP of EE Resources in
7 multiple auctions for Delivery Year 2014-2015, and 4.1 MW UCAP of EE Resources in
8 Delivery Year 2015-2016.

9 Measurement and Verification ("M&V") Plans are submitted and are subject
10 to approval by PJM before EE Resources can be offered into RPM auctions. The M&V
11 Plans are followed in each respective delivery year in order to validate the installations and
12 values of demand reduction. The results of implementing the M&V Plan are submitted via
13 the Post-Installation M&V Report to PJM and are subject to approval by PJM.

14

15 **M. Program Reporting**

16 TrakSmart, a commercial software application offered by Nexant, is the
17 system utilized by PSE&G to track the details of its energy efficiency programs. The
18 PSE&G TrakSmart system became operational in late 2011. Prior to PSE&G's use of
19 TrakSmart, as an interim tracking solution, all data for the 13 energy efficiency sub-programs
20 was captured and stored in Company and vendor databases.

21 By mid-2013 PSE&G completed an extensive data integration of all of its
22 energy efficiency program information and completed the data migration into TrakSmart.

1 TrakSmart currently contains detailed savings and cost information and sub-program
2 documentation for each energy efficiency sub-program implemented since 2009, by measure,
3 project and customer, except where precluded by sub-program design. Individual project
4 measure, savings and documentation information is provided by the PSE&G operational
5 program managers and cost information is provided by both the operational managers and
6 through PSE&G's SAP accounting system.

7 The Board Orders for CA, EEE and EEE Extension each contain general, but
8 sometimes not entirely aligned, obligations for energy efficiency sub-program data
9 collection, tracking and reporting. Presently, PSE&G is electronically providing sub-program
10 level and in some cases project level activity results to the Office of Clean Energy's
11 ("OCE's") reporting system and database "IMS", which is managed by Applied Energy
12 Group ("AEG") on behalf of the OCE.

13 PSE&G has worked with AEG to populate their IMS database with PSE&G
14 sub-program data; however there are basic incompatibilities between the financial tracking
15 used in the IMS and PSE&G's SAP accounting system. IMS is an invoice processing system
16 used by the OCE Market Managers in order to be paid for their services. IMS is also used to
17 make payments to OCE sub-contractors and vendors. OCE programs are driven by customer
18 applications and, as such, each monthly invoice submitted by a Market Manager must be
19 linked to a project application and its associated installed measures; the sum of project costs
20 and measure costs must equal the invoice total or the invoice is rejected by the IMS system.

21 Conversely, PSE&G uses an accrual-based accounting system and all program
22 expenses are accounted for through SAP. In order to be able to upload PSE&G sub-program

1 data into IMS, a sub-program's total cost for the month (from SAP) must be treated as an
2 invoice and the project and measure costs (from TrakSmart) must sum to the sub-program
3 cost for the month. However, because of accrual accounting, adjustments, timing
4 differences, and the design of certain sub-programs, on a month-to-month basis, the sum of
5 measure/project costs rarely equals the program costs in SAP.

- 6 • For example, when a project is complete and has begun to see energy savings,
7 the investment is booked as an estimated accrual. When final inspections and
8 actual project payment is made, the accrual is reversed and the revised final
9 amount is booked. IMS will not accept transactions such as this.
- 10 • As another example, some of the sub-programs provide progress payments to
11 customers that are not associated with specific energy efficiency measures.
12 When the project has completed and the collection of measures is uploaded to
13 IMS, they would be rejected because the total of all the measure costs would
14 not equal the 'invoice' amount.

15 Over the last year, PSE&G has continued working with AEG/OCE to provide
16 as much program activity data as possible to the IMS. Data uploads to AEG began in July
17 2013 and by October 2013, PSE&G was uploading sub-program data into IMS on a monthly
18 basis.

19 Currently, PSE&G is providing AEG all cost and energy savings information
20 at the sub-program level for all projects completed to date. To date, the data transferred to
21 IMS has been redacted to conceal confidential customer information in accordance with state
22 and federal law. However, pursuant to discussions with AEG and Board Staff over the

1 course of the past year, and recognizing that Board Staff believes customer specific data is
2 important to their comprehensive reporting obligations, PSE&G will now begin the process
3 of providing customer specific information directly to IMS with an affidavit requesting
4 confidential treatment of such customer data.

5 As part of OCE's Data Working Group discussions that have included Board
6 Staff, PSE&G, Rate Counsel and other interested stakeholders, PSE&G explained and
7 discussed the IMS data population situation with BPU Staff. Board Staff confirmed that
8 PSE&G's current level of reporting into IMS was consistent with the intent of the provisions
9 governing reporting contained in the various EEE Board Orders. Board Staff further directed
10 that PSE&G should continue to provide monthly electronic uploads of program level cost
11 data, and project level energy savings into the IMS system, with the more detailed data
12 (project and measure level costs and savings) captured in PSE&G's TrakSmart system.
13 PSE&G's detailed sub-program information in TrakSmart will be available for review upon
14 request by Rate Counsel, CEEEP, evaluation contractors, as well as other stakeholders.

15 Additionally, Board Staff is planning to introduce a more comprehensive quarterly
16 activity report in the near future that is to include utility energy efficiency activities. At that
17 time, all currently required PSE&G activity information will be obtained from IMS. If
18 additional information is required above that which can be populated into IMS, PSE&G will
19 work with OCE to develop the appropriate reporting processes.

20 In the interim, PSE&G will continue to produce hard-copy quarterly reports until the
21 OCE initiates its revised reporting format. At that time, PSE&G will no longer provide hard-

- 1 copy quarterly reports and will instead implement the revised reporting process as directed
- 2 by OCE.

1 had legacy load control devices installed on their central air condition units; however there
2 was also a small set of legacy sub-program participants who had load control thermostats
3 installed. Customers having the older technology thermostats were offered a new load control
4 thermostat upon their migration to the new version of the sub-program.

5 **New Participants**

6 The new version of the Residential A/C Cycling Sub-Program was also made
7 available to new sub-program participants (i.e., customers not already enrolled in the legacy
8 sub-program).

9 **Residential A/C Cycling Sub-Program Status**

10 PSE&G replaced 75,454 legacy load control devices from 2009 through
11 March 2014. Table DR-1 below shows the actual number of load control devices installed
12 from 2009 through March 31, 2014 and the anticipated number of devices from April 1, 2014
13 through the end of 2014.

1

TABLE DR-1

DR Program Total Installations							
	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast
Calendar Year	2009	2010	2011	2012	2013	2014	Total
Migrating Legacy	7,294	16,493	33,808	14,890	2,704	613	75,802
New Res Switch	0	220	1,690	3,662	1,542	258	7,372
New Res T-Stat	0	9	8,763	20,831	16,314	4,869	50,786
New Commercial	0	2	589	787	244	82	1,704
Total Installations	7,294	16,724	44,850	40,170	20,804	5,822	135,664
Cumulative Installations	7,294	24,018	68,868	109,038	129,842	135,664	

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In the 2009 through 2011 time period, PSE&G concentrated on migrating legacy sub-program participants to the new sub-program. In 2011, PSE&G also began to focus on obtaining new participants. The planned migration schedule was escalated in order to be in compliance with the Federal Communications Commission ("FCC") 12.5 kHz narrow banding mandate deadline of January 1, 2013.¹ The FCC narrow banding mandate requires that licensees in the private land mobile VHF and UHF bands, which have traditionally employed systems that operate on channel bandwidths of 25 kHz, convert to equipment designed to operate on channel bandwidths of 12.5 kHz or less or that meets a specific efficiency standard. The new standard meant that any equipment that was not capable of operating on channels of 12.5 kHz or less had to be replaced.

Approximately 98% of the 127,747 legacy devices of record were examined and offered the opportunity to receive the new load control equipment and continue

¹ FCC Narrowbanding Mandate, A Public Safety Guide for Compliance, Chapter 2, Page 6.

1 participation in the new version of the Residential A/C Cycling Sub-Program. The remaining
2 approximately 2% were removed from the system after the customer did not respond. Even
3 after customers opted out of the new program or did not respond to requests, we continued to
4 market to the premise. If legacy customers or new customers at a legacy premise decide to
5 enroll in the A/C Cycling Sub-Program, the installation will be recorded as a legacy
6 replacement. When this occurs, the number of legacy replacements will increase and the
7 number of legacy opt-outs previously recorded will decrease. The breakdown of the 127,747
8 legacy devices through May 2014 is as follows:

- 9 • 75,802 moved to the new program
- 10 • 49,413 either no longer had devices installed or chose to opt out
- 11 • 2,532 were removed from the system after the customer did not respond.

12 In addition, the A/C Cycling Sub-Program has experienced attrition among
13 both legacy and new participants. The rate of attrition varies depending on whether or not a
14 cycling event has occurred.

15 **Residential A/C Cycling Sub-Program Evaluation Results**

16 In 2011 PSE&G initiated a Residential A/C Cycling Sub-Program
17 certification study in order to meet the PJM requirement for an update of the average switch
18 operability rate that reflected the percentage of all active switches that both received the
19 control test signal and operated as a result.² PJM requires that a switch operability study be
20 conducted as part of a Measurement and Verification (“M&V”) process, and the results must

² PJM Manual 19: Load Forecasting and Analysis, Revision 19, Effective February 23, 2012, Attachment A: Load Drop Estimate Guidelines, Page 28.

1 be updated every five years. For sub-program participants, 87.1% of the switches and 100%
2 of the thermostats received the test signals and were functioning properly. In addition, initial
3 small commercial customer results indicated a kW capacity value of approximately 1.0 kW
4 rather than the 1.66 kW (PSE&G myPower pilot value) assumed by the sub-program. The
5 availability factors and revised small commercial kW capacity value as a result of the 2011
6 M&V study will continue to be in effect until the next M&V study, which is scheduled to
7 occur in 2016.

8

9 **B. Small Commercial Air Conditioner Cycling Sub-Program Description**

10 The Small Commercial Air Conditioner Cycling Sub-Program (“SC A/C
11 Cycling Sub-Program”) is targeted to small commercial customers with central air
12 conditioning who are on the PSE&G electric rate schedule GLP. Enrolled customers receive
13 load control thermostats that are owned by the Company. For each new participant enrolled,
14 the incremental kW impact is estimated to be 1.00 kW (or the then PJM established and
15 allowed demand response credit per device). Currently Small Commercial customers make
16 up less than 2% of the total customers enrolled in the program with the balance being
17 Residential.

18 **SC A/C Cycling Sub-Program Status**

19 PSE&G has had limited success marketing to small commercial customers.
20 Only 1,453 load control devices have been installed at small commercial locations through
21 April 30, 2014.

1 **C. DR Participation in PJM Market**

2 In accordance with the Board Orders establishing the current DR Program, PSE&G
3 has been offering DR resources into PJM markets, consistent with PJM protocols and
4 requirements, for the purpose of maximizing ratepayer benefits. During this cost recovery
5 period, PSE&G anticipates obtaining total PJM revenues for DR of \$14,874,299. WP-JEM-
6 DR-1.xlsx provides further details on PSE&G's DR participation in the PJM market. To the
7 extent that PJM continues to allow DR as a wholesale market resource product, PSE&G will
8 continue offering DR resources on behalf of ratepayers. The revenue flowing from these
9 sales are reflected in the revenue requirements calculation in the Testimony and Schedules of
10 Mr. Swetz.

11
12 **D. DR Program Curtailment Operations**

13 PJM called on PSE&G to initiate load control cycling events zero times
14 during the summer of 2012. On September 21, 2012, a Cycling Test was performed, lasting
15 approximately one hour. On September 11, 2013 PJM declared an emergency and dispatched
16 the PSE&G DR program.

17
18 **E. DR Program Budgets**

19 Total Demand Response Sub-Program budgets can be found in the electronic
20 work paper WP-JEM-DR-1.