

**Green Solutions**  
for Customers



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# ***PSE&G*** ***Multi-Family Energy Efficiency*** ***Program***

Presented to  
NJHMFA  
Multifamily Energy Program Introduction  
July 27, 2009



## **History**

- 10/16/08 – Gov. Corzine announced the NJ Economic Assistance & Recovery Plan
  - Called upon NJ utilities to invest \$500 million in energy efficiency
  - Create economic stimulus and create jobs
- 1/21/09 & 2/04/09 – PSE&G files Energy Efficiency Economic Stimulus Initiative (EEE) with the BPU
  - Filed under Regional Greenhouse Gas Initiative (RGGI) Legislation
    - PSE&G can earn a return on EE investment
    - 180 day time limit for BPU action



**Residential Multi-Family Housing Program**

**History**

- February to June – Discovery & settlement discussions
  - NJHMFA is Party to Stipulation of Agreement
- 7/1/09 – BPU approves stipulated settlement
- 7/16/09 – BPU issues written order
  - 8 programs
  - Direct program investment - \$166 million
  - Administration, Sales, Marketing, Evaluation, IT – \$24 million
  - **All funds must be committed by end of 2010**



**Residential Multi-Family Housing Program**

**EEE Programs**

- Residential Whole House Efficiency - \$10M
- Residential Multi-Family Housing - \$19M
- Small Business Direct Install - \$20M
- Municipal/County/State Direct Install - \$25M
- Hospital Efficiency - \$68
- Data Center Efficiency - \$10M
- Building Re-Commissioning Pilot - \$2M
- Technology Demonstration - \$12M



## **Program Summary**

- PSE&G provides free audit & recommended upgrades
  - All measures with 15 year or less payback
- Customer issues RFP and selects contractor
- PSE&G pays full cost of construction
- PSE&G buys down simple payback by 7 years, but not to less than 2 years
- Customer repays balance over 10 years through PSE&G energy bill
- Should provide positive cash flow from beginning



## **Program Details**

- Based on the successful Hospitals Program
- PSE&G provides a free Investment Grade Audit (IGA)
  - All measures with payback of 15 years or less will be identified, along with projected costs and savings
  - No funding cap
  - Assistance in preparation of RFP
- PSE&G & NJHMFA review / approve upgrade plan
- RFP issued and contractor selected by customer
  - Normal NJHMFA procurement processes & procedures



## **Program Details**

- PSE&G provides \$ for all construction costs through 3 progress payments
  - 1<sup>st</sup> Payment @ contract signing; 1/3 estimated cost
  - 2<sup>nd</sup> payment @ 50% complete; 1/3 estimated cost
  - 3<sup>rd</sup> payment after installation, commissioning & final inspection by a 3<sup>rd</sup> party inspector provided by PSE&G
- PSE&G buys down cost by 7 years but not less than 2
  - If project has 12 year payback – buy down to 5 years
  - If project has 6 year payback – buy down to 2 years
  - Detailed example to follow



## **Program Details**

- Customer pays remaining balance through energy bill
  - Up to 10 years (can be repaid at any time)
  - Customer share will range from 2 years to 8 years so, with 10 year to repay, savings should be immediate
  - If property is sold, balance is due upon transfer



**Residential Multi-Family Housing Program**

**Sample Calculation**

<b>Residential Multi-Family Program</b>						
<b>Incentive Payment Calculator</b>						
<b>Item</b>	<b>Measure Description</b>	<b>Measure Cost (\$)</b>	<b>Measure Payback (yrs)</b>	<b>PSE&amp;G Buydown</b>	<b>Customer Total Share</b>	<b>Customer Monthly Payment</b>
1	New Lighting	\$50,000	3			
2	Replace Boiler	\$150,000	14			
3	High Efficiency Motors for Elevators	\$25,000	9			
4						
5						
<b>Project Based Buydown</b>		<b>\$225,000</b>	<b>11.0</b>	<b>\$143,182</b>	<b>\$81,818</b>	<b>\$682</b>

11 yr payback – 7 yr PSE&G buy down = 4 yr customer payment

PSE&G pays:  $7/11 = 64\% \times \$225,000 = \$143,181$

Customer pays:  $4/11 = 36\% \times \$225,000 = \$81,818$



**Residential Multi-Family Housing Program**

**Sample Calculation**

<b>Residential Multi-Family Program</b>						
<b>Incentive Payment Calculator</b>						
<b>Item</b>	<b>Measure Description</b>	<b>Measure Cost (\$)</b>	<b>Measure Payback (yrs)</b>	<b>PSE&amp;G Buydown</b>	<b>Customer Total Share</b>	<b>Customer Monthly Payment</b>
1	CFLs for Apartments	\$4,000	3			
2	Apartment Seal-up	\$200,000	5			
3	High Efficiency Motors for Elevators	\$25,000	9			
4						
5						
<b>Project Based Buydown</b>		<b>\$229,000</b>	<b>5.4</b>	<b>\$144,213</b>	<b>\$84,787</b>	<b>\$707</b>

5.4 yr payback – 3.4 yr PSE&G buy down = 2 yr customer payment

PSE&G pays:  $3.4/5.4 = 63\% \times \$229,000 = \$144,213$

Customer pays:  $2/5.4 = 37\% \times \$229,000 = \$84,787$



**Residential Multi-Family Housing Program**

**Payback Schedule**

Payback Length (Yrs)	PSE&G Buydown (Yrs)	Customer Share (Yrs)	PSE&G % Alloc.	Customer % Alloc.	Customer Annual Payback	Customer Monthly Payback
1	0	1	0%	100%	10%	0.8%
2	0	2	0%	100%	10%	0.8%
3	1	2	33%	67%	7%	0.6%
4	2	2	50%	50%	5%	0.4%
5	3	2	60%	40%	4%	0.3%
6	4	2	67%	33%	3%	0.3%
7	5	2	71%	29%	3%	0.2%
8	6	2	75%	25%	3%	0.2%
9	7	2	78%	22%	2%	0.2%
10	7	3	70%	30%	3%	0.3%
11	7	4	64%	36%	4%	0.3%
12	7	5	58%	42%	4%	0.3%
13	7	6	54%	46%	5%	0.4%
14	7	7	50%	50%	5%	0.4%
15	7	8	47%	53%	5%	0.4%



**Residential Multi-Family Housing Program**

**Next Steps**

- PSE&G to hire a vendor(s) to perform the IGAs
  - Options to expedite this process are being explored
- NJHMFA to update current list of high priority buildings
  - 18 projects (3,673 units) highest priority
  - 57 projects (8,995 units) remaining
- Target to have first audit completed by 10/1
- All \$19M must be committed by 12/31/10
- Construction can continue into 2011

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**Residential Multi-Family Housing Program**

**Thank You**

**Questions?**

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