



**Electric and Gas
Energy Efficiency and
Demand-Response Plan
Compliance Filing**

ICC Docket No. 13-0498

Program Years:

June 1, 2014 – May 31, 2017 (Plan 3)

Ameren Illinois Company

February 27, 2014

Table of Contents

| | | |
|------------|---|-----------|
| 1.0 | Introduction | 1 |
| 1.1 | Background | 2 |
| 2.0 | Compliance Items that Factor into Remodeling Portfolio Costs and Savings Targets | 5 |
| 2.1 | Savings Targets..... | 5 |
| 2.2 | Inclusion of Standard CFL and Home Energy Reports Programs in the IPA Procurement Process | 8 |
| 3.0 | Portfolio Remodeling..... | 12 |
| 4.0 | Remodeled AIC Portfolio Results..... | 13 |
| 5.0 | Compliance Items That Did Not Factor Into Remodeling Portfolio | 15 |
| 5.1 | Cost-Ineffective Measures..... | 15 |
| 5.2 | Definition of “breakthrough equipment and devices” and spending of an emerging technologies budget on a smart devices program | 16 |
| 5.3 | Cost-effectiveness screening of new measures..... | 16 |
| 5.4 | Data Centers | 17 |
| 5.5 | On-Bill Financing (“OBF”) Program | 17 |
| 5.6 | Rider EDR and Rider GER..... | 17 |
| 5.7 | Net-to-Gross (“NTG”) Framework | 18 |
| 5.8 | Illinois Energy Efficiency Policy Manual | 18 |
| 5.9 | EM&V Schedule | 19 |
| 5.10 | Portfolio Flexibility and Adjustment of Goals..... | 19 |
| 5.11 | Renewing the EM&V Contract..... | 20 |
| 5.12 | Annual EM&V Report on Independence | 20 |
| 5.13 | Potential Study | 20 |
| 5.14 | TRM measure codes | 21 |
| 5.15 | LED Street Lighting | 21 |
| 5.16 | Large Commercial and Industrial (“C&I”) Pilot Program | 21 |
| 5.17 | Banking Savings..... | 22 |
| 5.18 | CFL Carryover Savings | 22 |
| 5.19 | Savings Adjustment Calculation Spreadsheet | 23 |
| | Appendix 1: Commensurate Savings Notes | 24 |
| | Appendix 2: Program Detail..... | 25 |

1.0 Introduction

Ameren Illinois Company (“Ameren Illinois” or “AIC”) filed its Energy Efficiency and Demand Response (“EEDR”) Plan (“Plan 3”) on August 30, 2013. Plan 3 covers the time period of June 1, 2014 through May 31, 2017, otherwise known as Program Years (“PY”) 7-9. AIC revised Plan 3 by way of Errata on October 10, 2013 and remodeled Plan 3 in response to other parties’ testimony as part of its rebuttal filing (filed as Ameren Ex. 6.1) on November 14, 2013. Plan 3 represents the third filing of an electric energy efficiency Plan to satisfy the requirements of Section 8-103 of the Public Utilities Act (the “Act”), 220 ILCS 5/1-101 *et seq.* (the previous plans being approved in Docket Nos. 07-0539 and 10-0568) and the second filing of a gas energy efficiency Plan to satisfy the requirements of Section 8-104 (though AIC voluntarily implemented gas EE programs previously in accordance with ICC Final Order 08-0104).

On January 28, 2014, the Illinois Commerce Commission (“Commission”) entered a Final Order (“Order”) conditionally approving Ameren Illinois’ Plan 3, subject to a compliance filing that incorporated the findings and terms of the Order. Specifically, the Commission concluded that:

Ameren Illinois shall make a filing within 30 days of the date of this Order providing a revised Energy Efficiency and Demand Response Plan pursuant to Section 8-103 and 8-104 of the Public Utilities Act, which revised plan contains terms and provisions consistent with and reflective of the findings and determinations made in this Order. (Order at 176).

While AIC concurrently seeks rehearing and/or clarification on certain issues set forth in the Order, AIC makes this compliance filing in accordance with the above directive from the Commission. In an effort to streamline this compliance filing, AIC does not set forth the entirety of the information and assumptions already provided in the previously remodeled Plan 3 (Ameren Ex. 6.1), which information and assumptions, to the extent consistent with this filing, are incorporated herein.

1.1 Background

AIC serves approximately 1.2 million electricity customers and 800,000 natural gas customers in central and southern Illinois, with a service territory that spans 70% of the State (44,000 square miles) covering rural, urban and suburban areas. Tables 1 and 2 provide a breakdown of AIC’s electric and natural gas customers as of 2013 is available in Tables 1 and 2.

Table 1. AIC– 2013 Electric Customer Details

| Rate Class | Deliveries (MWh) | #Customers |
|------------------------------|-------------------|------------------|
| Residential | 11,407,668 | 1,055,306 |
| Small Commercial (<150kW) | 5,284,429 | 142,557 |
| Commercial (150kW to 1000kW) | 4,509,815 | 4,216 |
| C&I (>1000kW) | 15,404,384 | 530 |
| Street Lighting | 315,508 | 1,619 |
| TOTAL | 36,921,804 | 1,204,228 |

Table 2. AIC– 2013 Natural Gas Customer Details

| Rate Class | Sales (Dekatherms) | #Customers |
|---|--------------------|----------------|
| Residential Gas Delivery Services | 54,532,103 | 742,763 |
| Small Commercial and Industrial Gas Delivery Services | 26,325,422 | 69,209 |
| Large Commercial and Industrial Gas Delivery Services | 73,070,546 | 485 |
| TOTAL | 153,928,071 | 812,457 |

Being both a gas and electric utility and recognizing the benefits of an integrated dual fuel savings portfolio of services for its customers, Plan 3 comprises a portfolio that integrates both electric and gas savings measures.¹ This integrated electric and

¹ The Act specifies that a gas utility affiliated with an electric utility shall integrate gas and electric efficiency measures into a single program that reduces program or participant cost and appropriately allocates costs to gas and electric ratepayers and that the DCEO shall integrate all gas and electric programs it delivers in any such utilities' service territories unless the DCEO can show that integration is not feasible or appropriate. 220 ILCS 5/8-104(f)(6).

gas energy efficiency portfolio of programs will be implemented in PY 7, 8, and 9, which span June 1, 2014 through May 31, 2017.

Sections 8-103 and 8-104 of the Act set forth specific electric and gas savings targets, spending limits, and other requirements for Plan 3. Table 3 summarizes these savings targets as well as the electric and gas spending limits.

Table 3: Savings Targets as Set Forth in the Act

| Program Year | 2012(PY5) | 2013(PY6) | 2014(PY7) | 2015(PY8) | 2016(PY9) |
|---|-----------|-----------|-----------|-----------|-----------|
| ELECTRIC ENERGY EFFICIENCY & DEMAND RESPONSE | | | | | |
| Incremental % of energy delivered | 1.00% | 1.40% | 1.80% | 2.00% | 2.00% |
| DR: % reduction of prior year peak demand | 0.10% | 0.10% | 0.10% | 0.10% | 0.10% |
| Maximum increase in per kWh rate | 2.015% | 2.015% | 2.015% | 2.015% | 2.015% |
| GAS ENERGY EFFICIENCY | | | | | |
| Incremental % of energy delivered | 0.40% | 0.60% | 0.80% | 1.00% | 1.20% |
| Maximum increase in per therm rate | 2.00% | 2.00% | 2.00% | 2.00% | 2.00% |

Pursuant to the Act, AIC calculated the therm targets by applying the target percent to 2009 total delivered therms. However, as established in this docket, delivered therms have declined since 2009. Therefore, when the resulting therm target is compared to forecasted delivered therms, the resulting target percent of energy delivered is higher than the target percent. Instead of the therm target representing 0.80%, 1.0% and 1.20% of delivered therms, the resulting targets actually represent 0.85%, 1.06% and 1.28% of forecasted delivered therms for 2014 - 2017.

These targets correspond to the amounts shown below in Table 4 for PY7, PY8, and PY9, respectively.

Table 4: Application of Savings Targets and Spending Limits

(Inclusive of the Department of Commerce and Economic Opportunity (“DCEO”) portion)*

| Program Year | 2014 (PY7) | 2015 (PY8) | 2016 (PY9) |
|---|--------------------------------------|--------------------------------------|--------------------------------------|
| | (June 1, 2014 – May 31, 2015) | (June 1, 2015 – May 31, 2016) | (June 1, 2016 – May 31, 2017) |
| (Incremental) | | | |
| ELECTRIC ENERGY EFFICIENCY & DEMAND RESPONSE | | | |
| Projected Energy Delivery (MWH) | 38,617,585 | 39,242,418 | 39,455,037 |
| Load Reduction Target (MWH) | 707,858 | 800,866 | 805,205 |
| Spending Limit | \$59,586,934 | \$60,551,052 | \$60,879,122 |
| Peak Demand Reduction Target (MW) | 1.23 | 1.12 | 1.07 |
| GAS ENERGY EFFICIENCY | | | |
| Projected Energy Delivery (Dekatherms)(1) | 106,869,251 | 106,831,840 | 105,896,073 |
| Gas Reduction Target (Therms)(2) | 9,030,493 | 11,288,116 | 13,545,739 |
| Spending Limit(3) | \$15,606,828 | \$15,662,621 | \$15,694,411 |

**All electric and natural gas savings throughout the document are measured at the point of the customer meter. Additionally, the “DCEO portion” reflects the values calculated by AIC for purposes of this docket.*

(1) Per the Final Order in ICC Docket No. 10-0568 “(Plan 2 Order)”, these values include those transportation and retail customers and therms appropriate under Section 5/8-104.

(2) Per the Plan 2 Order, adjusted in accordance with note (1).

(3) In accordance with Section 5/8-104, AIC retail revenues reflect the retail revenues associated with delivery service rates and the retail revenues associated with gas commodity charges.

Under the Act, electric utilities shall implement 75% of the energy efficiency measures. The remaining 25% of those energy efficiency measures shall be implemented by the Department of Commerce and Economic Opportunity (“DCEO”). See 220 ILCS 5/8-103(e). This has been consistently interpreted to be a percentage of the portfolio’s costs. Additionally, natural gas utilities shall utilize 75% of the portfolio’s costs and the remaining 25% shall be used by DCEO to implement energy efficiency measures that achieve no less than 20% of the target savings. See 220 ILCS 5/8-104(e).

Table 5 represents a summary of AIC’s portion of the electric and gas portfolio spending limits (represented below as “costs”) as well as the electric and gas energy savings targets for Plan 3, both of which reflect the application of the compliance filing requirements.

Table 5: AIC’s Proposed Targets (exclusive of the DCEO portion)*

| Program Year (Incremental) | 2014 (June 1, 2014 - May 31, 2015) | 2015 (June 1, 2015 - May 31, 2016) | 2016 (June 1, 2016 - May 31, 2017) | 3 Year Cumulative Targets (1) |
|-----------------------------------|--|--|--|-------------------------------------|
| ELECTRIC ENERGY EFFICIENCY | | | | |
| Costs | \$44,690,200 | \$45,413,289 | \$45,659,342 | \$135,762,831 |
| Savings (MWH) | 281,977 | 246,435 | 255,771 | 784,182 |
| Peak Demand Savings (MW) | 83.3 | 79.8 | 83.7 | 246.7 |
| GAS ENERGY EFFICIENCY | | | | |
| Costs | \$11,699,226 | \$11,741,069 | \$11,764,912 | \$35,205,206 |
| Gas Savings (Therms) | 5,427,963 | 5,666,273 | 5,661,807 | 16,756,042 |

*These figures represent the AIC portion of the portfolio costs (does not include the DCEO portfolio costs and savings).

The following sections provide further detail on how the savings values were derived in accordance with the Order.

2.0 Compliance Items that Factor into Remodeling Portfolio Costs and Savings Targets

2.1 Savings Targets

The Commission directed AIC to “present a Revised Plan which includes increased proposed savings targets that are *in line* with what the Company’s *achievements* have been in previous years.” (Order at 24 (emphasis added)).

As noted in the testimony sponsored by AIC, many Intervenors, and Staff, as well as noted by the Commission in its Order, there exists no savings “achievements” that have been approved by the Commission beyond PY 1 or 2. (See, e.g., Order at 24, “While the parties have discussed several areas of the Plan where increased savings might be achieved, it appears to the Commission that this decision is somewhat hampered by the

fact that previous savings goals have only been confirmed by the Commission for PY1 and PY2”). Furthermore, all parties recognized the PY1 and 2 “achievements,” as well as the Plan 2 estimated net savings, would fluctuate, at times significantly, if adjusted for annual TRM and NTG value changes. Accordingly, AIC, like the Commission, was hampered by not having a fairly comparable basis to adjust Plan 3 savings such that they would be “in line” with previous years’ “achievements”. This problem was exacerbated by (1) the decline in available funds for gas EE programs due to a decline in throughput (see above in Section 1.0) and (2) the fact that the two electric programs that accounted for the vast majority of estimated savings in previous years (i.e., Standard CFL and Behavior Modification Programs) were removed from PY 8 and 9 in accordance with other provisions of the Order (see below in Section 2.2).

The Commission, however, put its directive in context by way of the summary of the Citizen Utility Board’s (“CUB”) testimony, which uses the same language adopted by the Commission with respect to adjusting savings targets to be “in line” with prior years’ “achievements.” (See Order at 22). Accordingly, in order to have a consistent point of reference and to comply with the Commission’s directive, AIC used the data reflected on pages 20-22 of the Order to ensure that revised program savings are “in line” with previous years’ “achievements.” The resulting adjusted savings targets and costs (which reflect adjustments for, among other things, redistribution of the Residential CFLs and Behavior Modification Program funds, as ordered by the Commission) follow:

Table 6: Adjusted Comparison of Plan 2 “Achievements” to Plan 3 Remodeled Targets*

| | Plan 3 Compliance Targets | Plan 2 "Achieved" Savings | Plan 3 v 2 | 3yr Total Plan 2 Cost | 3yr Total Plan 3 Cost | Plan 3 | Plan 2 | Plan 3 v 2 |
|---------------------|---------------------------------|---------------------------------|------------------|--------------------------|--------------------------|---------------|---------------|----------------|
| MWH | | | | | | \$ / kWh | \$ / kWh | |
| Commensurate | | | | | | | | |
| Total | 784,182 | 503,914 | 280,268 | \$104,261,916 | \$135,762,831 | \$0.17 | \$0.21 | -\$0.03 |
| Therms | | | | | | \$ / therm | \$ / therm | |
| Commensurate | | | | | | | | |
| Total | 16,756,042 | 14,402,343 | 2,353,699 | \$36,799,980 | \$35,205,206 | \$2.10 | \$2.56 | -\$0.45 |

*See Appendix 1 for the detail of how AIC adjusted and equalized the savings and costs.

Commensurate savings and costs were derived by equalizing the Plan 2 and Plan 3 portfolio on a per program basis, removing programs from the comparison that appeared in Plan 2, but do not appear in Plan 3. Additionally, since the lowest cost measures have been removed from the Plan 3 portfolio remodeling for PY8-9, the most important frame of reference for comparative savings becomes the cost per energy for the remaining programs. As demonstrated above, the remodeled Plan 3 should achieve savings at a lower cost of energy as compared to Plan 2.

In addition to the Plan 3 compliance filing's savings targets being "in line" with Plan 2 achieved savings, this compliance filing also provides for a significant increase in savings and cost-effectiveness, and lower cost per energy, as compared to the previous Plan 3 filing (the most recent being the Plan 3 set forth in Ameren Exhibit 6.1):

Table 7: Overall Comparison of Ex 6.1 to Compliance Remodeling

| | Portfolio MWH | Portfolio Therms | Portfolio TRC |
|----------------------|------------------|---------------------|---------------|
| Plan 3 Compliance | 784,182 | 16,756,042 | 3.28 |
| Plan 3 Ex 6.1 | <u>608,369</u> | <u>13,611,897</u> | <u>2.30</u> |
| Change | 175,813 | 3,144,145 | 0.98 |
| Change % | 29% | 23% | 43% |
| Plan 3 Cost | \$135,762,831 | \$35,205,206 | |
| Compliance \$/energy | \$0.17 | \$2.10 | |
| Ex 6.1 \$/energy | <u>\$0.22</u> | <u>\$2.59</u> | |
| Change | \$(0.05) | \$(0.49) | |
| Change % | -22% | -19% | |

While not ordered by the Commission, AIC notes that AIC met with Staff and other SAG members regarding this compliance filing prior to its submission.

2.2 Inclusion of Standard CFL and Home Energy Reports Programs in the IPA Procurement Process

In regards to shifting programs to the IPA procurement process conducted pursuant to Section 5/16-111.5B, the Commission directed AIC to:

“Include the Standard CFL and Home Energy Reports programs in their package of programs presented to the IPA in years 8 and 9 of this three year plan in order to maximize all available funding for energy efficiency programs in Illinois. To the extent funds are *freed up* for investment in Section 8-103 programs, those funds should be spent on residential sector programs to maintain the ‘diverse cross-section of opportunities for customers of all rate classes to participate in the programs. 220 ILCS 5/8-103(f).” (Order at 62 (emphasis added)).

The Standard CFL and Home Energy Reports programs represent \$21 million (12% of Plan 3 costs) that were “freed up” for redistribution to residential sector programs. Importantly, and as reflected in the previously remodeled Plan 3 portfolio, these two programs provided the highest amount of residential program savings both in Plan 3 (137,820 MWH or 18% in Plan 3 previously) and in previous years. As a result, there were few remaining programs to receive the “freed-up” funding and one that could provide savings at the same low cost per kWh. Indeed, with the exception of the

Moderate Income Program, all other remaining residential programs are reaching high levels of maturation and have been heavily marketed and offered throughout the AIC territory for six years.

Therefore, as further detailed in Section 4.0, “in order to maximize all available funding for energy efficiency programs in Illinois,” and to address an important customer segment with great potential for long term savings, the “freed up” funds were redistributed to the Moderate Income Program, a cost-effective program (that does, however, contain measures with TRC values of less than 1) that ensures AIC maintains the “diverse cross-section of opportunities for customers of all rate classes to participate in the programs,” as required by the Order. This redistribution continues AIC down the path of long term penetration of energy efficiency in its service territory.

Table 8: MWH Program Comparison of Ex 6.1 to Compliance Remodeling

| Energy Efficiency | Compliance Annual MWH Savings | | | Ex 6.1 Annual MWH Savings | | | Comparison Savings | | |
|--|-------------------------------|----------------|----------------|---------------------------|----------------|----------------|--------------------|---------------|---------------|
| | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 |
| RES-Appliance Recycling | 4,010 | 3,702 | 3,329 | 4,476 | 4,131 | 3,715 | -465 | -429 | -386 |
| RES-Behavior Modification | 29,350 | 0 | 0 | 21,688 | 21,688 | 21,688 | 7,663 | -21,688 | -21,688 |
| RES-ENERGY STAR New Homes | 791 | 791 | 791 | 791 | 791 | 791 | 0 | 0 | 0 |
| RES-HPwES | 5,346 | 5,346 | 5,346 | 5,018 | 5,018 | 5,018 | 327 | 327 | 327 |
| RES-HVAC | 4,769 | 4,769 | 4,769 | 5,314 | 5,314 | 5,314 | -544 | -544 | -544 |
| RES-Lighting | 26,359 | 5,841 | 4,968 | 22,426 | 24,737 | 25,593 | 3,932 | -18,896 | -20,625 |
| RES-Moderate Income | 1,194 | 6,604 | 6,604 | 1,194 | 1,194 | 1,194 | 0 | 5,411 | 5,411 |
| RES-Multifamily In-Unit | 6,232 | 6,232 | 6,232 | 6,232 | 6,232 | 6,232 | 0 | 0 | 0 |
| RES-School Kits | 390 | 390 | 390 | 366 | 366 | 366 | 25 | 25 | 25 |
| RESIDENTIAL PORTFOLIO TOTAL | 78,440 | 33,675 | 32,429 | 67,503 | 69,469 | 69,909 | 10,937 | -35,794 | -37,479 |
| BUS-Standard | 109,586 | 119,131 | 130,032 | 60,073 | 65,400 | 71,567 | 49,512 | 53,731 | 58,465 |
| BUS-Custom | 46,221 | 45,978 | 45,735 | 33,108 | 32,934 | 32,760 | 13,113 | 13,044 | 12,975 |
| BUS-RCx | 22,826 | 22,748 | 22,671 | 17,075 | 17,017 | 16,959 | 5,751 | 5,732 | 5,712 |
| BUS-Large C&I | 24,904 | 24,904 | 24,904 | 18,199 | 18,199 | 18,199 | 6,705 | 6,705 | 6,705 |
| BUSINESS PORTFOLIO TOTAL | 203,536 | 212,760 | 223,342 | 128,455 | 133,549 | 139,484 | 75,081 | 79,211 | 83,857 |
| AMEREN ILLINOIS PORTFOLIO TOTAL | 281,977 | 246,435 | 255,771 | 195,958 | 203,018 | 209,393 | 86,019 | 43,417 | 46,378 |

Table 9: Therm Program Comparison of Ex 6.1 to Compliance Remodeling

| Energy Efficiency | Compliance Therm Savings | | | Ex 6.1 Therm Savings | | | Comparison Therm Savings | | |
|--|--------------------------|------------------|------------------|----------------------|------------------|------------------|--------------------------|------------------|------------------|
| | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 |
| RES-Appliance Recycling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RES-Behavior Modification | 1,887,500 | 1,887,500 | 1,887,500 | 1,337,500 | 1,337,500 | 1,337,500 | 550,000 | 550,000 | 550,000 |
| RES-ENERGY STAR New Homes | 25,663 | 25,663 | 25,663 | 25,663 | 25,663 | 25,663 | 0 | 0 | 0 |
| RES-HPwES | 768,779 | 768,779 | 768,779 | 814,804 | 814,804 | 814,804 | -46,025 | -46,025 | -46,025 |
| RES-HVAC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RES-Lighting | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RES-Moderate Income | 219,987 | 462,778 | 462,778 | 219,987 | 219,987 | 219,987 | 0 | 242,791 | 242,791 |
| RES-Multifamily In-Unit | 118,961 | 118,961 | 118,961 | 118,961 | 118,961 | 118,961 | 0 | 0 | 0 |
| RES-School Kits | 54,986 | 54,986 | 54,986 | 48,298 | 48,298 | 48,298 | 6,688 | 6,688 | 6,688 |
| RES-Plan 2 Lighting Carryover | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| RESIDENTIAL PORTFOLIO TOTAL | 3,075,876 | 3,318,668 | 3,318,668 | 2,565,214 | 2,565,214 | 2,565,214 | 510,663 | 753,454 | 753,454 |
| BUS-Standard | 1,034,066 | 1,034,066 | 1,034,066 | 950,625 | 950,625 | 950,625 | 83,441 | 83,441 | 83,441 |
| BUS-Custom | 1,139,309 | 1,135,436 | 1,131,575 | 891,260 | 888,230 | 885,210 | 248,049 | 247,206 | 246,366 |
| BUS-RCx | 178,711 | 178,103 | 177,498 | 133,681 | 133,227 | 132,774 | 45,030 | 44,876 | 44,724 |
| BUS-Large C&I | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BUSINESS PORTFOLIO TOTAL | 2,352,086 | 2,347,605 | 2,343,139 | 1,975,567 | 1,972,082 | 1,968,609 | 376,520 | 375,523 | 374,530 |
| AMEREN ILLINOIS PORTFOLIO TOTAL | 5,427,963 | 5,666,273 | 5,661,807 | 4,540,780 | 4,537,295 | 4,533,822 | 887,182 | 1,128,977 | 1,127,984 |

3.0 Portfolio Remodeling

In compliance with the Order, AIC remodeled its Plan 3 in a manner consistent with the Commission's various directives. AIC provides a summary of key tasks involved in the remodeling as follows:

1. The CFL Lighting and Home Energy Reports Programs were removed from the portfolio for PY8 & PY9.
2. Funds previously allocated to the CFL Lighting and Home Energy Reports programs were re-allocated to the Moderate Income program for PY8 & PY9.
3. To accommodate the increase in electric funding for Moderate Income as dual fuel program without a commensurate increase in gas funding, the allocation of costs was set at 90% from electric funds and 10% from gas funds. Such a configuration is consistent with prior Commission directives with respect to the funding of dual fuel incentives to achieve dual fuel savings (See Final Order in ICC Docket 10-0568).
4. LEDs were replaced with standard CFLs in residential lighting for PY7.
5. Savings for Business Standard programs were increased by 10%.
6. Participation levels for the electric Behavior Modification Program in PY7 have been increased to PY6 participation levels.
7. Participation levels for the gas Behavior Modification Program in PY7-PY9 have been increased to PY6 participation levels.
8. The PY7 NTG values recommended by the independent Evaluation, Measurement and Verification ("EM&V") evaluator were applied.
9. The IL State-wide TRM Version 2 values approved under Docket 13-0437 were applied, including the update to Steam Boiler baselines.
10. To accommodate the increase in the electric Behavior Modification Program in PY7, a small portion of funds from the Residential HVAC and HPwES programs were re-allocated.
11. To accommodate the increase in the gas Behavior Modification Program in PY7-PY9, a small portion of funds from the Residential HVAC HPwES program were re-allocated.
12. All other planning assumptions remain the same as detailed in the most recent Plan 3 filing (Ameren Exhibit 6.1).

4.0 Remodeled AIC Portfolio Results

The following tables reflect the results of remodeling the AIC portfolio (i.e., exclusive of the DCEO portion) pursuant to the terms and provisions of the Order.

Table 10: Ameren Illinois Portfolio Summary

| Energy Efficiency | TRC | Annual MWH Savings | | | Annual MW Savings | | | Annual Therm Savings | | | Annual Program Costs (\$ millions) | | |
|------------------------------------|-------------|--------------------|----------------|----------------|-------------------|-------------|-------------|----------------------|------------------|------------------|------------------------------------|----------------|----------------|
| | | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 |
| RES-Appliance Recycling | 1.00 | 4,010 | 3,702 | 3,329 | 0.5 | 0.5 | 0.4 | 0 | 0 | 0 | \$1.58 | \$1.46 | \$1.31 |
| RES-Behavior Modification | 1.04 | 29,350 | 0 | 0 | 6.7 | 0.0 | 0.0 | 1,887,500 | 1,887,500 | 1,887,500 | \$1.97 | \$0.98 | \$0.98 |
| RES-ENERGY STAR New Homes | 1.18 | 791 | 791 | 791 | 0.2 | 0.2 | 0.2 | 25,663 | 25,663 | 25,663 | \$1.02 | \$1.02 | \$1.02 |
| RES-HPwES | 1.31 | 5,346 | 5,346 | 5,346 | 3.3 | 3.3 | 3.3 | 768,779 | 768,779 | 768,779 | \$6.18 | \$6.18 | \$6.22 |
| RES-HVAC | 1.19 | 4,769 | 4,769 | 4,769 | 3.4 | 3.4 | 3.4 | 0 | 0 | 0 | \$2.84 | \$2.84 | \$2.84 |
| RES-Lighting | 3.19 | 26,359 | 5,481 | 4,968 | 3.0 | 0.7 | 0.6 | 0 | 0 | 0 | \$6.35 | \$0.00 | \$0.00 |
| RES-Moderate Income | 1.05 | 1,194 | 6,604 | 6,604 | 0.7 | 2.6 | 2.6 | 219,987 | 462,778 | 462,778 | \$2.30 | \$9.68 | \$9.68 |
| RES-Multifamily In-Unit | 1.97 | 6,232 | 6,232 | 6,232 | 0.5 | 0.5 | 0.5 | 118,961 | 118,961 | 118,961 | \$1.37 | \$1.37 | \$1.37 |
| RES-School Kits | 1.59 | 390 | 390 | 390 | 0.0 | 0.0 | 0.0 | 54,986 | 54,986 | 54,986 | \$0.24 | \$0.24 | \$0.24 |
| RES-Plan 2 Lighting Carryover | | | | | | | | 0 | 0 | 0 | \$0.00 | \$0.00 | \$0.00 |
| RESIDENTIAL PORTFOLIO TOTAL | 1.36 | 78,440 | 33,675 | 32,429 | 18.3 | 11.2 | 11.0 | 3,075,876 | 3,318,668 | 3,318,668 | \$23.85 | \$23.78 | \$23.67 |
| BUS-Standard | 5.64 | 109,586 | 119,131 | 130,032 | 41 | 45 | 49 | 1,034,066 | 1,034,066 | 1,034,066 | \$13.15 | \$13.92 | \$14.30 |
| BUS-Custom | 5.59 | 46,221 | 45,978 | 45,735 | 12 | 11 | 11 | 1,139,309 | 1,135,436 | 1,131,575 | \$7.43 | \$7.40 | \$7.37 |
| BUS-RCx | 2.75 | 22,826 | 22,748 | 22,671 | 6 | 6 | 6 | 178,711 | 178,103 | 177,498 | \$2.01 | \$2.00 | \$2.00 |
| BUS-Large C&I | 7.65 | 24,904 | 24,904 | 24,904 | 6 | 6 | 6 | 0 | 0 | 0 | \$1.71 | \$1.71 | \$1.71 |
| BUSINESS PORTFOLIO TOTAL | 6.03 | 203,536 | 212,760 | 223,342 | 65.0 | 68.6 | 72.7 | 2,352,086 | 2,347,605 | 2,343,139 | \$24.30 | \$25.03 | \$25.37 |
| Portfolio Administration | | | | | | | | | | | \$2.42 | \$2.46 | \$2.47 |
| EM&V | | | | | | | | | | | \$1.69 | \$1.71 | \$1.72 |
| Education | | | | | | | | | | | \$1.21 | \$1.23 | \$1.23 |
| Marketing | | | | | | | | | | | \$1.21 | \$1.23 | \$1.23 |
| Emerging Technologies | | | | | | | | | | | \$1.69 | \$1.71 | \$1.72 |
| PORTFOLIO TOTAL | 3.28 | 281,977 | 246,435 | 255,771 | 83.3 | 79.8 | 83.7 | 5,427,963 | 5,666,273 | 5,661,807 | \$56.39 | \$57.15 | \$57.42 |

5.0 Compliance Items That Did Not Factor Into Remodeling Portfolio

5.1 Cost-Ineffective Measures

With respect to the inclusion of cost-ineffective measures, the Order contains inconsistent findings, which are subjects of a concurrently filed pleading with the Commission. On the one hand, the Commission agreed with AIC and certain Intervenors “that cost-effectiveness is evaluated on a portfolio basis rather than on a measure basis [and therefore did] not believe it is necessary to direct Ameren to limit the participation of cost-ineffective measures to no more than the levels proposed in its Plan. The Commission believe[d] such a proposal would limit AIC's flexibility to prudently implement some energy efficiency measures.” (Order at 67).

On the other hand, the Commission directed AIC to spend “*all funding to the extent practicable on cost-effective energy efficiency measures* in order to exceed the modified savings goals and increase net benefits for ratepayers.” (Order at 29) (emphasis added). Additionally, the Commission imposed a series of limitations on AIC, including that “*AIC is directed to spend all funding to the extent practicable on cost-effective energy efficiency measures in order to exceed the modified savings goals; [and that] AIC is directed to avoid over-promoting cost-ineffective measures so as to help ensure participation of these cost-ineffective measures does not exceed expectations.*” (Order at 140, 152-153) (emphasis added).

AIC agrees with the Commission’s finding that cost-effectiveness should be evaluated on a portfolio basis and there should not be a limit on the participation of cost-ineffective measures. AIC also seeks to avoid the exhausting, impractical, and costly practice of having to calculate measure level TRC during implementation (particularly when TRC values change depending on how and when one calculates them). However, to the extent conflicting requirements stand, AIC will comply with the Final Order consistent

with its interpretation, which is explained in AIC's Motion for Clarification/Correction or in the Alternative Application for Rehearing, filed concurrently herewith.

5.2 Definition of “breakthrough equipment and devices” and spending of an emerging technologies budget on a smart devices program

The Commission directed AIC and Staff “to conduct a workshop with other SAG participants on a clear definition of breakthrough equipment and devices that could be applied during Plan 3.” (Order at 33). In addition, the Order “adopts CUB’s proposal to spend the remaining emerging technologies budget on the proposed smart devices program. At a minimum, AIC must develop a comprehensive plan for smart devices including potential programs that deploy home devices in conjunction with smart meters. In addition, AIC must discuss its plan with the SAG and report back to the Commission within 6 months.” (Order at 79).

In accordance with these provisions, AIC will work with Staff to conduct and participate in a workshop, as scheduled by Staff, regarding the definition of breakthrough equipment. While AIC concurrently seeks clarification on whether it must spend the gas portion of the emerging technologies budget on programs related to smart meters, AIC plans to spend the electric portion of the emerging technologies budget on such programs in compliance with the Order (and, if ordered to do so, will spend the gas portion in a consistent manner as well).

5.3 Cost-effectiveness screening of new measures

The Commission ordered “Ameren [to] provide cost-effectiveness screening results in its quarterly Commission activity reports for new measures Ameren adds to its Plan during implementation.” (Order at 67).

In compliance with the Order, AIC plans to provide the cost-effectiveness screening results of new measures in its quarterly reports, while highlighting that the results of cost-effectiveness analysis can fluctuate due to changes in assumptions, costs and

savings values. Also, as noted above, AIC does not understand the Order to preclude cost-ineffective measures from being included during implementation, if appropriate.

5.4 Data Centers

The Commission directed AIC to “target [data centers] in the Custom program and ensure it develops specific strategies to identify, market to, and assist data centers with efficiency upgrades....” (Order at 76).

AIC already provides incentives to the few data centers in AIC’s service territory (and has noted the limited opportunity for additional savings), but in compliance with the Order, AIC will continue to seek “to identify, market to, and assist data centers with efficiency upgrades.”

5.5 On-Bill Financing (“OBF”) Program

The Commission directed AIC to “*evaluate* including an OBF program *or similar cost-reducing mechanism* in its plan.” (Order at 86) (emphasis added). Pursuant to the Act, 220 ILCS 5/16-111.7, such an evaluation is already underway, as an independent evaluation is ongoing. Based on the evaluation, the legislature may extend the program. However, as part of its effort to creatively expand opportunities for AIC customers to participate in energy efficiency programs, AIC intends to petition the Commission pursuant to provisions of Section 5/16-111.7 to expand its OBF program. However, AIC has not identified any “similar cost-reducing mechanisms,” because OBF is not itself a “cost-reducing mechanism.” Indeed, OBF does not reduce the costs of procuring energy efficiency as it *adds* the interest rate costs of the loan, as well as the OBF program costs, to the delivery of the EE measures to AIC customers. And to the extent AIC identifies any “cost-reducing mechanisms” suggested by the Commission, it will evaluate them accordingly.

5.6 Rider EDR and Rider GER

The Commission approved Riders EDR and GER, respectively, as the cost-recovery mechanisms called for by the Act, subject to certain changes relating to amortization

period (in Rider GER) and the filing of testimony in the reconciliation dockets (in both Riders EDR and GER). (Order at 88). Accordingly, AIC will file revised Riders EDR and GER, respectively, reflecting these changes.

5.7 Net-to-Gross (“NTG”) Framework

With respect to the net to gross (“NTG”) framework for Plan 3, the Order provides:

the NTG Framework adopted from Plan 2 should be utilized with minor modification. The Commission would encourage the parties to continue discussions regarding a modified framework, taking into account the comments made in this case, that would address the critical challenges resulting from the continued use of the current NTG Framework, while avoiding making the process excessively complicated or burdensome. In order to *provide additional certainty*, which all parties advocate, *prior to March 1 of each year, the independent evaluator will present its proposed NTG values for each program to the SAG.* The purpose of this meeting will be for the independent evaluator to present its rationale for each value and provide the SAG, in their advisory role, with an opportunity to question, challenge and suggest modifications to the independent evaluator’s values. The independent evaluator will then review this feedback and *make the final determination of values to be used for the upcoming year.* In all other respects, the NTG Framework adopted in Plan 2 should be utilized.

(Order at 123) (emphasis added).

Since the Final Order issued, Staff has already instructed that the independent evaluator provide its “final determination of values” for PY7 by March 1 and those NTG values were used for remodeling the portfolio for this compliance filing. And while AIC believes the provisions of the Order to be clear on this issue, for the avoidance of doubt it concurrently seeks confirmation that, as stated in the Order, NTG values are being provided for the purposes of providing additional certainty and that they are the “final” determination of values “to be used” prospectively without the possibility of alternate values being applied retrospectively at some future, unspecified date.

5.8 Illinois Energy Efficiency Policy Manual

The Commission directed “the SAG to complete an Illinois Energy Efficiency Policy Manual to ensure that programs across the state and as delivered by various program administrators can be meaningfully and consistently evaluated.” (Order at 129). In

compliance with the Commission's directive, and as a member of SAG, AIC will participate in completing this manual.

5.9 EM&V Schedule

The Commission found that Staff's proposal for an EM&V schedule for TRM and NTG updates, which was developed through direct communication between Staff and the EM&V evaluators, was the "least objectionable" and therefore adopted it for purposes of Ameren's Plan 3. (Order at 131). That schedule follows:

TRM Updates

- July 1st: the TRM Technical Committee informs the evaluators and others which measures are high or medium priority measures, for which work papers need to be prepared.
- August 1st: updates to existing measure work papers to clarify terms or approaches will be completed.
- October 1st: completely new work papers for new measures will be completed.

NTG Updates

- November 1st: draft residential NTG estimates will be completed for the program year that ended May 31st.
- December 1st: draft commercial/industrial NTG estimates will be completed for the program year that ended May 31st.

AIC will include this timetable of expectations in the renewal of the EM&V contract in accordance with the Order.

5.10 Portfolio Flexibility and Adjustment of Goals

In regards to portfolio flexibility and annual adjustment of goals, the Order sets forth certain requirements of AIC proposed by Staff:

(1) AIC is directed to prudently respond to changes (e.g., TRM, NTG, market) in the implementation of its programs; (2) AIC is directed to spend all funding to the extent practicable on cost-effective energy efficiency measures in order to exceed the modified savings goals; (3) *AIC is directed to avoid over-promoting cost-ineffective measures so as to help ensure participation of these cost-ineffective measures does not exceed expectations*; (4) AIC is directed to provide cost-effectiveness screening results in its quarterly ICC activity reports for new measures the Company adds to its Plan during implementation; and (5) AIC is directed to explain

how it responds to TRM, NTG, and other changes in its quarterly ICC activity reports it will file with the Commission in this docket.

(Order at 140; 152-53) (emphasis added).

While AIC concurrently seeks relief with respect to items (2) and (3), AIC plans to comply with the requirements set forth by the Commission.

5.11 Renewing the EM&V Contract

The Order grants AIC's request to renew the EM&V contract, as opposed to rebid it, but adopts Staff's recommendation "*to require the Evaluators to use consistent NTG methods* that will ultimately be adopted by the Commission as an attachment to the updated IL-TRM." (Order at 167) (emphasis added). Setting aside AIC's position that NTG methods should take into consideration a utility's differences in budget, implementation, customer service territory, etc., as well as the fact that the deliberation required by Staff over "consistent" methodologies may cause delays in EM&V activities, AIC notes that the Commission also requires that there is consensus on the NTG methodologies so that no evaluator would be forced to accept a position that would place consistency over its independent judgment as to what is best for its service territory. (Order at 171.) Accordingly, and in compliance with the Order, AIC will address these issues in the context of the renewal of the contract.

5.12 Annual EM&V Report on Independence

The Commission approved AIC's request to have the EM&V evaluator file a report on its ability to conduct itself independently from all parties. Accordingly, AIC will include this requirement in the renewal of the EM&V contract.

5.13 Potential Study

The Commission directed AIC

to *request* to include in its next potential study an analysis of economically efficient potential and further directs Ameren to submit the methodology suggested by Dr. Brightwell as to how to evaluate 'economically efficient potential' to the contractor performing the next potential study. The Commission [did] *not, however, order that the contractor* who drafts

Ameren's next potential study *be required to employ* Staff's suggested methodology to analyze economically efficient potential, as it appears to the Commission that the contractor should have *discretion to choose the methodology it views most appropriate*.

(Order at 173) (emphasis added).

AIC will make this request to the contractor who performs the next potential study under Section 5/8-103A and will ensure that that the contractor understands that abiding by such a request is not required, pursuant to the Order.

5.14 TRM measure codes

The Commission directed AIC to “include TRM measure codes in the Company’s future plan filings, as suggested by Staff.” (Order at 173). AIC will include TRM measure codes in the next plan filing.

5.15 LED Street Lighting

The Commission found that the possibility of a LED Street Lighting Tariff “should be explored further by Ameren and the SAG.” (Order at 175). AIC will raise this issue with the SAG and explore the possibility of adding LED Street Lighting opportunities as part of its Plan 4.

5.16 Large Commercial and Industrial (“C&I”) Pilot Program

The Commission found that “the record supports IIEC's proposal [for a Large C&I pilot program] and finds that it should be approved....As a result, the Commission directs AIC to report to the SAG its progress, if any, in developing a large C&I program that attempts to meet the needs of this customer group.” (Order at 74).

As directed by the Commission, and in accordance with the provisions of the Order, AIC will develop and implement the Large C&I pilot program and report to the SAG the progress of doing so. AIC notes that the savings for this Program are assumed for planning purposes to be part of the Business Custom Program (as they have been part

of that program in previous years) and will be accounted for as such during implementation.

5.17 Banking Savings

The Commission found that AIC “may not bank savings between Plans but that Ameren Illinois may continue the practice of banking for the years within Plan 3 (PY7-9).... this conclusion [however] is subject to the Commission’s subsequent treatment of other utilities’ Plans and to the extent the Commission grants other utilities the right to bank in between Plans, the Commission shall afford Ameren Illinois that same right. (Order at 157).

As explained in AIC’s previously filed Plan 3, Ameren Illinois has not and still does not assume any banked savings from previous Plans, subject to its right to do so in the event the Commission affords this right to other utilities. However, because Sections 8-103 and 8-104 allow a utility to meet its energy savings goals by meeting the cumulative 3-year goal, AIC can bank and/or borrow between the three plan years that comprise Plan 3.

5.18 CFL Carryover Savings

With respect to the issue of CFL carryover savings, the Commission directed AIC to “adjust its Plan 3 savings goals upward by the amount of CFL carryover savings identified for PY5-6 for the appropriate years in Plan 3 that the Commission approves in Ameren Illinois’ PY5 and PY6 savings goals compliance dockets.” (Order at 160).

AIC did not assume any carryover of the CFL savings from PY5-6 in its previously filed Plan 3. In accordance with the Order, AIC will adjust its annual savings goal to account for these savings by simply adding whatever the Commission determines these savings to be after its review and approval of AIC’s PY5-6 savings.

5.19 Savings Adjustment Calculation Spreadsheet

The Commission required “that Ameren file a public version of the spreadsheet that demonstrates the savings forecasted in the approved Plan match the calculated savings in the spreadsheet listing all the measures with the associated IL-TRM measure codes.” (Order at 153).

AIC will file this spreadsheet with the most updated NTG and TRM 3 values when they are available.

Appendix 1: Commensurate Savings Notes

Table 6: Adjusted Comparison of Plan 2 "Achievements" to Plan 3 Remodeled Targets*

| | Plan 3 Compliance Targets | Plan 2 "Achieved" Savings | Plan 3 v 2 | 3yr Total Plan 2 Cost | 3yr Total Plan 3 Cost | Plan 3 | Plan 2 | Plan 3 v 2 |
|-------------------------------|---------------------------------|---------------------------------|------------------|--------------------------|--------------------------|---------------|---------------|----------------|
| MWH | | | | | | \$ / kWh | \$ / kWh | |
| Commensurate Total | 784,182 | 503,914 | 280,268 | \$104,261,916 | \$135,762,831 | \$0.17 | \$0.21 | -\$0.03 |
| Therms | | | | | | \$ / therm | \$ / therm | |
| Commensurate Total | 16,756,042 | 14,402,343 | 2,353,699 | \$36,799,980 | \$35,205,206 | \$2.10 | \$2.56 | -\$0.45 |

(1) Plan 2 Savings are derived from the table referenced in the Final Order at 22.

The source for the Y5-6 data table on Page 22 is AIC's SAG presentation dated 08/19/2013 for Q4 Results.

Program level Y5 and Y6 savings match the data from the presentation.

The source for Y4 data is final Y4 EMV results.

(2) RES Lighting, Behavior Modification and heating measures were removed from the Plan 3 portfolio and therefore they are removed from Plan 2 here to illustrate "in line" savings.

| Program | <u>Y4 Actual</u> | <u>Y5 Actual</u> | <u>Y6 forecast</u> | <u>Total</u> |
|------------------|------------------|------------------|--------------------|--------------|
| Lighting MWH | 145,737 | 115,496 | 72,973 | 334,206 |
| Behavior Mod MWH | 22,412 | 28,628 | 33,500 | 84,540 |
| Lighting | \$7,021,889 | \$4,612,658 | \$10,240,232 | \$21,874,779 |
| Behavior Mod | \$725,555 | \$1,026,000 | \$1,217,625 | \$2,969,180 |

(3) Multifamily Common Area measures are not included in 8-103/4 Plan 3.

Therefore they are removed from Plan 2 to illustrate "in line" savings.

MF CA Savings are EMV final for Y4, EMV draft for Y5, forecasted for Y6.

Gas costs are final incentive costs for Y4-5, forecasted for Y6.

| MF CA Costs | <u>Y4 Actual</u> | <u>Y5 Actual</u> | <u>Y6 Forecasted</u> | <u>Total</u> |
|-------------|------------------|------------------|----------------------|--------------|
| MWH | 3,238 | 7,789 | 1,060 | \$12,087 |
| Therms | 245,904 | 95,340 | 0 | \$341,244 |
| Electric | \$1,157,813 | \$1,743,951 | \$37,423 | \$2,939,187 |
| Gas | \$848,017 | \$523,111 | \$0 | \$1,371,129 |

(4) Heating was removed from Plan 3 therefore it was removed from Plan 2

| | <u>Y4 Actual</u> | <u>Y5 Actual</u> | <u>Y6 Forecasted</u> | <u>Total</u> |
|------------------------|------------------|------------------|----------------------|--------------|
| Plan 2 HVAC Therms: | 969,563 | 969,679 | 712,610 | 2,651,852 |
| Plan 2 Gas HVAC costs: | \$1,610,09 | \$1,787,425 | \$2,522,537 | \$4,309,962 |

| (5) Plan 2 Spend Limit | <u>Electric</u> | <u>Gas</u> | <u>AIC Electric</u> | <u>AIC Gas</u> |
|------------------------|-----------------|--------------|---------------------|----------------|
| PY4 | \$59,261,622 | \$18,535,267 | \$44,446,217 | \$13,901,450 |
| PY5 | \$58,071,226 | \$18,897,817 | \$43,553,420 | \$14,173,363 |
| PY6 | \$58,727,234 | \$19,208,343 | \$44,045,426 | \$14,406,257 |
| Total | | | \$132,045,062 | \$42,481,070 |

Plan 2 Electric costs were recalculated each year

Appendix 2: Program Detail

AIC Plan 3 Program Inputs

| Sector | Program | TRC | Admin/Delivery Costs | | | Incentives | | | Total Utility Costs | | | Inc Cost | | |
|--------------|-------------------------|-------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | | | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 |
| RES | Appliance Recycling | 1.00 | \$1,164,411 | \$1,074,734 | \$966,288 | \$418,750 | \$386,500 | \$347,500 | \$1,583,161 | \$1,461,234 | \$1,313,788 | \$0 | \$0 | \$0 |
| RES | Behavior Modification | 1.04 | \$1,968,750 | \$984,375 | \$984,375 | \$0 | \$0 | \$0 | \$1,968,750 | \$984,375 | \$984,375 | \$0 | \$0 | \$0 |
| RES | ENERGY STAR New Homes | 1.18 | \$621,302 | \$621,302 | \$621,302 | \$396,000 | \$396,000 | \$396,000 | \$1,017,302 | \$1,017,302 | \$1,017,302 | \$1,035,600 | \$1,035,600 | \$1,035,600 |
| RES | HPwES | 1.31 | \$2,689,074 | \$2,691,196 | \$2,724,819 | \$3,490,978 | \$3,490,978 | \$3,490,978 | \$6,180,052 | \$6,182,174 | \$6,215,797 | \$9,086,812 | \$9,086,812 | \$9,086,812 |
| RES | HVAC | 1.19 | \$776,503 | \$776,503 | \$776,503 | \$2,068,425 | \$2,068,425 | \$2,068,425 | \$2,844,928 | \$2,844,928 | \$2,844,928 | \$4,870,123 | \$4,870,123 | \$4,870,123 |
| RES | Lighting | 3.19 | \$2,311,096 | \$0 | \$0 | \$4,040,000 | \$0 | \$0 | \$6,351,096 | \$0 | \$0 | \$4,328,571 | \$0 | \$0 |
| RES | Moderate Income | 1.05 | \$1,070,011 | \$5,838,436 | \$5,838,436 | \$1,227,374 | \$3,841,337 | \$3,841,337 | \$2,297,385 | \$9,679,773 | \$9,679,773 | \$2,142,369 | \$5,862,835 | \$5,862,835 |
| RES | Multifamily | 1.97 | \$1,374,603 | \$1,374,603 | \$1,374,603 | \$0 | \$0 | \$0 | \$1,374,603 | \$1,374,603 | \$1,374,603 | \$0 | \$0 | \$0 |
| RES | School Kits | 1.59 | \$235,550 | \$235,550 | \$235,550 | \$0 | \$0 | \$0 | \$235,550 | \$235,550 | \$235,550 | \$0 | \$0 | \$0 |
| C&I | C&I Standard | 5.64 | \$6,248,496 | \$6,452,196 | \$6,257,875 | \$6,904,920 | \$7,464,489 | \$8,040,132 | \$13,153,416 | \$13,916,685 | \$14,298,008 | \$16,135,253 | \$17,770,258 | \$19,724,491 |
| C&I | C&I Custom | 5.59 | \$2,444,789 | \$2,435,680 | \$2,426,598 | \$4,985,607 | \$4,964,279 | \$4,943,024 | \$7,430,396 | \$7,399,959 | \$7,369,623 | \$5,862,754 | \$5,834,272 | \$5,805,887 |
| C&I | C&I Retro-commissioning | 2.75 | \$603,007 | \$601,004 | \$599,007 | \$1,406,924 | \$1,402,234 | \$1,397,560 | \$2,009,931 | \$2,003,238 | \$1,996,567 | \$2,009,931 | \$2,003,238 | \$1,996,567 |
| C&I | Large C&I | 7.65 | \$297,202 | \$297,202 | \$297,202 | \$1,412,798 | \$1,412,798 | \$1,412,798 | \$1,710,000 | \$1,710,000 | \$1,710,000 | \$2,514,302 | \$2,514,302 | \$2,514,302 |
| Total | | 3.28 | \$28,345,968 | \$30,012,687 | \$29,763,771 | \$31,535,839 | \$30,694,982 | \$31,234,239 | \$49,513,680 | \$50,171,785 | \$50,405,042 | \$47,985,714 | \$48,977,439 | \$50,896,616 |

| Sector | Program | kWh | | | kW | | | Therms | | |
|--------------|-------------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|------------------|------------------|------------------|
| | | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 | PY7 | PY8 | PY9 |
| RES | Appliance Recycling | 4,010,438 | 3,701,761 | 3,328,740 | 488 | 450 | 405 | 0 | 0 | 0 |
| RES | Behavior Modification | 29,350,000 | 0 | 0 | 6,688 | 0 | 0 | 1,887,500 | 1,887,500 | 1,887,500 |
| RES | ENERGY STAR New Homes | 791,187 | 791,187 | 791,187 | 244 | 244 | 244 | 25,663 | 25,663 | 25,663 |
| RES | HPwES | 5,345,568 | 5,345,568 | 5,345,568 | 3,298 | 3,298 | 3,298 | 768,779 | 768,779 | 768,779 |
| RES | HVAC | 4,769,275 | 4,769,275 | 4,769,275 | 3,384 | 3,384 | 3,384 | 0 | 0 | 0 |
| RES | Lighting | 26,358,566 | 5,840,603 | 4,968,305 | 3,000 | 665 | 565 | 0 | 0 | 0 |
| RES | Moderate Income | 1,193,502 | 6,604,235 | 6,604,235 | 701 | 2,607 | 2,607 | 219,987 | 462,778 | 462,778 |
| RES | Multifamily | 6,231,609 | 6,231,609 | 6,231,609 | 458 | 458 | 458 | 118,961 | 118,961 | 118,961 |
| RES | REEP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RES | School Kits | 390,320 | 390,320 | 390,320 | 50 | 50 | 50 | 54,986 | 54,986 | 54,986 |
| C&I | C&I Standard | 109,585,598 | 119,130,794 | 130,032,122 | 41,468 | 45,223 | 49,339 | 1,034,066 | 1,034,066 | 1,034,066 |
| C&I | C&I Custom | 46,221,051 | 45,977,518 | 45,734,813 | 11,555 | 11,494 | 11,434 | 1,139,309 | 1,135,436 | 1,131,575 |
| C&I | C&I Retro-commissioning | 22,826,067 | 22,748,458 | 22,671,113 | 5,707 | 5,687 | 5,668 | 178,711 | 178,103 | 177,498 |
| C&I | Large C&I | 24,903,558 | 24,903,558 | 24,903,558 | 6,226 | 6,226 | 6,226 | 0 | 0 | 0 |
| Total | | 281,976,741 | 246,434,887 | 255,770,846 | 83,266 | 79,786 | 83,677 | 5,427,963 | 5,666,273 | 5,661,807 |

Notes:

- 1.) Appliance Recycling Incentives are included with Admin costs for TRC purposes.
- 2.) Total Admin includes Below the Line for the Portfolio Level



Program Description : [Total Program](#)
 Measure Type : [All Measures](#)

Program Type: Total Please pick from drop down
 Rate Class: Other

Input Data
General

First Year Utility Costs:

| | |
|-------------------------------|-----------|
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

Other Inputs:

| | |
|-------------------------------|---------|
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

| Utility Project Costs: | PY7 | PY8 | PY9 |
|------------------------|----------------------|----------------------|----------------------|
| Rebate Costs = | \$ 31,535,839 | \$ 30,694,982 | \$ 31,234,239 |
| Administrative Costs = | \$28,345,968 | \$30,012,687 | \$29,763,771 |
| Total | \$ 59,881,806 | \$ 60,707,668 | \$ 60,998,010 |

| Participants and Costs Inputs: | PY7 | PY8 | PY9 |
|---------------------------------|---------------|-----------------|---------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 47,985,714 | \$ 48,977,439 | \$ 50,896,616 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

| Project Savings | PY7 | PY8 | PY9 |
|-----------------------------------|-------------|-------------|-------------|
| Project Life = | 9 | 9 | 9 |
| Demand Savings = | 83,265.57 | 79,786.29 | 83,677.06 |
| Annual Energy Savings = | 281,976,741 | 246,434,887 | 255,770,846 |
| Annual Natural Gas Savings = | 5,427,963 | 5,666,273 | 5,661,807 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

| Early Retirement Inputs | |
|--------------------------------------|---------|
| Remaining Useful Life for Retrofit = | 0 years |
| New Measure Cost (2012 \$) = | \$0 |
| Electric Savings Adjustment = | 0% |
| Other Fuels Savings Adjustment = | 0% |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|-----------------|------|-----------------|-----------------|
| Total Resource Cost Test | \$511,953,889 | 3.28 | \$224,827,289 | \$736,781,178 |
| Societal Test | \$671,787,838 | 3.93 | \$229,051,275 | \$900,839,113 |
| Participant Test | \$883,813,963 | 7.27 | \$140,861,846 | \$1,024,675,809 |
| Ratepayer Impact Measure Test | (\$433,813,600) | 0.62 | \$1,152,012,407 | \$718,198,807 |
| Utility Cost Test | \$545,092,906 | 4.15 | \$173,105,901 | \$718,198,807 |

Cost & Savings Summary

| | | | | | |
|--|---------------|-----------------|------------------------------|--------------|-----------|
| Coincident Peak Utility Demand Reduction = | 90,042.96 | kW | Levelized Costs = | \$0.018 | per kWh |
| Annual Utility Energy Reduction = | 302,177,274 | kWh | | \$52.846 | per kW |
| Annual Utility Gas Reduction = | 3,743,919 | therms | | \$0.550 | per therm |
| Total Utility Demand Reduction = | 83,603,471 | Lifetime kW | Annual Participant Savings = | \$27,840,831 | per therm |
| Total Utility Energy Reduction = | 9,966,505,092 | Lifetime kWh | | | |
| Total Utility Gas Reduction = | 83,603,471 | Lifetime therms | Participant Simple Payback = | 1.7 | years |



Program Description : Total Residential Programs
 Measure Type : All Measures

Program Type: Residential
 Rate Class: DS1 Please pick from drop down

Input Data
 General

First Year Utility Costs:

| | |
|-------------------------------|-----------|
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

Other Inputs:

| | |
|-------------------------------|---------|
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|----------------------|----------------------|----------------------|
| Rebate Costs = | \$ 11,641,527 | \$ 10,183,240 | \$ 10,144,240 |
| Administrative Costs = | \$12,211,300 | \$13,596,699 | \$13,521,875 |
| Total | \$ 23,852,827 | \$ 23,779,939 | \$ 23,666,115 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|---------------|-----------------|---------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 21,463,475 | \$ 20,855,369 | \$ 20,855,369 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|------------|------------|------------|
| Project Life = | 0 | 0 | 0 |
| Demand Savings = | 18,309.90 | 11,033.70 | 10,907.23 |
| Annual Energy Savings = | 78,440,466 | 32,571,140 | 31,490,617 |
| Annual Natural Gas Savings = | 2,445,743 | 3,061,213 | 3,077,155 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|-----------------|------|---------------|----------------|
| Total Resource Cost Test | \$35,220,085 | 1.36 | \$97,712,793 | \$132,932,878 |
| Societal Test | \$60,106,547 | 1.60 | \$99,527,236 | \$159,633,783 |
| Participant Test | \$156,894,177 | 3.60 | \$60,269,658 | \$217,163,835 |
| Ratepayer Impact Measure Test | (\$130,652,101) | 0.47 | \$245,064,002 | \$114,411,901 |
| Utility Cost Test | \$46,414,402 | 1.68 | \$67,997,500 | \$114,411,901 |

Cost & Savings Summary

| | | | | | |
|--|---------------|-----------------|------------------------------|-------------|-----------|
| Coincident Peak Utility Demand Reduction = | 19,820.73 | kW | Levelized Costs = | \$0.062 | per kWh |
| Annual Utility Energy Reduction = | 84,149,279 | kWh | | \$162.487 | per kW |
| Annual Utility Gas Reduction = | 2,489,306 | therms | | \$0.301 | per therm |
| Total Utility Demand Reduction = | 74,293,557 | Lifetime kW | Annual Participant Savings = | \$9,354,611 | |
| Total Utility Energy Reduction = | 1,150,875,999 | Lifetime kWh | Participant Simple Payback = | 2.3 | years |
| Total Utility Gas Reduction = | 74,293,557 | Lifetime therms | | | |



Program Description : [Appliance Recycling](#)
 Measure Type : [All Measures](#)

Program Type: **Residential** Please pick from drop down
 Rate Class: **DS1**

Input Data
General

| | |
|-------------------------------|-----------|
| First Year Utility Costs: | |
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

| | |
|-------------------------------|---------|
| Other Inputs: | |
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

| | | | |
|------------------------|---------------------|---------------------|---------------------|
| Utility Project Costs: | PY7 | PY8 | PY9 |
| Rebate Costs = | \$ 418,750 | \$ 386,500 | \$ 347,500 |
| Administrative Costs = | \$1,164,411 | \$1,074,734 | \$966,288 |
| Total | \$ 1,583,161 | \$ 1,461,234 | \$ 1,313,788 |

| | | | |
|---------------------------------|--------|-----------------|------|
| Participants and Costs Inputs: | PY7 | PY8 | PY9 |
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ - | \$ - | \$ - |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

| | | | |
|-----------------------------------|-----------|-----------|-----------|
| Project Savings | PY7 | PY8 | PY9 |
| Project Life = | 8 | 8 | 8 |
| Demand Savings = | 487.84 | 450.29 | 404.90 |
| Annual Energy Savings = | 4,010,438 | 3,701,761 | 3,328,740 |
| Annual Natural Gas Savings = | 0 | 0 | 0 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

| | |
|--------------------------------------|---------|
| Early Retirement Inputs | |
| Remaining Useful Life for Retrofit = | 0 years |
| New Measure Cost (2012 \$) = | \$0 |
| Electric Savings Adjustment = | 0% |
| Other Fuels Savings Adjustment = | 0% |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|---------------|------|--------------|----------------|
| Total Resource Cost Test | \$16,090 | 1.00 | \$4,168,256 | \$4,184,345 |
| Societal Test | \$781,903 | 1.18 | \$4,240,206 | \$5,022,109 |
| Participant Test | \$10,308,892 | N/A | \$0 | \$10,308,892 |
| Ratepayer Impact Measure Test | (\$9,853,527) | 0.30 | \$14,037,872 | \$4,184,345 |
| Utility Cost Test | \$16,090 | 1.00 | \$4,168,256 | \$4,184,345 |

Cost & Savings Summary

| | | | | | |
|--|------------|-----------------|------------------------------|-----------|-----------|
| Coincident Peak Utility Demand Reduction = | 527.40 | kW | Levelized Costs = | \$0.054 | per kWh |
| Annual Utility Energy Reduction = | 4,299,355 | kWh | | \$441.626 | per kW |
| Annual Utility Gas Reduction = | 0 | therms | | N/A | per therm |
| Total Utility Demand Reduction = | 0 | Lifetime kW | Annual Participant Savings = | \$394,226 | |
| Total Utility Energy Reduction = | 94,690,731 | Lifetime kWh | Participant Simple Payback = | - | years |
| Total Utility Gas Reduction = | 0 | Lifetime therms | | | |



Program Description : Behavior Modification

Measure Type : All Measures

Program Type:

Residential
DS1

Please pick from drop down

Rate Class:

Input Data

General

First Year Utility Costs:

Electric Retail Rate = per kWh
 Natural Gas Retail Rate = per therm
 Electric Commodity Cost = per kWh
 Natural Gas Commodity Cost = per therm
 Electric Demand Cost = per kW/Yr
 Energy Escalation Rate =
 Demand Escalation Rate =
 Natural Gas Escalation Rate =

Other Inputs:

Environmental Externalities = per kWh
 Participant Discount Rate =
 Utility Discount Rate =
 Societal Discount Rate =
 General Input Data Year =
 Project Analysis Year 1 =
 Line Losses (Energy) =
 Line Losses (Peak) =
 Gas System Losses =
 Utility Variable O&M =
 Utility O&M Escalation Rate = per kWh

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|---------------------|-------------------|-------------------|
| Rebate Costs = | \$ - | \$ - | \$ - |
| Administrative Costs = | \$1,968,750 | \$984,375 | \$984,375 |
| Total | \$ 1,968,750 | \$ 984,375 | \$ 984,375 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|--------|-----------------|------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ - | \$ - | \$ - |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|------------|-----------|-----------|
| Project Life = | 1 | 1 | 1 |
| Demand Savings = | 6,687.50 | 0.00 | 0.00 |
| Annual Energy Savings = | 29,350,000 | 0 | 0 |
| Annual Natural Gas Savings = | 1,887,500 | 1,887,500 | 1,887,500 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

Test Results

| | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|---------------|------|--------------|----------------|
| Total Resource Cost Test | \$146,629 | 1.04 | \$3,800,405 | \$3,947,034 |
| Societal Test | \$299,686 | 1.08 | \$3,852,322 | \$4,152,008 |
| Participant Test | \$6,911,796 | N/A | \$0 | \$6,911,796 |
| Ratepayer Impact Measure Test | (\$7,044,736) | 0.36 | \$10,991,769 | \$3,947,034 |
| Utility Cost Test | \$146,629 | 1.04 | \$3,800,405 | \$3,947,034 |

Cost & Savings Summary

| | | | | | |
|--|------------|-----------------|------------------------------|-------------|-----------|
| Coincident Peak Utility Demand Reduction = | 7,229.73 | kW | Levelized Costs = | \$0.031 | per kWh |
| Annual Utility Energy Reduction = | 31,464,408 | kWh | | \$136.157 | per kW |
| Annual Utility Gas Reduction = | 1,921,120 | therms | | \$0.512 | per therm |
| Total Utility Demand Reduction = | 5,763,359 | Lifetime kW | Annual Participant Savings = | \$4,153,793 | |
| Total Utility Energy Reduction = | 31,464,408 | Lifetime kWh | | | |
| Total Utility Gas Reduction = | 5,763,359 | Lifetime therms | Participant Simple Payback = | - | years |



Program Description : ENERGY STAR New Homes
 Measure Type : All Measures

Program Type: Residential
 Rate Class: DS1 Please pick from drop down

Input Data
General

| | |
|-------------------------------|-----------|
| First Year Utility Costs: | |
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

| | |
|-------------------------------|---------|
| Other Inputs: | |
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Project Specific

| | | | |
|------------------------|---------------------|---------------------|---------------------|
| Utility Project Costs: | PY7 | PY8 | PY9 |
| Rebate Costs = | \$ 396,000 | \$ 396,000 | \$ 396,000 |
| Administrative Costs = | \$621,302 | \$621,302 | \$621,302 |
| Total | \$ 1,017,302 | \$ 1,017,302 | \$ 1,017,302 |

| | | | |
|---------------------------------|--------------|-----------------|--------------|
| Participants and Costs Inputs: | PY7 | PY8 | PY9 |
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 1,035,600 | \$ 1,035,600 | \$ 1,035,600 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

| | | | |
|-----------------------------------|---------|-----------|---------|
| Project Savings | PY7 | PY8 | PY9 |
| Project Life = | 30 | 30 | 30 |
| Demand Savings = | 243.95 | 243.95 | 243.95 |
| Annual Energy Savings = | 791,187 | 791,187 | 791,187 |
| Annual Natural Gas Savings = | 25,663 | 25,663 | 25,663 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

| | |
|--------------------------------------|---------|
| Early Retirement Inputs | |
| Remaining Useful Life for Retrofit = | 0 years |
| New Measure Cost (2012 \$) = | \$0 |
| Electric Savings Adjustment = | 0% |
| Other Fuels Savings Adjustment = | 0% |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|---------------|------|--------------|----------------|
| Total Resource Cost Test | \$859,916 | 1.18 | \$4,739,948 | \$5,599,864 |
| Societal Test | \$3,009,328 | 1.62 | \$4,827,335 | \$7,836,663 |
| Participant Test | \$6,626,958 | 3.24 | \$2,962,571 | \$9,589,529 |
| Ratepayer Impact Measure Test | (\$6,280,329) | 0.47 | \$11,880,193 | \$5,599,864 |
| Utility Cost Test | \$2,689,638 | 1.92 | \$2,910,226 | \$5,599,864 |

Cost & Savings Summary

| | | | | | |
|--|------------|-----------------|------------------------------|-----------|-----------|
| Coincident Peak Utility Demand Reduction = | 263.73 | kW | Levelized Costs = | \$0.048 | per kWh |
| Annual Utility Energy Reduction = | 848,185 | kWh | | \$153.157 | per kW |
| Annual Utility Gas Reduction = | 26,120 | therms | | \$0.854 | per therm |
| Total Utility Demand Reduction = | 2,350,829 | Lifetime kW | Annual Participant Savings = | \$95,023 | |
| Total Utility Energy Reduction = | 76,336,660 | Lifetime kWh | | | |
| Total Utility Gas Reduction = | 2,350,829 | Lifetime therms | Participant Simple Payback = | 10.9 | years |



ActOnEnergy

Program Description : HPwES
Measure Type : All Measures

Program Type: Residential
Rate Class: DS1 Please pick from drop down

Input Data
General

| | |
|-------------------------------|-----------|
| First Year Utility Costs: | |
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

| | |
|-------------------------------|---------|
| Other Inputs: | |
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

| | | | |
|------------------------|---------------------|---------------------|---------------------|
| Utility Project Costs: | PY7 | PY8 | PY9 |
| Rebate Costs = | \$ 3,490,978 | \$ 3,490,978 | \$ 3,490,978 |
| Administrative Costs = | \$2,689,074 | \$2,691,196 | \$2,724,819 |
| Total | \$ 6,180,052 | \$ 6,182,174 | \$ 6,215,797 |

| | | | |
|---------------------------------|--------------|-----------------|--------------|
| Participants and Costs Inputs: | PY7 | PY8 | PY9 |
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 9,086,812 | \$ 9,086,812 | \$ 9,086,812 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

| | | | |
|-----------------------------------|-----------|-----------|-----------|
| Project Savings | PY7 | PY8 | PY9 |
| Project Life = | 9 | 9 | 9 |
| Demand Savings = | 3,297.67 | 3,297.67 | 3,297.67 |
| Annual Energy Savings = | 5,345,568 | 5,345,568 | 5,345,568 |
| Annual Natural Gas Savings = | 768,779 | 768,779 | 768,779 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

| | |
|--------------------------------------|---------|
| Early Retirement Inputs | |
| Remaining Useful Life for Retrofit = | 0 years |
| New Measure Cost (2012 \$) = | \$0 |
| Electric Savings Adjustment = | 0% |
| Other Fuels Savings Adjustment = | 0% |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|----------------|------|--------------|----------------|
| Total Resource Cost Test | \$10,489,457 | 1.31 | \$33,722,088 | \$44,211,545 |
| Societal Test | \$20,266,318 | 1.59 | \$34,344,440 | \$54,610,758 |
| Participant Test | \$42,873,179 | 2.65 | \$25,994,902 | \$68,868,081 |
| Ratepayer Impact Measure Test | (\$34,707,504) | 0.56 | \$78,406,381 | \$43,698,877 |
| Utility Cost Test | \$25,984,951 | 2.47 | \$17,713,926 | \$43,698,877 |

Cost & Savings Summary

| | | | |
|--|----------------------------|------------------------------|-------------------|
| Coincident Peak Utility Demand Reduction = | 3,565.05 kW | Levelized Costs = | \$0.069 per kWh |
| Annual Utility Energy Reduction = | 5,730,669 kWh | | \$99.521 per kW |
| Annual Utility Gas Reduction = | 757,106 therms | | \$0.228 per therm |
| Total Utility Demand Reduction = | 44,341,744 Lifetime kW | Annual Participant Savings = | \$1,042,207 |
| Total Utility Energy Reduction = | 245,188,896 Lifetime kWh | | |
| Total Utility Gas Reduction = | 44,341,744 Lifetime therms | Participant Simple Payback = | 8.7 years |



ActOnEnergy

Program Description : HVAC
 Measure Type : All Measures

Program Type: Residential
 Rate Class: DS1 Please pick from drop down

Input Data
 General

First Year Utility Costs:

| | |
|-------------------------------|-----------|
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

Other Inputs:

| | |
|-------------------------------|---------|
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|---------------------|---------------------|---------------------|
| Rebate Costs = | \$ 2,068,425 | \$ 2,068,425 | \$ 2,068,425 |
| Administrative Costs = | \$776,503 | \$776,503 | \$776,503 |
| Total | \$ 2,844,928 | \$ 2,844,928 | \$ 2,844,928 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|--------------|-----------------|--------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 4,870,123 | \$ 4,870,123 | \$ 4,870,123 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|-----------|-----------|-----------|
| Project Life = | 0 | 0 | 0 |
| Demand Savings = | 3,383.95 | 3,383.95 | 3,383.95 |
| Annual Energy Savings = | 4,769,275 | 4,769,275 | 4,769,275 |
| Annual Natural Gas Savings = | 0 | 0 | 0 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|---------------|------|--------------|----------------|
| Total Resource Cost Test | \$3,117,773 | 1.19 | \$16,153,465 | \$19,271,238 |
| Societal Test | \$7,138,392 | 1.43 | \$16,451,274 | \$23,589,666 |
| Participant Test | \$10,552,175 | 1.76 | \$13,932,100 | \$24,484,274 |
| Ratepayer Impact Measure Test | (\$8,771,995) | 0.69 | \$28,043,233 | \$19,271,238 |
| Utility Cost Test | \$11,132,670 | 2.37 | \$8,138,568 | \$19,271,238 |

Cost & Savings Summary

| | | | | | |
|--|-------------|-----------------|------------------------------|-----------|-----------|
| Coincident Peak Utility Demand Reduction = | 3,684.57 | kW | Levelized Costs = | \$0.062 | per kWh |
| Annual Utility Energy Reduction = | 5,170,729 | kWh | | \$91.388 | per kW |
| Annual Utility Gas Reduction = | 0 | therms | | N/A | per therm |
| Total Utility Demand Reduction = | 0 | Lifetime kW | Annual Participant Savings = | \$468,820 | |
| Total Utility Energy Reduction = | 190,969,073 | Lifetime kWh | Participant Simple Payback = | 10.4 | years |
| Total Utility Gas Reduction = | 0 | Lifetime therms | | | |



ActOnEnergy

Program Description : Lighting
Measure Type : All Measures

Program Type: Residential
Rate Class: DS1 Please pick from drop down

Input Data
General

| | |
|-------------------------------|-----------|
| First Year Utility Costs: | |
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

| | |
|-------------------------------|---------|
| Other Inputs: | |
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

| | | | |
|------------------------|---------------------|-------------|-------------|
| Utility Project Costs: | PY7 | PY8 | PY9 |
| Rebate Costs = | \$ 4,040,000 | \$ - | \$ - |
| Administrative Costs = | \$2,311,096 | \$0 | \$0 |
| Total | \$ 6,351,096 | \$ - | \$ - |

| | | | |
|---------------------------------|--------------|-----------------|------|
| Participants and Costs Inputs: | PY7 | PY8 | PY9 |
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 4,328,571 | \$ - | \$ - |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

| | | | |
|-----------------------------------|------------|-----------|-----------|
| Project Savings | PY7 | PY8 | PY9 |
| Project Life = | 5.2 | 5 | 5 |
| Demand Savings = | 2,999.53 | 664.64 | 565.38 |
| Annual Energy Savings = | 26,358,566 | 5,840,603 | 4,968,305 |
| Annual Natural Gas Savings = | 0 | 0 | 0 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

| | |
|--------------------------------------|---------|
| Early Retirement Inputs | |
| Remaining Useful Life for Retrofit = | 0 years |
| New Measure Cost (2012 \$) = | \$0 |
| Electric Savings Adjustment = | 0% |
| Other Fuels Savings Adjustment = | 0% |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|----------------|------|--------------|----------------|
| Total Resource Cost Test | \$14,518,586 | 3.19 | \$6,639,667 | \$21,158,253 |
| Societal Test | \$15,631,568 | 3.35 | \$6,639,667 | \$22,271,235 |
| Participant Test | \$29,044,811 | 7.71 | \$4,328,571 | \$33,373,382 |
| Ratepayer Impact Measure Test | (\$15,644,225) | 0.26 | \$21,190,764 | \$5,546,539 |
| Utility Cost Test | (\$804,557) | 0.87 | \$6,351,096 | \$5,546,539 |

Cost & Savings Summary

| | | | |
|--|----------------------------|------------------------------|------------------|
| Coincident Peak Utility Demand Reduction = | 3,242.73 kW | Levelized Costs = | \$0.042 per kWh |
| Annual Utility Energy Reduction = | 28,257,468 kWh | | \$367.084 per kW |
| Annual Utility Gas Reduction = | -537,998 therms | | N/A per therm |
| Total Utility Demand Reduction = | (3,227,986) Lifetime kW | Annual Participant Savings = | \$2,591,047 |
| Total Utility Energy Reduction = | 169,544,810 Lifetime kWh | | |
| Total Utility Gas Reduction = | -3,227,986 Lifetime therms | Participant Simple Payback = | 1.7 years |



ActOnEnergy

Program Description : Moderate Income
 Measure Type : All Measures

Program Type: Residential
 Rate Class: DS1 Please pick from drop down

Input Data
 General

First Year Utility Costs:

| | |
|-------------------------------|-----------|
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

Other Inputs:

| | |
|-------------------------------|---------|
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|---------------------|---------------------|---------------------|
| Rebate Costs = | \$ 1,227,374 | \$ 3,841,337 | \$ 3,841,337 |
| Administrative Costs = | \$1,070,011 | \$5,838,436 | \$5,838,436 |
| Total | \$ 2,297,385 | \$ 9,679,773 | \$ 9,679,773 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|--------------|-----------------|--------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 2,142,369 | \$ 5,862,835 | \$ 5,862,835 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|-----------|-----------|-----------|
| Project Life = | 9 | 7 | 7 |
| Demand Savings = | 701.15 | 2,606.67 | 2,606.67 |
| Annual Energy Savings = | 1,193,502 | 6,604,235 | 6,604,235 |
| Annual Natural Gas Savings = | 219,987 | 462,778 | 462,778 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|----------------|------|--------------|----------------|
| Total Resource Cost Test | \$1,350,854 | 1.05 | \$24,985,269 | \$26,336,123 |
| Societal Test | \$7,071,127 | 1.28 | \$25,602,407 | \$32,673,534 |
| Participant Test | \$30,949,277 | 3.25 | \$13,737,668 | \$44,686,945 |
| Ratepayer Impact Measure Test | (\$32,657,962) | 0.44 | \$58,307,931 | \$25,649,969 |
| Utility Cost Test | \$5,341,155 | 1.26 | \$20,308,814 | \$25,649,969 |

Cost & Savings Summary

| | | | | | |
|--|-------------|-----------------|------------------------------|-----------|-----------|
| Coincident Peak Utility Demand Reduction = | 758.00 | kW | Levelized Costs = | \$0.124 | per kWh |
| Annual Utility Energy Reduction = | 1,279,483 | kWh | | \$251.767 | per kW |
| Annual Utility Gas Reduction = | 217,312 | therms | | \$0.278 | per therm |
| Total Utility Demand Reduction = | 21,818,304 | Lifetime kW | Annual Participant Savings = | \$265,186 | |
| Total Utility Energy Reduction = | 197,830,675 | Lifetime kWh | | | |
| Total Utility Gas Reduction = | 21,818,304 | Lifetime therms | Participant Simple Payback = | 8.1 | years |



ActOnEnergy

Program Description : Multifamily
Measure Type : All Measures

Program Type: Residential
Rate Class: DS1 Please pick from drop down

Input Data
General

| | |
|-------------------------------|-----------|
| First Year Utility Costs: | |
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

| | |
|-------------------------------|---------|
| Other Inputs: | |
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

| | | | |
|------------------------|---------------------|---------------------|---------------------|
| Utility Project Costs: | PY7 | PY8 | PY9 |
| Rebate Costs = | \$ - | \$ - | \$ - |
| Administrative Costs = | \$ 1,374,603 | \$ 1,374,603 | \$ 1,374,603 |
| Total | \$ 1,374,603 | \$ 1,374,603 | \$ 1,374,603 |

| | | | |
|---------------------------------|--------|-----------------|------|
| Participants and Costs Inputs: | PY7 | PY8 | PY9 |
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ - | \$ - | \$ - |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

| | | | |
|-----------------------------------|-----------|-----------|-----------|
| Project Savings | PY7 | PY8 | PY9 |
| Project Life = | 6 | 6 | 6 |
| Demand Savings = | 458.37 | 458.37 | 458.37 |
| Annual Energy Savings = | 6,231,609 | 6,231,609 | 6,231,609 |
| Annual Natural Gas Savings = | 118,961 | 118,961 | 118,961 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

| | |
|--------------------------------------|---------|
| Early Retirement Inputs | |
| Remaining Useful Life for Retrofit = | 0 years |
| New Measure Cost (2012 \$) = | \$0 |
| Electric Savings Adjustment = | 0% |
| Other Fuels Savings Adjustment = | 0% |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|----------------|------|--------------|----------------|
| Total Resource Cost Test | \$3,804,171 | 1.97 | \$3,932,365 | \$7,736,536 |
| Societal Test | \$4,938,613 | 2.23 | \$4,004,863 | \$8,943,476 |
| Participant Test | \$16,255,817 | N/A | \$0 | \$16,255,817 |
| Ratepayer Impact Measure Test | (\$13,424,622) | 0.31 | \$19,596,517 | \$6,171,895 |
| Utility Cost Test | \$2,239,530 | 1.57 | \$3,932,365 | \$6,171,895 |

Cost & Savings Summary

| | | | |
|--|---------------------------|------------------------------|-------------------|
| Coincident Peak Utility Demand Reduction = | 495.53 kW | Levelized Costs = | \$0.027 per kWh |
| Annual Utility Energy Reduction = | 6,680,541 kWh | | \$354.383 per kW |
| Annual Utility Gas Reduction = | 55,343 therms | | \$0.587 per therm |
| Total Utility Demand Reduction = | 2,023,175 Lifetime kW | Annual Participant Savings = | \$692,527 |
| Total Utility Energy Reduction = | 135,500,707 Lifetime kWh | | |
| Total Utility Gas Reduction = | 2,023,175 Lifetime therms | Participant Simple Payback = | - years |



Program Description : [School Kits](#)
 Measure Type : [All Measures](#)

Program Type: **Residential** Please pick from drop down
 Rate Class: **DS1**

Input Data
General

| | |
|-------------------------------|-----------|
| First Year Utility Costs: | |
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

| | |
|-------------------------------|---------|
| Other Inputs: | |
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

| | | | |
|------------------------|-------------------|-------------------|-------------------|
| Utility Project Costs: | PY7 | PY8 | PY9 |
| Rebate Costs = | \$ - | \$ - | \$ - |
| Administrative Costs = | \$ 235,550 | \$ 235,550 | \$ 235,550 |
| Total | \$ 235,550 | \$ 235,550 | \$ 235,550 |

| | | | |
|---------------------------------|--------|-----------------|------|
| Participants and Costs Inputs: | PY7 | PY8 | PY9 |
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ - | \$ - | \$ - |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

| | | | |
|-----------------------------------|---------|-----------|---------|
| Project Savings | PY7 | PY8 | PY9 |
| Project Life = | 0 | 0 | 0 |
| Demand Savings = | 49.95 | 49.95 | 49.95 |
| Annual Energy Savings = | 390,320 | 390,320 | 390,320 |
| Annual Natural Gas Savings = | 54,986 | 54,986 | 54,986 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

| | |
|--------------------------------------|---------|
| Early Retirement Inputs | |
| Remaining Useful Life for Retrofit = | 0 years |
| New Measure Cost (2012 \$) = | \$0 |
| Electric Savings Adjustment = | 0% |
| Other Fuels Savings Adjustment = | 0% |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|---------------|------|-------------|----------------|
| Total Resource Cost Test | \$399,096 | 1.59 | \$673,845 | \$1,072,941 |
| Societal Test | \$525,244 | 1.77 | \$686,268 | \$1,211,511 |
| Participant Test | \$1,998,966 | N/A | \$0 | \$1,998,966 |
| Ratepayer Impact Measure Test | (\$1,682,201) | 0.36 | \$2,609,342 | \$927,141 |
| Utility Cost Test | \$253,296 | 1.38 | \$673,845 | \$927,141 |

Cost & Savings Summary

| | | | |
|--|---------------------------|------------------------------|-------------------|
| Coincident Peak Utility Demand Reduction = | 54.00 kW | Levelized Costs = | \$0.044 per kWh |
| Annual Utility Energy Reduction = | 418,440 kWh | | \$333.698 per kW |
| Annual Utility Gas Reduction = | 50,302 therms | | \$0.359 per therm |
| Total Utility Demand Reduction = | 1,224,133 Lifetime kW | Annual Participant Savings = | \$75,327 |
| Total Utility Energy Reduction = | 9,350,039 Lifetime kWh | | |
| Total Utility Gas Reduction = | 1,224,133 Lifetime therms | Participant Simple Payback = | - years |



Program Description : Total Business Programs

Measure Type : All Measures

Program Type:

Commercial Please pick from drop down
 DS2 DS3, DS4

Rate Class:

Input Data

General

First Year Utility Costs:

| | |
|-------------------------------|-----------|
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

Other Inputs:

| | |
|-------------------------------|---------|
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|----------------------|----------------------|----------------------|
| Rebate Costs = | \$ 13,297,451 | \$ 13,831,002 | \$ 14,380,717 |
| Administrative Costs = | \$9,296,293 | \$9,488,880 | \$9,283,481 |
| Total | \$ 22,593,743 | \$ 23,319,882 | \$ 23,664,198 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|---------------|-----------------|---------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 24,007,938 | \$ 25,607,768 | \$ 27,526,945 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|-------------|-------------|-------------|
| Project Life = | 11 | 11 | 11 |
| Demand Savings = | 58,729.78 | 62,404.92 | 66,440.35 |
| Annual Energy Savings = | 178,632,716 | 187,856,770 | 198,438,048 |
| Annual Natural Gas Savings = | 1,232,657 | 1,056,747 | 835,679 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|-----------------|-------|---------------|----------------|
| Total Resource Cost Test | \$503,682,805 | 6.03 | \$100,165,495 | \$603,848,300 |
| Societal Test | \$639,129,328 | 7.26 | \$102,076,002 | \$741,205,330 |
| Participant Test | \$835,315,730 | 12.38 | \$73,399,453 | \$908,715,183 |
| Ratepayer Impact Measure Test | (\$393,274,621) | 0.61 | \$997,061,526 | \$603,786,906 |
| Utility Cost Test | \$537,488,589 | 9.11 | \$66,298,317 | \$603,786,906 |

Cost & Savings Summary

| | | | | | |
|--|---------------|-----------------|------------------------------|--------------|-----------|
| Coincident Peak Utility Demand Reduction = | 70,222.23 | kW | Levelized Costs = | \$0.009 | per kWh |
| Annual Utility Energy Reduction = | 218,027,995 | kWh | | \$27.111 | per kW |
| Annual Utility Gas Reduction = | 1,254,613 | therms | | \$1.224 | per therm |
| Total Utility Demand Reduction = | 9,309,914 | Lifetime kW | Annual Participant Savings = | \$18,263,873 | |
| Total Utility Energy Reduction = | 8,815,629,093 | Lifetime kWh | Participant Simple Payback = | 1.3 | years |
| Total Utility Gas Reduction = | 9,309,914 | Lifetime therms | | | |



Program Description : C&I Standard

Measure Type : All Measures

Program Type:

Commercial

Please pick from drop down

Rate Class:

DS2

DS3

Input Data

General

First Year Utility Costs:

Electric Retail Rate = per kWh
 Natural Gas Retail Rate = per therm
 Electric Commodity Cost = per kWh
 Natural Gas Commodity Cost = per therm
 Electric Demand Cost = per kW/Yr
 Energy Escalation Rate =
 Demand Escalation Rate =
 Natural Gas Escalation Rate =

Other Inputs:

Environmental Externalities = per kWh
 Participant Discount Rate =
 Utility Discount Rate =
 Societal Discount Rate =
 General Input Data Year =
 Project Analysis Year 1 =
 Line Losses (Energy) =
 Line Losses (Peak) =
 Gas System Losses =
 Utility Variable O&M =
 Utility O&M Escalation Rate = per kWh

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|----------------------|----------------------|----------------------|
| Rebate Costs = | \$ 6,904,920 | \$ 7,464,489 | \$ 8,040,132 |
| Administrative Costs = | \$6,248,496 | \$6,452,196 | \$6,257,875 |
| Total | \$ 13,153,416 | \$ 13,916,685 | \$ 14,298,008 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|----------------|-----------------|---------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 16,135,253 | \$ 17,770,258 | \$ 19,724,491 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 per kWh | | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|------------------|-------------|-------------|
| Project Life = | 14 | 14 | 14 |
| Demand Savings = | 41,468.01 | 45,223.43 | 49,338.86 |
| Annual Energy Savings = | 109,585,598 | 119,130,794 | 130,032,122 |
| Annual Natural Gas Savings = | 1,034,066 | 1,034,066 | 1,034,066 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 (Units) | | |
| Non-Energy Reduction Rate = | \$1.50 per Units | | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

Remaining Useful Life for Retrofit = 0 years
 New Measure Cost (2012 \$) = \$0
 Electric Savings Adjustment = 0%
 Other Fuels Savings Adjustment = 0%

Test Results

| | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|-----------------|-------|---------------|----------------|
| Total Resource Cost Test | \$320,476,624 | 5.64 | \$69,052,976 | \$389,529,600 |
| Societal Test | \$410,766,432 | 6.84 | \$70,391,566 | \$481,157,998 |
| Participant Test | \$477,633,868 | 10.37 | \$50,975,117 | \$528,608,985 |
| Ratepayer Impact Measure Test | (\$195,041,985) | 0.67 | \$584,568,998 | \$389,527,013 |
| Utility Cost Test | \$350,132,223 | 9.89 | \$39,394,790 | \$389,527,013 |

Cost & Savings Summary

| | | | |
|--|-----------------------------|------------------------------|---------------------|
| Coincident Peak Utility Demand Reduction = | 44,830.15 kW | Levelized Costs = | \$0.008 per kWh |
| Annual Utility Energy Reduction = | 117,416,862 kWh | | \$21.210 per kW |
| Annual Utility Gas Reduction = | -86,884 therms | | (\$0.316) per therm |
| Total Utility Demand Reduction = | (38,480,137) Lifetime kW | Annual Participant Savings = | \$11,389,251 |
| Total Utility Energy Reduction = | 5,489,862,417 Lifetime kWh | | |
| Total Utility Gas Reduction = | -38,480,137 Lifetime therms | Participant Simple Payback = | 1.4 years |



ActOnEnergy

Program Description : C&I Custom
Measure Type : All Measures

Program Type: Industrial
Rate Class: DS4 Please pick from drop down

Input Data
General

First Year Utility Costs:

| | |
|-------------------------------|-----------|
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

Other Inputs:

| | |
|-------------------------------|---------|
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|---------------------|---------------------|---------------------|
| Rebate Costs = | \$ 4,985,607 | \$ 4,964,279 | \$ 4,943,024 |
| Administrative Costs = | \$ 2,444,789 | \$ 2,435,680 | \$ 2,426,598 |
| Total | \$ 7,430,396 | \$ 7,399,959 | \$ 7,369,623 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|--------------|-----------------|--------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 5,862,754 | \$ 5,834,272 | \$ 5,805,887 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|------------|------------|------------|
| Project Life = | 13 | 13 | 13 |
| Demand Savings = | 11,555.26 | 11,494.38 | 11,433.70 |
| Annual Energy Savings = | 46,221,051 | 45,977,518 | 45,734,813 |
| Annual Natural Gas Savings = | 1,139,309 | 1,135,436 | 1,131,575 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|----------------|-------|---------------|----------------|
| Total Resource Cost Test | \$108,556,416 | 5.59 | \$23,661,663 | \$132,218,078 |
| Societal Test | \$136,735,970 | 6.67 | \$24,096,529 | \$160,832,498 |
| Participant Test | \$152,250,751 | 10.12 | \$16,692,979 | \$168,943,730 |
| Ratepayer Impact Measure Test | (\$52,642,412) | 0.72 | \$184,860,490 | \$132,218,078 |
| Utility Cost Test | \$111,045,909 | 6.24 | \$21,172,170 | \$132,218,078 |

Cost & Savings Summary

| | | | | | |
|--|---------------|-----------------|------------------------------|-------------|-----------|
| Coincident Peak Utility Demand Reduction = | 12,492.18 | kW | Levelized Costs = | \$0.011 | per kWh |
| Annual Utility Energy Reduction = | 49,497,806 | kWh | | \$43.975 | per kW |
| Annual Utility Gas Reduction = | 1,159,602 | therms | | \$0.175 | per therm |
| Total Utility Demand Reduction = | 45,070,906 | Lifetime kW | Annual Participant Savings = | \$3,625,167 | |
| Total Utility Energy Reduction = | 1,920,254,840 | Lifetime kWh | Participant Simple Payback = | 1.6 | years |
| Total Utility Gas Reduction = | 45,070,906 | Lifetime therms | | | |



ActOnEnergy

Program Description : C&I Retro-commissioning

Measure Type : All Measures

Program Type:

Commercial
DS4

Please pick from drop down

Rate Class:

Input Data

General

First Year Utility Costs:

Electric Retail Rate = per kWh
 Natural Gas Retail Rate = per therm
 Electric Commodity Cost = per kWh
 Natural Gas Commodity Cost = per therm
 Electric Demand Cost = per kW/Yr
 Energy Escalation Rate =
 Demand Escalation Rate =
 Natural Gas Escalation Rate =

Other Inputs:

Environmental Externalities = per kWh
 Participant Discount Rate =
 Utility Discount Rate =
 Societal Discount Rate =
 General Input Data Year =
 Project Analysis Year 1 =
 Line Losses (Energy) =
 Line Losses (Peak) =
 Gas System Losses =
 Utility Variable O&M =
 Utility O&M Escalation Rate = per kWh

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|---------------------|---------------------|---------------------|
| Rebate Costs = | \$ 1,406,924 | \$ 1,402,234 | \$ 1,397,560 |
| Administrative Costs = | \$603,007 | \$601,004 | \$599,007 |
| Total | \$ 2,009,931 | \$ 2,003,238 | \$ 1,996,567 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|--------------|-----------------|--------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 2,009,931 | \$ 2,003,238 | \$ 1,996,567 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|------------|------------|------------|
| Project Life = | 5 | 5 | 5 |
| Demand Savings = | 5,706.52 | 5,687.11 | 5,667.78 |
| Annual Energy Savings = | 22,826,067 | 22,748,458 | 22,671,113 |
| Annual Natural Gas Savings = | 178,711 | 178,103 | 177,498 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

Test Results

| | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|----------------|------|--------------|----------------|
| Total Resource Cost Test | \$13,051,150 | 2.75 | \$7,450,857 | \$20,502,007 |
| Societal Test | \$15,943,970 | 3.10 | \$7,587,907 | \$23,531,877 |
| Participant Test | \$22,029,150 | 4.84 | \$5,731,357 | \$27,760,507 |
| Ratepayer Impact Measure Test | (\$10,544,056) | 0.66 | \$31,046,063 | \$20,502,007 |
| Utility Cost Test | \$14,770,650 | 3.58 | \$5,731,357 | \$20,502,007 |

Cost & Savings Summary

| | | | | | |
|--|-------------|-----------------|------------------------------|-------------|-----------|
| Coincident Peak Utility Demand Reduction = | 6,169.21 | kW | Levelized Costs = | \$0.017 | per kWh |
| Annual Utility Energy Reduction = | 24,444,278 | kWh | | \$67.053 | per kW |
| Annual Utility Gas Reduction = | 181,894 | therms | | \$0.154 | per therm |
| Total Utility Demand Reduction = | 2,719,145 | Lifetime kW | Annual Participant Savings = | \$2,347,906 | |
| Total Utility Energy Reduction = | 365,418,924 | Lifetime kWh | | | |
| Total Utility Gas Reduction = | 2,719,145 | Lifetime therms | Participant Simple Payback = | 0.9 | years |



Program Description : [Large C&I](#)
 Measure Type : [All Measures](#)

Program Type: **Commercial** Please pick from drop down
 Rate Class: **DS4**

Input Data
General

First Year Utility Costs:

| | |
|-------------------------------|-----------|
| Electric Retail Rate = | per kWh |
| Natural Gas Retail Rate = | per therm |
| Electric Commodity Cost = | per kWh |
| Natural Gas Commodity Cost = | per therm |
| Electric Demand Cost = | per kW/Yr |
| Energy Escalation Rate = | |
| Demand Escalation Rate = | |
| Natural Gas Escalation Rate = | |

Other Inputs:

| | |
|-------------------------------|---------|
| Environmental Externalities = | per kWh |
| Participant Discount Rate = | |
| Utility Discount Rate = | |
| Societal Discount Rate = | |
| General Input Data Year = | |
| Project Analysis Year 1 = | |
| Line Losses (Energy) = | |
| Line Losses (Peak) = | |
| Gas System Losses = | |
| Utility Variable O&M = | |
| Utility O&M Escalation Rate = | per kWh |

Project Specific

Utility Project Costs:

| | PY7 | PY8 | PY9 |
|------------------------|---------------------|---------------------|---------------------|
| Rebate Costs = | \$ 1,412,798 | \$ 1,412,798 | \$ 1,412,798 |
| Administrative Costs = | \$ 297,202 | \$ 297,202 | \$ 297,202 |
| Total | \$ 1,710,000 | \$ 1,710,000 | \$ 1,710,000 |

Participants and Costs Inputs:

| | PY7 | PY8 | PY9 |
|---------------------------------|--------------|-----------------|--------------|
| Participants = | 1 | 1 | 1 |
| Direct Participant Costs = | \$ 2,514,302 | \$ 2,514,302 | \$ 2,514,302 |
| Other Participant Costs = | \$ - | per participant | |
| Other Costs Escalation Rate = | 2.50% | | |
| Increased Project O&M Cost = | \$0.00 | per kWh | |
| Increased O&M Escalation Rate = | 0.00% | | |

Project Savings

| | PY7 | PY8 | PY9 |
|-----------------------------------|------------|------------|------------|
| Project Life = | 13 | 13 | 13 |
| Demand Savings = | 6,225.89 | 6,225.89 | 6,225.89 |
| Annual Energy Savings = | 24,903,558 | 24,903,558 | 24,903,558 |
| Annual Natural Gas Savings = | 0 | 0 | 0 |
| Energy Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Demand Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Natural Gas Net-To-Gross Factor = | 100.00% | 100.00% | 100.00% |
| Non-Energy Reduction = | 0 | (Units) | |
| Non-Energy Reduction Rate = | \$1.50 | per Units | |
| Non-Energy Escalation Rate = | 2.0% | | |

Note: Avoided energy costs include a 10% Non-Energy Benefits (NEBs) adder

Early Retirement Inputs

| | | |
|--------------------------------------|-----|-------|
| Remaining Useful Life for Retrofit = | 0 | years |
| New Measure Cost (2012 \$) = | \$0 | |
| Electric Savings Adjustment = | 0% | |
| Other Fuels Savings Adjustment = | 0% | |

| Test Results | NPV | B/C | Total Costs | Total Benefits |
|--------------------------------------|----------------|-------|--------------|----------------|
| Total Resource Cost Test | \$53,496,858 | 7.65 | \$8,042,949 | \$61,539,807 |
| Societal Test | \$67,416,510 | 9.23 | \$8,191,230 | \$75,607,740 |
| Participant Test | \$60,032,197 | 9.35 | \$7,192,734 | \$67,224,932 |
| Ratepayer Impact Measure Test | (\$11,014,601) | 0.85 | \$72,554,408 | \$61,539,807 |
| Utility Cost Test | \$56,647,961 | 12.58 | \$4,891,846 | \$61,539,807 |

Cost & Savings Summary

| | | | | | |
|--|---------------|-----------------|------------------------------|-------------|-----------|
| Coincident Peak Utility Demand Reduction = | 6,730.69 | kW | Levelized Costs = | \$0.006 | per kWh |
| Annual Utility Energy Reduction = | 26,669,049 | kWh | | \$25.693 | per kW |
| Annual Utility Gas Reduction = | 0 | therms | | N/A | per therm |
| Total Utility Demand Reduction = | 0 | Lifetime kW | Annual Participant Savings = | \$2,431,832 | |
| Total Utility Energy Reduction = | 1,040,092,911 | Lifetime kWh | Participant Simple Payback = | 1.0 | years |
| Total Utility Gas Reduction = | 0 | Lifetime therms | | | |