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SOUTHWESTERN PUBLIC SERVICE COMPANY

2008 Energy Efficiency and Load Management Annual Report

Prepared in Compliance with the Efficient Use of Energy Act and 17.7.2 NMAC (Energy Efficiency Rule)
Case No. 07-00376-UT

AUGUST 1, 2009

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Glossary of Acronyms and Defined Terms

Acronym/Defined Term	Meaning
2008 Plan	SPS's 2008 Energy Efficiency and Load Management Plan (Attachment DLS-1 to the Direct Testimony of Debra L. Sundin, filed in Case No. 07-00376-UT)
2008 Report	SPS's 2008 Energy Efficiency and Load Management Annual Report
ASHP	Air-Source Heat Pump
CFL	Compact Fluorescent Light Bulb
Commission or NMPRC	New Mexico Public Regulation Commission
EUEA	New Mexico Efficient Use of Energy Act, as amended by Senate Bill 418 (2007) and House Bill 305 (2008), §§62-17-1 through 62-17-11 NMSA 1978
Evaluator	Independent Program Evaluator, the third-party contractor that will conduct all measurement & verification of the programs.
Generator kW; Generator kWh	Demand and energy savings, respectively, measured at the generator, corrected for transmission line losses and free-rider/drivership.
Customer kW; Customer kWh	Demand and energy savings measured at the customer meter.
Home Use Study	2008 Home Use Study performed by Wiese Research Associates
HVAC	Heating, Ventilation and Air Conditioning
LIHEAP	Low-Income Home Energy Assistance Program
LivingWise®	LivingWise® is the name given to the curriculum and energy savings kits program.
MFA	Mortgage Finance Authority, a low-income community agency
M&V	Measurement and Verification
NEB	Non-Energy Benefits refers to benefits of the energy efficiency and load management programs that are unrelated to the generation, transmission, distribution, or cost of energy.
O&M	Operations and Maintenance
Rule	Energy Efficiency Rule, 17.7.2 NMAC
SPS	Southwestern Public Service Company
TRC	Total Resource Cost, a test of cost-effectiveness as defined in the Efficient Use of Energy Act
Xcel Energy	Xcel Energy Inc.

Document Layout
This 2008 Annual Report includes the following sections:

- Section I provides the Executive Summary consisting of an Introduction, Background, and Summary of Results;
- Section II provides the reporting requirements as stated in 17.7.2.13 NMAC and from the Final Order in Case No. 07-00376-UT;
- Section III provides the program descriptions including an explanation of deviations from goal and changes during 2008, organized into the Residential, Low-Income, Business, Large Customer, and Planning & Research Segments; and
- Section IV provides benefit-cost analyses for the Residential, Low-Income, Business, and Large Customer programs, as well as the overall portfolio.

Section I. Executive Summary

Introduction
In accordance with the Efficient Use of Energy Act ("EUEA"), as amended by Senate Bill 418 (2007) and House Bill 305 (2008) (§§62-17-1 through 62-17-11 NMSA 1978, "EUEA"), and the New Mexico Public Regulation Commission's ("Commission" or "NMPRC") Energy Efficiency Rule ("17.7.2 NMAC", "Rule"), Southwestern Public Service Company ("SPS") respectfully submits for Commission review SPS's 2008 Energy Efficiency and Load Management Annual Report ("2008 Annual Report"). The EUEA and its associated Rule require public utilities to offer cost-effective energy efficiency and load management programs and authorizes them to receive cost recovery for qualified expenditures. Further, 17.7.2.13.B NMAC requires SPS to file with the Commission by August 1 of each year, a report on its energy efficiency and load management programs during the prior calendar year. The specific reporting requirements are discussed in Section II.

In addition to the above requirements, the Final Order in Case No. 07-00376-UT (SPS's 2008 Energy Efficiency and Load Management Plan ("2008 Plan")) required SPS to include in its August 1, 2009 Annual Report, a reconciliation of the revenues and expenses collected under its Energy Efficiency Tariff Rider, and testimony concerning its ability to mitigate or offset lost fixed cost disincentives. SPS has included reconciliation information on its Energy Efficiency Tariff Rider in Section II of this report. SPS has not submitted testimony regarding its lost fixed costs in this proceeding, as this subject is being addressed in the ongoing rulemaking, Case No. 08-00024-UT.

With this 2008 Annual Report, SPS provides the expenditures, savings, and cost-effectiveness results (based on un-verified results; see Section II, C (1) M&V). In 2008, SPS offered eight programs in four customer segments: Residential, Low-Income, Business, and Large Customer (listed below in Table 1).

Background

SPS filed its 2008 Plan on September 24, 2007 and received final approval from the Commission on April 17, 2008 (Case No. 07-00376-UT). SPS filed a compliance report with the updated tariff rider value and partial-year program goals and budgets on May 21, 2008. SPS launched the programs and began collection of the tariff rider on June 1, 2008.

The 2008 Plan was SPS's first energy efficiency and load management portfolio to be presented to the Commission under the EUEA. This report reflects costs that SPS incurred during 2007 and early 2008 to prepare for these new programs, as well as the costs incurred during the second half of 2008 to administer the programs. Although these expenditures were spread over two calendar years, all costs were in preparation for the 2008 program offerings. Therefore, the benefit-cost analyses provided in this filing, both for the individual programs and the overall portfolio, include all 2007 and 2008 costs. The savings provided in this report were achieved by the programs between program launch on June 1, 2008 and December 31, 2008.

Summary of Results

In 2008, SPS achieved savings of 558 kW and 6,147,126 kWh at the generator, at a total cost of $1,216,755 (2007 and 2008 expenditures combined). Table 1, below, shows SPS's program-level partial-year goals, revised budget, and Total Resource Cost ("TRC") Test ratios as filed with the Commission on May 21, 2008 in Case No. 07-00376-UT.

Table 1: 2008 Program Goals and Budgets (as Revised on May 21, 2008)

Program	Participants	Budget	Customer kW	Generator kW	Generator kWh	TRC Test
Residential Segment						
Air-Source Heat Pumps	31	$23,000	14	14	45,500	1.36
Home Lighting	20,000	$284,644	1,040	124	1,509,752	1.42
LivingWise	3,018	$134,285	162	25	1,055,961	2.58
Total Residential	**23,049**	**$441,929**	**1,216**	**163**	**2,611,213**	**1.76**
Total Low-Income	**16,030**	**$99,822**	**999**	**81**	**1,338,301**	**2.71**
Business Segment						
Cooling Efficiency	36	$78,201	46	35	99,721	0.91
Custom Efficiency	20	$158,092	308	153	1,843,780	1.95
Lighting Efficiency	29	$191,444	248	161	793,762	1.91
Total Business	**85**	**$427,737**	**601**	**349**	**2,737,263**	**1.82**
Total Large Customer	**TBD**	**$24,000**	**TBD**	**TBD**	**TBD**	**TBD**
Planning & Research Segment						
General Advertising	N/A	$45,000	N/A	N/A	N/A	N/A
Market Research	N/A	$46,379	N/A	N/A	N/A	N/A
Planning & Administration	N/A	$342,611	N/A	N/A	N/A	N/A
Product Development	N/A	$88,575	N/A	N/A	N/A	N/A
Total Planning & Research	**N/A**	**$522,565**	**N/A**	**N/A**	**N/A**	**N/A**
TOTAL PORTFOLIO	**39,164**	**$1,516,053**	**2,816**	**593**	**6,686,777**	**1.45**

In compliance with 17.7.2.13.C(7) NMAC, Table 2, below, provides SPS's actual 2008 program achievements, expenditures and TRC test ratios. Please note that the savings provided in this Annual Report are based on SPS's calculations and have not yet been measured and verified by the Independent Program Evaluator. As can be derived from Tables 1 and 2, the overall 2008 energy efficiency and load management portfolio met 92% of the partial-year energy savings goal while spending 82% of the budget. The overall portfolio was cost-effective, achieving a TRC Test ratio of 1.54. Despite this fact, 2008 was a challenging year for SPS. While three of the four Residential and Low-Income programs were cost-effective, the Business programs experienced low participation and none passed the TRC Test. The successes and shortfalls of the individual programs are discussed in Section III of this report. SPS will continue to improve its programs and increase customer awareness of them in the coming years. SPS

is optimistic that as customer awareness grows, the programs will see increased participation, which will support cost-effective programs.

In its first year, SPS worked in good faith to comply with the EUEA and to offer cost-effective energy efficiency and load management programs to all of its customers. SPS will continue to work going forward to meet the statutory goals to obtain all cost-effective and achievable energy efficiency and load management, but no less than a reduction of 5% of 2005 retail sales by 2014 and 10% by 2020.

Table 2: 2008 Program Achievements and Expenditures

Program	Participants	Expenditures	Customer kW	Generator kW	Generator kWh	TRC Test
Residential Segment						
Air-Source Heat Pumps	8	$21,608	5	5	17,469	0.77
Home Lighting	27,346	$169,682	1422	170	2,064,285	2.55
LivingWise	5,959	$229,567	499	268	2,549,298	4.07
Total Residential	**33,313**	**$420,857**	**1926**	**443**	**4,631,052**	**3.13**
Total Low-Income	**18,007**	**$94,349**	**826**	**91**	**1,392,536**	**2.84**
Business Segment						
Cooling Efficiency	2	$38,911	10	9	33,935	0.72
Custom Efficiency	1	$28,546	4	5	36,258	0.58
Lighting Efficiency	3	$66,750	17	11	53,344	0.63
Total Business	**6**	**$134,208**	**31**	**24**	**123,537**	**0.65**
Total Large Customer	**0**	**$0**	**0**	**0**	**0**	**0**
Planning & Research Segment						
General Advertising	N/A	$22,788	N/A	N/A	N/A	N/A
Market Research	N/A	$19,709	N/A	N/A	N/A	N/A
Planning & Administration	N/A	$395,868	N/A	N/A	N/A	N/A
Product Development	N/A	$128,977	N/A	N/A	N/A	N/A
Total Planning & Research	**N/A**	**$567,342**	**N/A**	**N/A**	**N/A**	**N/A**
TOTAL PORTFOLIO	**51,326**	**$1,216,755**	**2,783**	**558**	**6,147,126**	**1.54**

Section II: 17.7.2.13 NMAC Reporting Requirements

This section of the Annual Report follows the reporting requirements and section headings as specified in the Energy Efficiency Rule 17.7.2.13.C NMAC.

(1) Independent Measurement and Verification Report

17.7.2.13.C(1) requires that utilities provide a Measurement and Verification ("M&V") Report provided by an Independent Program Evaluator ("Evaluator") every year with its Annual Report. SPS has requested a variance from this requirement because its M&V Report is not yet completed. In preparation for these M&V requirements, the Commission formed an Evaluation Committee made up of the New Mexico utilities and other interested parties. For the past several months, the Evaluation Committee has worked to develop and standardize a contract for the Evaluator. The Committee has presented its contract to the Commission for approval and expects that the proposed contract will soon be ready for submittal to the Independent Program Evaluator. All utilities will use the same Evaluator. Once the evaluation is completed for the 2008 programs, SPS will file its M&V Report with the Commission. In compliance with the reporting requirements, the M&V Report will include:

- Expenditure documentation, at both the total portfolio and individual program levels;
- Measured and verified savings;
- Cost-effectiveness of all of SPS's energy efficiency and load management programs;
- Deemed savings assumptions and all other assumptions used by the Evaluator;
- Description of the M&V process, including confirmation that:
    - measures were actually installed;
    - installations meet reasonable quality standards; and
    - measures are operating correctly and are expected to generate the predicted savings.

(2) Program Expenditures Not Included in the M&V Report

In 2007 and 2008, SPS spent a total of $1,216,755 for its energy efficiency programs. These expenditures included all expenses incurred by SPS to develop and implement the programs. All of these expenditures will be included in the M&V Report provided by the Independent Program Evaluator.

(3) Budgeted Funds Not Spent in Program Year and
(4) Material Variances in Program Costs

SPS provided a forecasted partial-year budget in its May 21, 2008 Compliance Filing. At that time, SPS anticipated that it would spend a total of $1,516,053. In 2007 and 2008 combined, SPS had actual expenditures of $1,216,755. As presented in the table below, SPS had a total of $299,298 of unspent funds in 2008. SPS addresses the reasons for these unspent funds in the "Deviation from Goal" section of each program discussion. These unspent funds will not be carried over into 2009. Any over-collection above

projected spending is returned to customers, with interest (discussed further in next reporting section (5) and (9), below).

Table 3: 2008 Forecasted Budget, Actual Expenditures and Variance by Program

Program	Budget	Actual Spend	Variance
Residential Segment			
Air-Source Heat Pumps	$23,000	$21,608	($1,392)
Home Lighting	$284,644	$169,682	($114,962)
LivingWise	$134,285	$229,567	$95,282
Total Residential	**$441,929**	**$420,857**	**($21,072)**
Total Low-Income	**$99,822**	**$94,349**	**($5,473)**
Business Segment			
Cooling Efficiency	$78,201	$38,911	($39,290)
Custom Efficiency	$158,092	$28,546	($129,545)
Lighting Efficiency	$191,444	$66,750	($124,694)
Total Business	**$427,737**	**$134,208**	**($293,529)**
Total Large Customer	**$24,000**	**$0**	**($24,000)**
Planning & Research Segment			
General Advertising	$45,000	$22,788	($22,212)
Market Research	$46,379	$19,709	($26,670)
Planning & Administration	$342,611	$395,868	$53,257
Product Development	$88,575	$128,977	$40,402
Total Planning & Research	**$522,565**	**$567,342**	**$44,777**
TOTAL PORTFOLIO	**$1,516,053**	**$1,216,755**	**($299,298)**

(5) Tariff Collections
(9) Tariff Rider and Rate of Return Impacts, and
Tariff Rider Reconciliation (the Final Order in Case No. 07-00376-UT)

Beginning with the first billing cycle in June 2008, SPS implemented Rate No. 44 on all affected customers' bills. The rider was set at 0.9604 % of bills. As of December 31, 2008, SPS had recovered $1,628,263. Actual expenditures recorded in 2008 were $1,216,755, resulting in an over-collection of $424,590, when taking into account interest applied on the over-recovery balance. In Case No. 08-00333-UT, SPS reduced its projected annual budget for program year 2009 based upon a forecasted 2008 over-collection of $500,428, which would be collected through Rate No. 44 in 2009 and 2010.

All costs of the SPS energy efficiency and load management programs are recorded in a separate balancing account and not included in base rates. The revenues collected

through Rate No. 44 are used to offset the balance in this account. Therefore, there is no impact on SPS's allowed rate of return.

(6) Cost Separation, Cost Allocation Methodology, Employee Assignments, and Program Expenses

Demand- and Supply-Side Cost Separation

SPS ensures that there are no cross-subsidies between its demand-side (energy efficiency and load management) activities, and its supply-side activities. SPS has separate accounting codes and subledgers for tracking all energy efficiency and load management program expenditures, including labor, materials, incentives, promotion, measurement and verification, third-party expenses, and any other related program costs. These costs are deferred through an automated accounting process and transferred from temporary monthly expense accounts to a specific regulatory asset account for New Mexico energy efficiency and load management expenditures. Concurrently, revenue from the New Mexico Energy Efficiency Rider (Rate No. 44) is reclassified to the same regulatory asset account. The difference between the expenditures and the revenue is tracked monthly and interest charges are applied at the Commission's customer deposit rate to the balance.

Cost Allocation Methodology

In accordance with 17.7.2.9(H) NMAC and as approved in SPS's 2008 Energy Efficiency and Load Management Plan, SPS has directly assigned the costs associated with marketing and promotion, rebates, labor, and utility administration to the individual program budgets. As approved in Case No. 07-00376-UT, the costs of the indirect programs, including Market Research, Product Development, Planning and Administration, and General Advertising were kept outside of the direct-impact program budgets.

Assignments by Employee

SPS typically uses resources from several different internal departments to administer its energy efficiency and load management programs. Specifically, the following employees contribute to the process:

- Product Developer – identifies and develops the proposed programs;
- Program Manager – manages overall program marketing and performance tracking;
- Account Manager – interacts with large business customers to promote programs;
- Energy Efficiency Engineer – reviews Custom Efficiency and Large Customer applications;
- Rebate Processor – reviews/approves applications and invoices, pays rebates; and
- Regulatory Analyst – performs benefit-cost analyses, drafts and manages program filings, and corresponds with regulators.

In addition, SPS works with outside groups such as equipment vendors and manufacturers, attorneys, community agencies and third-party administrators, and contractors as noted in the individual program descriptions.

Expenditures by Program

The following table provides SPS's 2007 and 2008 program expenditures by cost category.

Table 4: Energy Efficiency Program Costs by Cost Category

Program	Total Incentive	Internal Admin.	Third-Party Delivery	Promotion	M&V	Total Cost
Residential Segment						
Air-Source Heat Pumps	$4,928	$14,818	$0	$1,862	$0	$21,608
Home Lighting	$82,038	$11,732	$46,797	$29,115	$0	$169,682
LivingWise	$0	$1,335	$227,426	$806	$0	$229,567
Total Residential	**$86,966**	**$27,885**	**$274,223**	**$31,783**	**$0**	**$420,857**
Total Low-Income	**$73,025**	**$20,891**	**$0**	**$433**	**$0**	**$94,349**
Business Segment						
Cooling Efficiency	$12,420	$23,698	$0	$2,793	$0	$38,911
Custom Efficiency	$1,230	$23,277	$0	$4,040	$0	$28,546
Lighting Efficiency	$15,893	$30,320	$0	$20,537	$0	$66,750
Total Business	**$29,543**	**$77,295**	**$0**	**$27,370**	**$0**	**$134,208**
Total Large Customer	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Planning & Research Segment						
General Advertising	$0	$0	$0	$22,788	$0	$22,788
Market Research	$0	$19,709	$0	$0	$0	$19,709
Planning & Administration	$0	$395,868	$0	$0	$0	$395,868
Product Development	$0	$128,977	$0	$0	$0	$128,977
Total Planning & Research	**$0**	**$544,554**	**$0**	**$22,788**	**$0**	**$567,342**
TOTAL PORTFOLIO	**$189,534**	**$670,625**	**$274,223**	**$82,374**	**$0**	**$1,216,755**

(7) Program-Specific Metrics

The following paragraphs and tables provide program-specific information by items a) through g) which correspond to the items listed in 17.7.2.13.C(7) NMAC.

a. comparison of forecasted savings to verified achieved savings for each of the utility's energy efficiency programs

Please refer to Tables 1 and 2 above for SPS's forecasted and achieved savings by program. Note that the savings provided in this annual report are based on SPS's calculations and have not yet been measured and verified by the Independent Program Evaluator.

b. number of program participants served by each project

Please refer to Table 2 above for the number of program participants.

c. utility and participant costs, including M&V costs broken down by program

Please refer to the benefit-cost analyses in Section IV for utility and participant costs by program. SPS did not have any expenditures in 2007 or 2008 for M&V, as the Evaluator has not yet been contracted.

d. total avoided supply-side costs broken down by type of avoided cost (generation transmission, distribution, etc.)

Table 5, below, shows the total avoided supply-side costs for each program broken down by type of avoided cost (generation, transmission and distribution).

Table 5: Avoided Costs by Program and Type

Program	Avoided Generation Costs (NPV)	Avoided Transmission and Distribution Costs (NPV)	Avoided Marginal Energy Costs (NPV)	Total Avoided Supply-Side Costs (NPV)
Residential Segment				
Air-Source Heat Pumps	$4,144	$2,232	$9,809	$16,185
Home Lighting	$31,406	$14,939	$536,235	$582,580
LivingWise	$91,515	$44,550	$797,383	$933,447
Total Residential	**$127,064**	**$61,721**	**$1,343,427**	**$1,532,212**
Total Low-Income	**$25,664**	**$12,296**	**$364,822**	**$402,783**
Business Segment				
Cooling Efficiency	$5,773	$2,541	$17,347	$25,661
Custom Efficiency	$3,387	$1,488	$17,611	$22,486
Lighting Efficiency	$7,697	$3,385	$28,329	$39,411
Total Business	**$16,857**	**$7,414**	**$63,286**	**$87,558**
Total Large Customer	**$0**	**$0**	**$0**	**$0**
Planning & Research Segment				
General Advertising	N/A	N/A	N/A	N/A
Market Research	N/A	N/A	N/A	N/A
Planning & Administration	N/A	N/A	N/A	N/A
Product Development	N/A	N/A	N/A	N/A
Total Planning & Research	**N/A**	**N/A**	**N/A**	**N/A**
TOTAL PORTFOLIO	**$169,586**	**$81,431**	**$1,771,536**	**$2,022,553**

e. total cost per kWh and kW saved over the life of the measure

Table 6, below, shows the total cost per actual generator kWh and kW saved over the lifetime of the program.

Table 6: Lifetime Cost per Generator kW and kWh Saved

Program	Total Utility Costs	Total Lifetime Generator kWh	Cost per Generator kWh	Total Generator kW	Cost per Generator kW
Residential Segment					
Air-Source Heat Pumps	$21,608	264,654	$0.08	5	$4,680
Home Lighting	$169,682	12,385,710	$0.01	170	$1,000
LivingWise	$229,567	20,030,199	$0.01	268	$855
Total Residential	**$420,857**	**32,680,563**	**$0.01**	**443**	**$951**
Total Low-Income	**$94,349**	**8,437,707**	**$0.01**	**91**	**$1,035**
Business Segment					
Cooling Efficiency	$38,911	509,028	$0.08	9	$4,512
Custom Efficiency	$28,546	675,199	$0.04	5	$6,341
Lighting Efficiency	$66,750	939,592	$0.07	11	$6,184
Total Business	**$134,208**	**2,123,820**	**$0.06**	**24**	**$5,611**
Total Large Customer	**$0**	**0**	**N/A**	**0**	**N/A**
Planning & Research Segment					
General Advertising	$22,788	N/A	N/A	N/A	N/A
Market Research	$19,709	N/A	N/A	N/A	N/A
Planning & Administration	$395,868	N/A	N/A	N/A	N/A
Product Development	$128,977	N/A	N/A	N/A	N/A
Total Planning & Research	**$567,342**	**N/A**	**N/A**	**N/A**	**N/A**
TOTAL PORTFOLIO	**$1,216,755**	**43,242,089**	**$0.03**	**558**	**$2,181**

f. total economic benefits for the reporting period, and
g. net present value of all economic benefits for the life of the measures.

Table 7 provides the total economic benefits and TRC net present economic value benefits by program. The total economic benefits are calculated by dividing the total economic net benefits of each program over the lifetime of the program. At the portfolio level, the total lifetime net benefit is divided by the average lifetime of the programs, weighted on the generator kWh provided by each program.

Table 7: Total Economic Benefits Derived from 2008 Programs

Program	Total TRC Net Benefits (NPV)	Lifetime (Years)	Total Economic Benefits Reporting Period
Residential Segment			
Air-Source Heat Pumps	($6,183)	15	($408)
Home Lighting	$404,283	6	$67,381
LivingWise	$703,880	8	$89,585
Total Residential	**$1,101,981**	**7**	**$156,557**
Total Low-Income	**$308,434**	**6**	**$50,903**
Business Segment			
Cooling Efficiency	($14,737)	15	($982)
Custom Efficiency	($17,368)	19	($933)
Lighting Efficiency	($32,228)	18	($1,830)
Total Business	**($64,333)**	**17**	**($3,745)**
Total Large Customer	**$0**	**1**	**$0**
Planning & Research Segment			
General Advertising	($22,788)	1	($22,788)
Market Research	($19,709)	1	($19,709)
Planning & Administration	($395,868)	1	($395,868)
Product Development	($128,977)	1	($128,977)
Total Planning & Research	**($567,342)**		**($567,342)**
TOTAL PORTFOLIO	**$778,740**	**7**	**$110,703**

(8) Non-Energy Benefits

Non-energy benefits ("NEB") refer to all monetary benefits of the energy efficiency and load management programs that are unrelated to the generation, transmission, distribution, or cost of energy. NEBs may include greenhouse gas emissions reductions, improvements in safety and comfort, reduced arrearages on customer bills, reduced water consumption, reduced labor and maintenance costs, amongst others. Generally speaking,

non-energy benefits are difficult to quantify. SPS did not consider the value of any NEBs in the TRC Test in this Report or in the 2008 Plan.

The following table shows the emission reductions associated with SPS's 2008 energy efficiency portfolio. These values were estimated by applying the lifetime and annual energy savings from the 2008 program achievements to the emission rates for SPS's Cunningham Station - 2 Plant[1], which is believed to be a fair proxy for the generation avoided by the 2008 energy efficiency programs.

Table 8: Greenhouse Gas Emissions Avoided With 2008 Programs

Emissions Type	Avoided Electric Emissions Rate (lbs/MWh)[1]	Annual Avoided Emissions (tons)	Lifetime Avoided Emissions (tons)
CO_2	1,250	3,841,550	27,023,462
SO_2	0.006	19	137
NOx	2.49	7,652	53,831

The following table shows the amount of water conserved by the 2008 program achievements, due to the reduced need for energy generation. These values are estimated by applying the lifetime and annual energy savings to the water consumption rate for SPS's Cunningham Station Plant average[1], which is believed to be a fair proxy for the energy generation avoided by the energy efficiency programs.

Table 9: Water Consumption Avoided With 2008 Programs

Non-Energy Benefit Type	Avoided Water Consumption Rate (gal/MWh)	Annual Avoided Water Consumption (gal)	Lifetime Avoided Water Consumption (gal)
Water Savings	840	2,581,521	18,159,767

[1]Source: Southwestern Public Service Company's 2009 Integrated Resource Plan for New Mexico; Table 5-1: Emission Rates (p. 51).

(10) Self-Direct Programs

SPS's did not propose any goals for the Large Customer (Self-Direct) Program because it was unknown at the time of filing who might choose to participate. This program had no participants or spending in 2008. For more information about this program, please refer to the program discussion in Section III.

Section III: Segment and Program Descriptions

Residential Segment

SPS has approximately 84,000 customers in its Residential Segment in New Mexico. The service area is relatively rural, with only a few small cities, including Clovis, Roswell, and Hobbs. The climate in this part of New Mexico consists of winters with very little snow and hot, relatively dry summers.

SPS met its portfolio goal for the initial year of energy efficiency programs due to the strong performances of the Home Lighting and the LivingWise Programs. With Home Lighting, SPS was able to leverage existing relationships with large national vendors to make compact fluorescent light bulbs a viable option for consumers. In the case of LivingWise, for the initial year of the program, SPS expanded its offering to both 5th and 6th grade classrooms, thereby achieving nearly double the savings goal. In contrast, SPS's Air-Source Heat Pump Program suffered challenges from low market interest, which led to its underachievement.

The Residential Segment was more cost-effective than forecasted due to the strong performance of Home Lighting and the LivingWise Programs. The Air-Source Heat Pump Program was not cost-effective because of low interest from customers. SPS spent 95% of its 2008 Residential Segment budget on labor and promotional efforts to build awareness with customers to help drive participation, while achieving 177% of the energy savings goal.

Air-Source Heat Pumps

The Air-Source Heat Pump Program offers cash rebates to offset the upfront costs of installing energy efficient air-source heat pumps. The program provides prescriptive rebates for existing homes and for new construction or major renovation projects. The Air-Source Heat Pump Program is marketed through local heating, ventilation and air conditioning ("HVAC") contractors in our service area and through direct mail and utility bill inserts.

Deviation from Goal

The Air-Source Heat Pump Program did not meet its goal in 2008 due to the fact that SPS could not effectively target individual customers directly. The program achieved 38% of the energy savings goal and spent 94% of its budget on labor and promotional activities including utility bill inserts and general advertising, but has found that more direct marketing is needed to effectively drive participation. In 2009, SPS has redirected its marketing efforts to target HVAC contractors in order to educate them on the many benefits of upgrading heat pump equipment and to allow them to directly receive the rebate dollars instead of customers. SPS will continue to reach out to the HVAC trade community and encourage them to utilize the program when working with their customer base. Ongoing marketing efforts will include direct mail literature to contractors and informational materials on the xcelenergy.com website.

Changes in 2008
SPS offered customers a 50% bonus on rebates later in 2008 to encourage participation.

Home Lighting
The Home Lighting Program offers a low cost and easy way for customers to save energy and money. It provides two ways for customers to purchase energy saving compact fluorescent light bulbs ("CFL"), via mail order and through instant rebates at retail stores. Through mail order, customers can purchase a wide variety of CFLs via mail, telephone, or Internet. There are 20 different models available for purchase. SPS also provides limited-time instant rebates at participating retailers for the purchase of CFLs. SPS works with retailers and manufacturers to buy down the price of the bulbs to roughly $1.00 each. SPS also participates in the ENERGY STAR Change-a-Light, Change-the-World campaign and leverages the related national promotional efforts.

Deviation from Goal
The Home Lighting Program achieved 137% of the 2008 energy saving goal and spent 60% of the budget. These results were achieved by marketing CFLs through large retail upstream incentive promotions with Home Depot, Albertsons and Ace Hardware, as well as educational events at Home Depot, the Clovis Home and Garden Show, and the Hobbs August Nights event. The Home Lighting Program spent less than was budgeted because SPS had included funds in its forecast for contingency plans in case the program did not perform as expected. Fortunately, SPS did not have to use the contingency funding and found some economies of scale by promoting our Colorado and New Mexico programs using similar advertising and two of the same national retail chains.

Changes in 2008
None.

LivingWise
LivingWise is an educational program that combines energy efficiency curriculum for teachers with easy-to-install energy efficiency measures for students to implement at home. All materials are free of charge to participants. The following measures are included in the student kit:

- One compact fluorescent light bulb;
- One electroluminescent night light;
- Furnace air filter alarm;
- High efficiency shower head (1.5 gpm);
- Kitchen aerator (1.5 gpm);
- Flow rate test bag (for showerhead);
- Toilet leak detector tablets;
- Air temperature ruler;
- Water temperature check card; and
- Resource fact wheel.

Deviation from Goal
The LivingWise Program far exceeded its goal in 2008. The original goal was for all 5th grade classrooms in the SPS-New Mexico service area to participate in the program. However, since this was the first year, SPS expanded the program to all 6th grade classrooms as well. Additional resources were necessary to fund the program expansion to 6th grade classrooms. Thus, the program spent 171% of its forecasted budget, while achieving 241% of the energy savings goal.

Changes in 2008
SPS made several changes to the LivingWise Program technical assumptions for 2008, both to reflect the actual installation rates by participants, as well as to correct errors from the original 2008 Energy Efficiency and Load Management Plan. Specifically, SPS incorporated the results of a survey conducted by the third-party vendor for the LivingWise Program, Resource Action Programs, which determined the number of actual measures installed and the percentage of homes with electric water heating. SPS also corrected the deemed savings associated with showerheads and nightlights. The 2008 Energy Efficiency and Load Management Plan had included an incorrect deemed savings value for low-flow showerheads and had neglected to include nightlights in the assumptions.

Low-Income Segment

The Low-Income Segment serves the subset of residential customers who fall at or below 150% of the Federal Poverty level. It is estimated that there are about 33,600 customers that meet the Federal low-income guidelines within the SPS New Mexico service area. These customers do not typically have the disposable income needed to incorporate energy efficiency measures into their homes. Because SPS has no direct knowledge of customer incomes, the SPS works with the New Mexico Mortgage Finance Authority ("MFA") and the Low Income Home Energy Assistance Program ("LIHEAP") who receive applications for energy assistance from low-income customers. When approached by a low-income customer, these agencies can offer no-cost energy efficiency services to provide energy and bill savings, as well as to improve the comfort and safety of the home.

SPS has two key challenges with the Low-Income Segment in its New Mexico service area. First, SPS does not have access to low-income customer lists, which makes us reliant on third-party vendors (community agencies) to identify and implement energy efficiency improvements. Second, few low-income homes in the service area use electricity for their primary air and water heating needs. As an electric-only company, SPS can only offer its low-income customers electricity-saving energy efficiency measures. Many of the energy saving opportunities available in low-income homes relate to weatherization. However, weatherization is only cost-effective when related to the fuel used to heat the air and water in the house. Because most of SPS's customers use natural gas, propane, or wood to heat their homes, there is little opportunity for electricity savings. As a result, in 2008, SPS viewed the distribution of CFLs to low-income customers as its primary opportunity to reduce low-income customer energy bills.

Low-Income

The Low-Income Program offers free energy efficiency upgrades to customers with households at or below 150% of the Federal Poverty level. For low-income customers, SPS will pay a third-party contractor the entire cost of installing common energy efficiency measures. The program provides refrigerator replacements, lighting giveaways, and single-family weatherization for qualifying customers. As mentioned above, the Low-Income Program markets its services through local community agencies with direct supervision by the MFA, and through the local LIHEAP.

Deviation from Goal

The Low-Income Program met its goal for 2008 due to the purchase and distribution of CFLs, which provided the majority of the savings for this program. The program spent 95% of its budget and achieved 104% of the energy savings goal. Only one weatherization was completed in 2008, due to the fact that MFA had difficulty identifying individual low-income customers with electric heating or air-conditioning systems. In 2008, the Low-Income Program expenditures were split between LIHEAP agencies for lighting and MFA for weatherization and refrigerator replacements.

Changes in 2008

None.

Business Segment

SPS has approximately 19,000 customers in its Business Segment in New Mexico, including commercial, industrial, and agricultural customers of all sizes. In 2008, SPS did not meet its ambitious goals for its first year with business programs in the marketplace. The Business Segment has been slow to respond to energy efficiency offerings due to a number of factors. In the past, New Mexico businesses in the SPS service area have enjoyed relatively inexpensive energy, been resistant to environmental messaging, and had difficulty accepting the calculated benefits of energy efficiency. They therefore require a longer acceptance and education curve prior to participation in the programs. In addition, energy efficiency programs for business customers have an average sales cycle of twelve to eighteen months, meaning that customers generally require this length of time to decide to proceed, implement, and complete an energy efficiency project. Since the 2008 Plan was not approved until April 2008 and the programs were subsequently not launched until June 2008, SPS had difficulty building awareness and completing projects by the end of 2008.

Given these issues, SPS has renewed its focus on awareness and project pipeline building in order to gain momentum over time to result in improved participation and energy savings in future years. SPS recognizes that a lack of participation in 2008 drove its business programs to be non-cost-effective, but remains committed to delivering cost-effective projects in the future. To that end, we are implementing strategies to accelerate customer acceptance going forward. Our efforts to improve business performance include:

- Continue building general energy efficiency and program awareness with customers,
- Expand trade outreach to increase the number of energy efficiency proponents in our service territory,
- Increase large customer planning and sales efforts, and
- Aggressively market the new Small Business Lighting and Motor and Drive Efficiency products launched in mid-2009.

SPS is confident that these activities will significantly augment our traditional marketing efforts over time and build a strong pipeline of energy efficiency projects for completion in future years.

In 2008, Business Segment spending was focused primarily on training SPS personnel, preparing regulatory filings, reaching out to trade partners, developing communication tools to take programs to market, and creating promotional pieces for customer communications. The Business Segment spent 31% of its budget and achieved 5% of the energy savings goal. This spending is an investment that will promote future participation in the programs and is essential in overcoming the awareness and acceptance barriers to energy efficiency in this market.

Cooling Efficiency

The Cooling Efficiency Program offers prescriptive rebates for common high efficiency cooling equipment, custom rebates for newer technologies and system-based high efficiency solutions, and study funding to educate customers about the best options for their facilities. The program is designed to influence customers to select the most energy efficient option to meet their cooling requirements. The Cooling Efficiency Program directs its marketing efforts towards educating customers to make strategic decisions that will benefit their facilities as well as their bottom lines.

Deviation from Goal

The Cooling Efficiency Program did not meet its goal in 2008. The program achieved 34% of the energy savings goal and spent 50% of its budget on promotional costs, internal administration, and customer incentives. Promotional pieces were aimed at increasing program awareness and educating customers. The low savings and under spent budget was primarily due to lower than planned participation. Customers were not easily influenced by SPS's efforts to inform them of the benefits of energy efficiency. To help mitigate this barrier, SPS is working more with the trade to educate them on the benefits of purchasing energy efficiency equipment. In turn, trade allies will educate their customers at the time of sale. SPS will continue to reach out to customers through direct mail literature, our account management team, and our Business Solutions Center.

Changes in 2008

None.

Custom Efficiency

The Custom Efficiency Program offers rebates to business customers who purchase and install specialized equipment that is not covered under SPS's prescriptive rebate programs. Rebates of up to $200 per kW saved are offered for equipment that is more efficient than the standard efficiency options. Since energy applications and building system complexity can vary greatly by customer type, this program addresses the unique needs of our customers and encourages them to implement cost-effective energy efficiency measures. This program is primarily promoted through our account managers, who are able to help the customer through the application process. SPS also uses trade meetings, customer visits, and presentations at motors and drive training to promote the program.

Deviation from Goal

The Custom Efficiency Program did not reach its goal in 2008. The education curve to get customers to buy into energy efficiency is a long process and customers are just becoming familiar with our programs. The program achieved 2% of the energy savings goal and spent 18% of its budget, mainly on labor and promotional activities to educate customers, which will help bring in projects in the future. The program's savings were low and the budget was under spent due to lower than expected participation. It is often difficult for customers to identify what projects to submit under the Custom Efficiency Program. To address this issue, SPS has developed a list of technologies that may offer energy savings to help with this process. SPS has also assigned a trade relations manager to identify and work with trade partners in the region. In addition, SPS offered a 50% lighting bonus for custom lighting options to improve customer participation.

Changes in 2008

None.

Lighting Efficiency

The Lighting Efficiency Program offers cash rebates to offset the upfront costs of installing common energy efficient lighting equipment. The program provides prescriptive rebates for both existing buildings and for new construction or major renovation projects. Custom rebates are also available for those projects that do not meet the qualifications of the prescriptive rebates. The Lighting Efficiency Program is marketed through local lighting contractors as well as directly to the customer via internal account management staff and the Business Solutions Center.

Deviation from Goal

The Lighting Efficiency Program did not meet its goal in 2008 due to difficulty building program awareness and attracting participants. The program achieved 7% of the energy goal and spent 35% of its budget on training internal staff, communicating program features and benefits to prospective customers, and building a trade partner network. The program did not reach goals or spend its entire budget due to lower than planned participation levels. SPS is continuing to educate customers on the many benefits of upgrading their lighting equipment. In addition, SPS continues to reach out to the lighting trade and encourage them to utilize the program when working with their

customer base. Ongoing marketing efforts include direct mail literature to customers, local advertising, and providing informational materials on our website. The account management staff and Business Solutions Center are available to work directly with customers.

Changes in 2008
SPS offered customers a 50% bonus on rebates towards the end of 2008 to encourage participation.

Large Customer Segment

Large Customer
The Large Customer Program allows participants to identify and administer their own energy efficiency and load management projects. The program offers customers two options: 1) a bill credit of up to 70 % of the Energy Efficiency Tariff Rider charges for incremental expenditures made towards cost-effective energy efficiency or load management, or 2) an exemption of up to 70 % of the Energy Efficiency Tariff Rider for 24 months if the customer demonstrates that it has exhausted all cost-effective energy efficiency or load management projects at its facility. For this program, *cost-effective* means projects with a simple payback period of more that one year, but less than seven years. This program is available only to SPS customers with contiguous facilities with consumption greater than 7,000 MWh per year. This program is primarily promoted through our account managers.

Deviation from Goal
SPS did not propose any goals for the Large Customer Program because it was unknown at the time of filing who might choose to participate. This program had no participants in 2008 and had no expenditures. The average sales cycle for these types of large customized projects is long and the projects are often quite complex. In addition, customers may choose to submit their projects through the Custom Efficiency Program, rather than the Large Customer Program, in order to receive SPS assistance with their project planning.

Changes in 2008
None.

Planning and Research Segment

The Planning & Research Segment consists of internal functions (not customer-facing), which support the direct impact programs. The Segment includes energy efficiency and load management-related expenses for General Advertising, Market Research, Planning & Administration, and Product Development. The overall purpose of the Planning & Research Segment is to:

- Provide strategic direction for SPS's energy efficiency and load management programs;
- Ensure regulatory compliance with energy efficiency legislation and rules;
- Guide SPS internal policy issues related to energy efficiency;
- Train SPS Marketing staff for effective performance;
- Evaluate program technical assumptions, program achievements, and marketing strategies;
- Provide segment and target market information;
- Analyze overall effects of SPS's energy efficiency portfolio on customer usage and overall system peak demand and system energy usage;
- Measure customer satisfaction with the SPS's energy efficiency efforts; and
- Develop new conservation and load management programs.

In 2008, the Market Research and General Advertising programs under spent their budgets, while Planning & Administration and Product Development over spent their budgets. Overall, this segment spent 109% of its budget. The causes of these budget deviations are addressed in the individual program discussions below.

General Advertising

The objective of General Advertising was to educate consumers by promoting energy efficiency in general and the SPS energy efficiency programs in particular. The budget was used specifically to:

- Increase awareness of the Cooling, Lighting, and Custom Efficiency Programs for business customers;
- Increase the awareness of general energy efficiency for residential customers; and
- Educate the market regarding benefits of using compact fluorescent light bulbs, promote SPS's CFL educational events at Home Depot, and encourage customers to participate.

For the Business Segment, the advertising plan targeted facility and middle managers throughout the SPS New Mexico service area. Advertising tactics included print advertising in five local newspapers, interactive advertising in the *New Mexico Business Journal* online, and 246 radio spots throughout the region.

For the Residential Segment, the advertising plan targeted both English- and Spanish-speaking households. The advertising tactics included print advertising in seven local publications, 500 radio spots, and TV promotional messages with energy conservation tips on KBIM-TV and the KBIM website.

Deviation from Goal
The program spent about 51% of its budget. This was less than forecasted due to the unexpected lead-time needed to create and reserve space for advertising such as radio. Since the program was not able to start until mid-year, the window to advertise about energy efficiency was further shortened.

Changes in 2008
None.

Market Research
The Market Research group spearheads a variety of energy efficiency-related research efforts that are used to inform SPS's decision-making concerning energy efficiency and load management. In 2008, the Market Research group oversaw the following research efforts:

- 2008 Home Use Study (performed by Wiese Research); and
- Oil Field Characterization Study (performed by Southwest Energy Efficiency Project).

Using these studies, SPS is better able to understand where it should direct its energy efficiency and load management dollars and efforts.

Deviation from Goal
The Market Research team spent 43% of its budget. Two primary reasons for the deviations from goal were that SPS postponed until 2009 the qualitative vendor studies it had originally proposed in the 2008 Energy Efficiency and Load Management Plan, and it was able to achieve cost savings with both the Home Use Study and Oil Field Characteristics Study by merging these studies with larger research efforts, rather than conducting stand-alone primary studies.

Changes in 2008
SPS postponed the qualitative vendor studies originally proposed for 2008. This study is now scheduled for 2009.

Planning and Administration
The Planning & Administration group manages all energy efficiency and load management regulatory filings, directs and carries out benefit-cost analyses, provides tracking results of energy conservation achievements and expenditures, and analyzes and prepares cost recovery reports. Planning and Administration, which includes outside legal assistance, coordinates and participates in all DSM related rulemaking activities and litigated hearings. In addition, this area supports the energy and demand conservation component of resource planning and provides strategic evaluation planning and internal policy guidance to meet all energy efficiency and load management regulatory requirements. These functions are needed to ensure a cohesive and high-quality energy

efficiency portfolio that meets legal requirements as well as the expectations of SPS's customers, regulators and staff.

Deviation from Goal
In 2008, SPS's Planning & Administration group, including legal expenses, spent 116% of its budget. Specific activities that contributed to the 2007 and 2008 expenditures included preparation of the 2008 Plan and filings and the subsequent hearings held in February 2008, coordination and responding to numerous discovery requests related to the 2008 Plan, participation in rulemaking workshops from May through December 2008, preparation and filing of the 2009 Plan in October 2008, and participation in the Evaluation Committee meetings and related activities.

Changes in 2008
None.

Product Development
Product Development identifies, assesses, and develops new energy efficiency and load management products and services. The product development process starts with ideas and concepts from customers, regulators, energy professionals, interest groups, and Xcel Energy staff. These ideas are then carefully screened and only ideas with the most potential are selected for the development process.

In 2008, the Product Development team developed several new products in preparation for the 2009 Energy Efficiency and Load Management Plan, including: Small Business Lighting, Residential Evaporative Cooling, Residential Refrigerator Recycling, Low-Income Evaporative Cooling, Low-Income Multi-Family Weatherization, Residential Home Energy Services, and Business Motor & Drive Efficiency.

Deviation from Goal
The Product Development Program spent 146% of its budget. In 2007, when the budget was set, SPS did not accurately anticipate the number of new products it would need to analyze and develop. In response to requests from stakeholders for several new measures, SPS hired outside consultants to assist with its development research, which contributed to the overage.

Changes in 2008
None.

Section IV: Benefit-Cost Analyses and Technical Assumptions

This section provides details on the goal and actual benefit-cost analyses for each program and the portfolio as a whole. This section also includes the actual achievement by specific measures and the technical assumptions that are applied to those measures in order to calculate the total program savings.

Benefit-Cost Analyses

The following pages detail the TRC benefit-cost analyses for both the forecast achievement and spend and the results of the actual achievement and spend, for each program. These analyses are the source of all of the benefit-cost results provided in the previous sections.

Technical Assumptions

The pages following the benefit-cost analyses detail the application of the actual participation by measure applied to technical assumptions for the measure. The product of these factors within a program provides the energy saving impacts used to calculate the Avoided Revenue Requirements in the benefit-cost analyses, as well as the Participant Incremental Capital and O&M. The energy savings impacts are applied to the Avoided Cost Assumptions as filed in the 2008 Plan, pages 46-49. Note that within the technical assumptions, measures that had participation in 2008 are represented in black font. Measures without any 2008 participation are in gray font.

➢ New Mexico Conservation Total

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$339,987	$169,586
T & D	$152,855	$81,431
Marginal Energy	$2,545,791	$1,771,536
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$3,038,634	$2,022,553
Rebates Paid To Participants	$344,929	$189,534
TOTAL BENEFITS	**$3,383,563**	**$2,212,087**
Xcel Energy's Project Costs		
Total Incentive	$319,366	$189,534
Internal Admin.	$1,017,402	$670,625
Third-Party Delivery	$134,285	$274,223
Promotion	$45,000	$82,374
Measurement & Verification	$0	$0
Subtotal	$1,516,053	$1,216,755
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$816,934	$216,591
Incremental O&M	$0	$0
Subtotal	$816,934	$216,591
TOTAL COSTS	**$2,332,987**	**$1,433,347**
Net Present Benefit (Cost)	$1,050,576	$778,740
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.01	$0.02
Net Present Benefit (Cost) per Generator kW	$1,776	$1,396
Benefit-Cost Ratio	**1.45**	**1.54**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	11 years	7 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	28.09%	24.51%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	2,460 kWh	2,147 kWh
(C) Free Driver/Free Rider Factor (Energy)	91.7%	91.7%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	2,255 kWh	1,967 kWh
(E1) Transmission Loss Factor (Energy)	10.2%	10.9%
(E2) Transmission Loss Factor (Demand)	9.8%	10.9%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	2,511 kWh	2,208 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	84.8%	94.5%
(G) Net Customer kW: (F)*(C1)=	0.85 kW	0.95 kW
(H) Coincidence Factor at Generator	21.87%	18.89%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.2057 kW	0.2004 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	85%	95%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0199	$0.0281
* Xcel Energy Project Cost per kW at Gen	$2,560.52	$462.47

Participant Input Summary & Program Totals

New Mexico Conservation Total	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	0.07 kW	0.05 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	86.7%	94.5%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	0.06 kW	0.05 kW
(D) Coincident Factor	21.87%	18.89%
(E1) Transmission Loss Factor (Energy)	10.2%	10.9%
(E2) Transmission Loss Factor (Demand)	9.8%	10.9%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	0.02 kW	0.01 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	2,327 kWh	2,147 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	167 kWh	116 kWh
(I) Free Driver/Free Rider Factor (Energy)	92%	92%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	153 kWh	106.697 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	171 kWh	119.766 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	92%	92%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	39,164	51,326
Total Gross Customer kW Reduction: (A)*(O)=	2,816 kW	2,783 kW
Total Net Customer kW Reduction: (C)*(O)=	2,441 kW	2,631 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	592 kW	558 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	6,552,665 kWh	5,975,086 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	6,005,978 kWh	5,476,328 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	6,686,778 kWh	6,147,126 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	76,130,092 kWh	43,242,089 kWh
Total Budget	$1,516,053	$1,216,755

➢ Residential Segment Conservation Total

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$54,348	$127,064
T & D	$26,674	$61,721
Marginal Energy	$748,666	$1,343,427
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$829,688	$1,532,212
Rebates Paid To Participants	$93,398	$86,966
TOTAL BENEFITS	**$923,086**	**$1,619,178**
Xcel Energy's Project Costs		
Total Incentive	$67,836	$86,966
Internal Admin.	$239,808	$27,886
Third-Party Delivery	$134,285	$274,223
Promotion	$0	$31,783
Measurement & Verification	$0	$0
Subtotal	$441,929	$420,857
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$81,914	$96,340
Incremental O&M	$0	$0
Subtotal	$81,914	$96,340
TOTAL COSTS	**$523,843**	**$517,197**
Net Present Benefit (Cost)	$399,243	$1,101,981
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.02	$0.03
Net Present Benefit (Cost) per Generator kW	$2,452	$2,489
Benefit-Cost Ratio	**1.76**	**3.13**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	7 years	7 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	24.60%	26.35%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	2,155 kWh	2,308 kWh
(C) Free Driver/Free Rider Factor (Energy)	90.7%	92.7%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	1,955 kWh	2,140 kWh
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	2,197 kWh	2,405 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	90.8%	93.7%
(G) Net Customer kW: (F)*(C1)=	0.91 kW	0.94 kW
(H) Coincidence Factor at Generator	13.43%	21.84%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.1371 kW	0.2299 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	91%	94%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0245	$0.0129
* Xcel Energy Project Cost per kW at Gen	$2,714.62	$233.30

Participant Input Summary & Program Totals

Residential Segment Conservation Total	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	0.05 kW	0.06 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	88.7%	93.7%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	0.05 kW	0.05 kW
(D) Coincident Factor	13.43%	21.84%
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	0.01 kW	0.01 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	2,107 kWh	2,308 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	111 kWh	133 kWh
(I) Free Driver/Free Rider Factor (Energy)	91%	93%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	101 kWh	123.725 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	113 kWh	139.016 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	91%	93%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	23,049	33,313
Total Gross Customer kW Reduction: (A)*(O)=	1,216 kW	1,926 kW
Total Net Customer kW Reduction: (C)*(O)=	1,079 kW	1,804 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	163 kW	443 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	2,561,100 kWh	4,445,850 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	2,323,980 kWh	4,121,636 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	2,611,214 kWh	4,631,052 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	18,044,678 kWh	32,680,563 kWh
Total Budget	$441,929	$420,857

➢ Residential Air-Source Heat Pumps

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$12,551	$4,144
T & D	$6,760	$2,232
Marginal Energy	$25,552	$9,809
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$44,863	$16,185
Rebates Paid To Participants	$7,836	$4,928
TOTAL BENEFITS	**$52,699**	**$21,113**
Xcel Energy's Project Costs		
Total Incentive	$7,836	$4,928
Internal Admin.	$15,164	$14,818
Third-Party Delivery	$0	$0
Promotion	$0	$1,862
Measurement & Verification	$0	$0
Subtotal	$23,000	$21,608
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$15,614	$5,688
Incremental O&M	$0	$0
Subtotal	$15,614	$5,688
TOTAL COSTS	**$38,614**	**$27,296**
Net Present Benefit (Cost)	$14,085	($6,183)
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.02	($0.02)
Net Present Benefit (Cost) per Generator kW	$1,012	($1,339)
Benefit-Cost Ratio	**1.36**	**0.77**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	15 years	15 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	33.18%	33.69%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	2,906 kWh	2,951 kWh
(C) Free Driver/Free Rider Factor (Energy)	100.0%	100.0%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	2,906 kWh	2,951 kWh
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	3,265 kWh	3,316 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	100.0%	100.0%
(G) Net Customer kW: (F)*(C1)=	1.00 kW	1.00 kW
(H) Coincidence Factor at Generator	88.93%	78.00%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.9992 kW	0.8764 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	100%	100%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0334	$0.0816
* Xcel Energy Project Cost per kW at Gen	$1,651.90	$4,101.33

Participant Input Summary & Program Totals

Residential Air-Source Heat Pumps	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	0.45 kW	0.66 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	100.0%	100.0%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	0.45 kW	0.66 kW
(D) Coincident Factor	88.93%	78.00%
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	0.45 kW	0.58 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	2,906 kWh	2,951 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	1,303 kWh	1,943 kWh
(I) Free Driver/Free Rider Factor (Energy)	100%	100%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	1,303 kWh	1,943.420 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	1,464 kWh	2,183.618 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	100%	100%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	31	8
Total Gross Customer kW Reduction: (A)*(O)=	14 kW	5 kW
Total Net Customer kW Reduction: (C)*(O)=	14 kW	5 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	14 kW	5 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	40,495 kWh	15,547 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	40,495 kWh	15,547 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	45,500 kWh	17,469 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	689,326 kWh	264,654 kWh
Total Budget	$23,000	$21,608

➢ Residential Home Lighting

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$31,450	$31,406
T & D	$14,960	$14,939
Marginal Energy	$392,190	$536,235
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$438,600	$582,580
Rebates Paid To Participants	$60,000	$82,038
TOTAL BENEFITS	**$498,600**	**$664,618**
Xcel Energy's Project Costs		
Total Incentive	$60,000	$82,038
Internal Admin.	$224,644	$11,732
Third-Party Delivery	$0	$46,797
Promotion	$0	$29,115
Measurement & Verification	$0	$0
Subtotal	$284,644	$169,682
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$66,300	$90,652
Incremental O&M	$0	$0
Subtotal	$66,300	$90,652
TOTAL COSTS	**$350,944**	**$260,334**
Net Present Benefit (Cost)	$147,656	$404,283
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.02	$0.03
Net Present Benefit (Cost) per Generator kW	$1,189	$2,381
Benefit-Cost Ratio	**1.42**	**2.55**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	6 years	6 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	17.35%	17.35%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	1,520 kWh	1,520 kWh
(C) Free Driver/Free Rider Factor (Energy)	85.0%	85.0%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	1,292 kWh	1,292 kWh
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	1,452 kWh	1,452 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	85.0%	85.0%
(G) Net Customer kW: (F)*(C1)=	0.85 kW	0.85 kW
(H) Coincidence Factor at Generator	12.50%	12.50%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.1194 kW	0.1194 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	85%	85%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0314	$0.0137
* Xcel Energy Project Cost per kW at Gen	$2,292.61	$140.38

Participant Input Summary & Program Totals

Residential Home Lighting	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	0.05 kW	0.05 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	85.0%	85.0%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	0.04 kW	0.04 kW
(D) Coincident Factor	12.50%	12.50%
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	0.01 kW	0.01 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	1,520 kWh	1,520 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	79 kWh	79 kWh
(I) Free Driver/Free Rider Factor (Energy)	85%	85%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	67 kWh	67.184 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	75 kWh	75.488 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	85%	85%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	20,000	27,346
Total Gross Customer kW Reduction: (A)*(O)=	1,040 kW	1,422 kW
Total Net Customer kW Reduction: (C)*(O)=	884 kW	1,209 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	124 kW	170 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	1,580,706 kWh	2,161,428 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	1,343,600 kWh	1,837,214 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	1,509,663 kWh	2,064,285 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	9,057,978 kWh	12,385,710 kWh
Total Budget	$284,644	$169,682

➢ Residential LivingWise

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$10,291	$91,515
T & D	$5,010	$44,550
Marginal Energy	$330,924	$797,383
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$346,225	$933,447
Rebates Paid To Participants	$0	$0
TOTAL BENEFITS	**$346,225**	**$933,447**
Xcel Energy's Project Costs		
Total Incentive	$0	$0
Internal Admin.	$0	$1,335
Third-Party Delivery	$134,285	$227,426
Promotion	$0	$806
Measurement & Verification	$0	$0
Subtotal	$134,285	$229,567
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$0	$0
Incremental O&M	$0	$0
Subtotal	$0	$0
TOTAL COSTS	**$134,285**	**$229,567**
Net Present Benefit (Cost)	$211,940	$703,880
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.03	$0.04
Net Present Benefit (Cost) per Generator kW	$8,575	$2,623
Benefit-Cost Ratio	**2.58**	**4.07**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	8 years	8 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	66.38%	51.94%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	5,815 kWh	4,550 kWh
(C) Free Driver/Free Rider Factor (Energy)	100.0%	100.0%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	5,815 kWh	4,550 kWh
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	6,533 kWh	5,112 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	100.0%	100.0%
(G) Net Customer kW: (F)*(C1)=	1.00 kW	1.00 kW
(H) Coincidence Factor at Generator	13.61%	47.89%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.1529 kW	0.5381 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	100%	100%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0162	$0.0115
* Xcel Energy Project Cost per kW at Gen	$5,433.27	$460.32

Participant Input Summary & Program Totals

Residential LivingWise	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	0.05 kW	0.08 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	100.0%	100.0%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	0.05 kW	0.08 kW
(D) Coincident Factor	13.61%	47.89%
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	0.01 kW	0.05 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	5,815 kWh	4,550 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	311 kWh	381 kWh
(I) Free Driver/Free Rider Factor (Energy)	100%	100%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	311 kWh	380.748 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	350 kWh	427.806 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	100%	100%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	3,018	5,959
Total Gross Customer kW Reduction: (A)*(O)=	162 kW	499 kW
Total Net Customer kW Reduction: (C)*(O)=	162 kW	499 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	25 kW	268 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	939,805 kWh	2,268,875 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	939,805 kWh	2,268,875 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	1,055,961 kWh	2,549,298 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	8,296,836 kWh	20,030,199 kWh
Total Budget	$134,285	$229,567

➢ Low-Income Segment Conservation Total

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$22,927	$25,664
T & D	$10,995	$12,296
Marginal Energy	$370,140	$364,822
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$404,063	$402,783
Rebates Paid To Participants	$78,560	$73,025
TOTAL BENEFITS	**$482,623**	**$475,808**
Xcel Energy's Project Costs		
Total Incentive	$78,560	$73,025
Internal Admin.	$21,262	$20,891
Third-Party Delivery	$0	$0
Promotion	$0	$433
Measurement & Verification	$0	$0
Subtotal	$99,822	$94,349
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$78,560	$73,025
Incremental O&M	$0	$0
Subtotal	$78,560	$73,025
TOTAL COSTS	**$178,382**	**$167,374**
Net Present Benefit (Cost)	$304,241	$308,434
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.03	$0.04
Net Present Benefit (Cost) per Generator kW	$3,756	$3,385
Benefit-Cost Ratio	**2.71**	**2.84**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	7 years	6 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	13.61%	17.12%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	1,192 kWh	1,500 kWh
(C) Free Driver/Free Rider Factor (Energy)	100.0%	100.0%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	1,192 kWh	1,500 kWh
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	1,340 kWh	1,685 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	100.0%	100.0%
(G) Net Customer kW: (F)*(C1)=	1.00 kW	1.00 kW
(H) Coincidence Factor at Generator	7.22%	9.81%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.0811 kW	0.1103 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	100%	100%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0111	$0.0112
* Xcel Energy Project Cost per kW at Gen	$1,232.37	$114.17

Participant Input Summary & Program Totals

Low-Income Segment Conservation Total	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	0.06 kW	0.05 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	100.0%	100.0%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	0.06 kW	0.05 kW
(D) Coincident Factor	7.22%	9.81%
(E1) Transmission Loss Factor (Energy)	11.0%	11.0%
(E2) Transmission Loss Factor (Demand)	11.0%	11.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	0.01 kW	0.01 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	1,192 kWh	1,500 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	74 kWh	69 kWh
(I) Free Driver/Free Rider Factor (Energy)	100%	100%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	74 kWh	68.826 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	83 kWh	77.333 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	100%	100%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	16,030	18,007
Total Gross Customer kW Reduction: (A)*(O)=	999 kW	826 kW
Total Net Customer kW Reduction: (C)*(O)=	999 kW	826 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	81 kW	91 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	1,191,088 kWh	1,239,357 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	1,191,088 kWh	1,239,357 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	1,338,301 kWh	1,392,536 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	9,032,673 kWh	8,437,707 kWh
Total Budget	$99,822	$94,349

➢ Business Segment Conservation Total

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$262,488	$16,857
T & D	$115,410	$7,414
Marginal Energy	$1,426,985	$63,286
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$1,804,883	$87,558
Rebates Paid To Participants	$172,970	$29,543
TOTAL BENEFITS	**$1,977,853**	**$117,101**
Xcel Energy's Project Costs		
Total Incentive	$172,970	$29,543
Internal Admin.	$254,767	$77,295
Third-Party Delivery	$0	$0
Promotion	$0	$27,370
Measurement & Verification	$0	$0
Subtotal	$427,737	$134,208
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$656,459	$47,226
Incremental O&M	$0	$0
Subtotal	$656,459	$47,226
TOTAL COSTS	**$1,084,196**	**$181,434**
Net Present Benefit (Cost)	$893,657	($64,333)
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.02	($0.03)
Net Present Benefit (Cost) per Generator kW	$2,566	($2,689)
Benefit-Cost Ratio	**1.82**	**0.65**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	18 years	17 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	56.69%	44.43%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	4,966 kWh	3,892 kWh
(C) Free Driver/Free Rider Factor (Energy)	88.9%	92.8%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	4,417 kWh	3,613 kWh
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	4,854 kWh	3,970 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	82.6%	93.2%
(G) Net Customer kW: (F)*(C1)=	0.83 kW	0.93 kW
(H) Coincidence Factor at Generator	63.19%	75.09%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.5732 kW	0.7687 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	83%	93%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0087	$0.0632
* Xcel Energy Project Cost per kW at Gen	$1,228.10	$4,629.82

Participant Input Summary & Program Totals

Business Segment Conservation Total	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	7.08 kW	5.19 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	83.4%	93.2%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	5.91 kW	4.83 kW
(D) Coincident Factor	63.19%	75.09%
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	4.10 kW	3.99 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	4,658 kWh	3,892 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	32,979 kWh	20,186 kWh
(I) Free Driver/Free Rider Factor (Energy)	89%	93%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	29,333 kWh	18,736.492 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	32,234 kWh	20,589.551 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	89%	93%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	85	6
Total Gross Customer kW Reduction: (A)*(O)=	601 kW	31 kW
Total Net Customer kW Reduction: (C)*(O)=	502 kW	29 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	348 kW	24 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	2,800,477 kWh	121,115 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	2,490,909 kWh	112,419 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	2,737,263 kWh	123,537 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	49,052,741 kWh	2,123,820 kWh
Total Budget	$427,737	$134,208

➢ Business Cooling Efficiency

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$26,353	$5,773
T & D	$11,582	$2,541
Marginal Energy	$51,968	$17,347
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$89,904	$25,661
Rebates Paid To Participants	$18,383	$12,420
TOTAL BENEFITS	**$108,287**	**$38,081**
Xcel Energy's Project Costs		
Total Incentive	$18,383	$12,420
Internal Admin.	$59,818	$23,698
Third-Party Delivery	$0	$0
Promotion	$0	$2,793
Measurement & Verification	$0	$0
Subtotal	$78,201	$38,911
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$41,361	$13,907
Incremental O&M	$0	$0
Subtotal	$41,361	$13,907
TOTAL COSTS	**$119,562**	**$52,819**
Net Present Benefit (Cost)	($11,274)	($14,737)
Net Present Benefit (Cost) per Gen kWh Lifetime	($0.01)	($0.03)
Net Present Benefit (Cost) per Generator kW	($329)	($1,709)
Benefit-Cost Ratio	**0.91**	**0.72**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	18 years	15 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	22.69%	33.69%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	1,987 kWh	2,951 kWh
(C) Free Driver/Free Rider Factor (Energy)	100.0%	100.0%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	1,987 kWh	2,951 kWh
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	2,184 kWh	3,243 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	100.0%	100.0%
(G) Net Customer kW: (F)*(C1)=	1.00 kW	1.00 kW
(H) Coincidence Factor at Generator	68.31%	75.00%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.7506 kW	0.8242 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	100%	100%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0432	$0.0764
* Xcel Energy Project Cost per kW at Gen	$2,216.59	$3,718.39

Participant Input Summary & Program Totals

Business Cooling Efficiency	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	1.27 kW	5.23 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	100.0%	100.0%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	1.27 kW	5.23 kW
(D) Coincident Factor	68.31%	75.00%
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	0.95 kW	4.31 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	1,987 kWh	2,951 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	2,521 kWh	15,441 kWh
(I) Free Driver/Free Rider Factor (Energy)	100%	100%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	2,521 kWh	15,440.511 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	2,770 kWh	16,967.595 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	100%	100%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	36	2
Total Gross Customer kW Reduction: (A)*(O)=	46 kW	10 kW
Total Net Customer kW Reduction: (C)*(O)=	46 kW	10 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	34 kW	9 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	90,746 kWh	30,881 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	90,746 kWh	30,881 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	99,721 kWh	33,935 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	1,810,990 kWh	509,028 kWh
Total Budget	$78,201	$38,911

➢ Business Custom Efficiency

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$106,741	$3,387
T & D	$46,923	$1,488
Marginal Energy	$901,134	$17,611
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$1,054,798	$22,486
Rebates Paid To Participants	$71,726	$1,230
TOTAL BENEFITS	**$1,126,524**	**$23,716**
Xcel Energy's Project Costs		
Total Incentive	$71,726	$1,230
Internal Admin.	$86,366	$23,277
Third-Party Delivery	$0	$0
Promotion	$0	$4,040
Measurement & Verification	$0	$0
Subtotal	$158,092	$28,546
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$418,288	$12,538
Incremental O&M	$0	$0
Subtotal	$418,288	$12,538
TOTAL COSTS	**$576,380**	**$41,084**
Net Present Benefit (Cost)	$550,144	($17,368)
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.02	($0.03)
Net Present Benefit (Cost) per Generator kW	$3,604	($3,858)
Benefit-Cost Ratio	**1.95**	**0.58**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	18 years	19 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	62.19%	91.95%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	5,447 kWh	8,055 kWh
(C) Free Driver/Free Rider Factor (Energy)	100.0%	100.0%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	5,447 kWh	8,055 kWh
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	5,986 kWh	8,851 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	100.0%	100.0%
(G) Net Customer kW: (F)*(C1)=	1.00 kW	1.00 kW
(H) Coincidence Factor at Generator	45.10%	100.00%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.4956 kW	1.0989 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	100%	100%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0048	$0.0423
* Xcel Energy Project Cost per kW at Gen	$1,035.74	$6,968.67

Participant Input Summary & Program Totals

Business Custom Efficiency	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	15.71 kW	4.10 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	100.0%	100.0%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	15.71 kW	4.10 kW
(D) Coincident Factor	45.10%	100.00%
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	7.79 kW	4.50 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	5,447 kWh	8,055 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	85,604 kWh	32,995 kWh
(I) Free Driver/Free Rider Factor (Energy)	100%	100%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	85,604 kWh	32,994.640 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	94,070 kWh	36,257.846 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	100%	100%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	20	1
Total Gross Customer kW Reduction: (A)*(O)=	308 kW	4 kW
Total Net Customer kW Reduction: (C)*(O)=	308 kW	4 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	153 kW	5 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	1,677,840 kWh	32,995 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	1,677,840 kWh	32,995 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	1,843,780 kWh	36,258 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	33,235,670 kWh	675,199 kWh
Total Budget	$158,092	$28,546

➢ Business Lighting Efficiency

Net Present Value Benefit Analysis 2008 Benefit-Cost Summary For Total Program	GOAL Total Resource Cost Test ($)	ACTUAL Total Resource Cost Test ($)
Avoided Revenue Requirements		
Generation	$129,397	$7,697
T & D	$56,902	$3,385
Marginal Energy	$473,883	$28,329
Environmental Externality	N/A	N/A
Natural Gas	N/A	N/A
Subtotal	$660,182	$39,411
Rebates Paid To Participants	$82,860	$15,893
TOTAL BENEFITS	**$743,042**	**$55,304**
Xcel Energy's Project Costs		
Total Incentive	$82,860	$15,893
Internal Admin.	$108,584	$30,320
Third-Party Delivery	$0	$0
Promotion	$0	$20,537
Measurement & Verification	$0	$0
Subtotal	$191,444	$66,750
Revenue Reduction		
Revenue Reduction - Electric	N/A	N/A
Revenue Reduction - Gas	N/A	N/A
Subtotal	N/A	N/A
Participants' Net Costs		
Incremental Capital	$196,811	$20,781
Incremental O&M	$0	$0
Subtotal	$196,811	$20,781
TOTAL COSTS	**$388,255**	**$87,531**
Net Present Benefit (Cost)	$354,787	($32,228)
Net Present Benefit (Cost) per Gen kWh Lifetime	$0.03	($0.03)
Net Present Benefit (Cost) per Generator kW	$2,198	($2,986)
Benefit-Cost Ratio	**1.91**	**0.63**

Project Assumptions:	**GOAL**	**ACTUAL**
Measure Lifetime (Years)	18 years	18 years
Customer Rate	General Service	General Service
(A) Gross Load Factor at Customer (LF)	47.59%	38.33%
(B) Gross kWh/Year saved per Customer kW: (A)*(8760)=	4,169 kWh	3,357 kWh
(C) Free Driver/Free Rider Factor (Energy)	70.0%	87.3%
(D) Net kWh/Year saved per Customer kW: (B)*(C)=	2,918 kWh	2,932 kWh
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
Net kWh/Year Saved at Generator per Customer kW: (D)/(1-(E1))=	3,207 kWh	3,222 kWh
(F) Gross Customer kW	1 kW	1 kW
(C1) Free Driver/Free Rider Factor (Demand)	70.0%	87.6%
(G) Net Customer kW: (F)*(C1)=	0.70 kW	0.88 kW
(H) Coincidence Factor at Generator	84.75%	67.76%
Generator Adjusted kW: (G)*(H)/(1-(E2))=	0.6519 kW	0.6519 kW
(I) Gross MCF/Year saved per Customer kW	0.0 MCF	0.0 MCF
(J) Free Driver/Free Rider Factor (Gas)	70%	88%
(K) Net MCF/Year saved per Customer kW (I)*(J)	0.0 MCF	0.0 MCF
* Xcel Energy Project Cost per kWh Lifetime	$0.0137	$0.0710
* Xcel Energy Project Cost per kW at Gen	$1,186.30	$4,604.30

Participant Input Summary & Program Totals

Business Lighting Efficiency	GOAL 2008	ACTUAL 2008
(A) Gross Customer kW Reduction per Participant	8.44 kW	5.52 kW
(B) Free Driver/Free Rider Factor (Marketing kW)	70.0%	87.6%
(C) Net Customer kW Reduction per Participant: (A)*(B)=	5.91 kW	4.83 kW
(D) Coincident Factor	84.75%	67.76%
(E1) Transmission Loss Factor (Energy)	9.0%	9.0%
(E2) Transmission Loss Factor (Demand)	9.0%	9.0%
(F) Net Summer Generator kW Reduction per Participant: (C)*(D)/(1-E2)=	5.50 kW	3.60 kW
(G) Gross kWh/Year saved per Customer kW (Equivalent Full Load Hours)	4,169 kWh	3,357 kWh
(H) Gross kWh Reduction per Participant at Customer per Year: (A)*(G)=	35,196 kWh	18,530 kWh
(I) Free Driver/Free Rider Factor (Energy)	70%	87%
(J) Net kWh reduction per Participant at Customer per Year: (I)*(H)=	24,638 kWh	16,181.096 kWh
(K) Net kWh reduction per Participant at Generator per Year: (I)/(1-E1)=	27,074 kWh	17,781.424 kWh
(L) Gross MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(M) Free Driver/Free Rider Factor (Gas)	70%	87%
(N) Net MCF/Year Reduction per Participant	0.0 MCF	0.0 MCF
(O) Number of Participants	29	3
Total Gross Customer kW Reduction: (A)*(O)=	248 kW	17 kW
Total Net Customer kW Reduction: (C)*(O)=	173 kW	14 kW
Total Net Summer Generator kW Reduction: (F)*(O)=	161 kW	11 kW
Total Gross kWh Reduction at Customer per Year: (H)*(O)=	1,031,890 kWh	55,591 kWh
Total Net kWh Reduction at Customer per Year: (J)*(O)=	722,323 kWh	48,543 kWh
Total Net kWh reduction at Generator per year: (K)*(O)=	793,762 kWh	53,344 kWh
Total Gross MCF Reduction at Customer per Year: (L)*(O)=	0 MCF	0 MCF
Total Net MCF Reduction at Customer per Year: (N)*(O)=	0 MCF	0 MCF
Total Net kWh reduction at Generator Lifetime: (K)*(O)*(Lifetime)=	14,006,081 kWh	939,592 kWh
Total Budget	$191,444	$66,750

Type of Measure ELECTRIC	Baseline Product Description / Rating	Baseline Product kW Consumption	Baseline Peak Coincident kW per Participant (at customer)	Baseline kWh per Participant (at customer)	Coincidence Factor	High Efficiency Product Description / Rating	Efficient Product kW Consumption	H.E. Peak Coincident kW per Participant (at customer)	H.E. kWh per Participant (at customer)	Life of Product (years)	Hours of Operation per yr	Rebate Amount	Incremental Cost of Efficient Product	Customer kW Savings	Generator Peak kW Savings
Revised: 5/09/07 amk															
BUSINESS															
		kW					kW							kW	kW
Cooling Efficiency		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Roof Top Units (RTUs)		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
RTUs 5.4 Tons Single Phase	Assume average unit size of 4 tons, 13.0 SEER (minimum code efficiency)	4.34	3.30	5,243	75.96%	Assume average unit size of 4 tons, 13.9 SEER	4.06	3.08	4,904	20	1,208	$200	$2,000	0.28	0.23
RTUs 5.4 Tons Three Phase	Assume average unit size of 4 tons, 12.0 SEER	4.71	3.58	5,690	75.96%	Assume average unit size of 4 tons, 13.12 SEER	4.35	3.30	5,255	20	1,208	$360	$596	0.36	0.30
Rooftop Units 5.5 tons to 11.3 tons	Assume average unit size of 7.5 tons, EER 10.1 (code minimum efficiency)	8.91	6.77	10,763	75.96%	Assume average unit size of 7.5 tons, 11.56 EER	7.79	5.92	9,410	20	1,208	$543	$657	1.12	0.93
Rooftop Units 11.4 to 19.9 tons	Assume average unit size of 15 tons, 9.5 EER (code minimum efficiency)	18.95	14.39	22,892	75.96%	Assume average unit size of 15 tons, 11.46 EER	15.71	11.93	18,978	20	1,208	$1,146	$1,564	3.24	2.70
Rooftop Units 20 to 63.3 tons (assumed 25 Ton average)	Assume average unit size of 25 tons, 9.3 EER (minimum code efficiency)	32.26	24.50	38,970	75.96%	Assume average unit size of 25 tons, 10.46 EER	28.68	21.79	34,645	20	1,208	$1,910	$2,022	3.58	2.99
Rooftop Units greater than 63 tons (assumed 90 Tons average)	Assume average unit size of 90 tons, 9.0 (code minimum efficiency)	120.00	90.00	144,960	75.00%	Assume average unit size of 90 tons, 9.35 EER based on an average of CEE Information (see comments below)	115.51	86.63	139,536	20	1,208	$4,500	$9,900	4.49	3.70
Variable Air Volume Conversion	Constant Volume Air Handling System	**9.00**	**6.84**	**10,800**	**75.96%**	Variable volume air handling system - VAV Boxes	**0.00**	**0.00**	**0**	**20**	**1,200**	**$100**	**$7,250**	**9.000**	**7.513**
Split Systems		**47.25**	**35.89**	**57,072**	**75.96%**		**45.22**	**34.35**	**54,623**	**20**	**1,208**	**$1,260**	**$2,803**	**2.028**	**1.692**
Split Systems - 5.4 to 11.3 tons	Assume average unit size of 7.5 tons, 10.3 EER (code minimum efficiency)	8.74	6.64	10,558	75.96%	Assume average unit size of 7.5 tons, 11.21 EER	8.03	6.10	9,700	20	1,208	$325	$570	0.71	0.59
Split Systems - 11.3 to 20 tons	Assume average unit size of 20 tons, 9.5 EER (code minimum efficiency)	18.56	14.10	22,420	75.96%	Assume average size of 15 Tons, 10.17 EER	17.70	13.44	21,382	20	1,208	$497	$1,140	0.86	0.72
Split Systems - 20 to 63.3 tons	Assume average unit size of 33 tons, 9.7 EER (code minimum efficiency)	41.68	31.66	50,349	75.96%	Assume average size of 33 Tons, 9.87 EER	40.14	30.49	48,489	20	1,208	$1,092	$2,508	1.54	1.29
Split Systems - greater than 63.3 tons	Assume average unit size of 92 tons, 9.2 EER (code minimum efficiency)	120.00	91.15	144,960	75.96%	Assume average size of 92 Tons, 9.6 EER	115.00	87.35	138,920	20	1,208	$3,128	$6,992	5.00	4.17
Condensing Units > 11.3 tons	Assume average size of 53.6 Tons, 10.10 EER (code minimum efficiency)	**63.71**	**47.78**	**76,962**	**75.00%**	Assume average size of 53.6 Tons, 10.87 EER	**59.18**	**44.39**	**71,489**	**20**	**1,208**	**$2,242**	**$4,095**	**4.530**	**3.734**
PTAC	Assume average size of 1 ton, 8.29 EER	**1.44**	**1.09**	**1,740**	**75.96%**	Assume average size of 1 ton, 11 EER	**1.09**	**0.83**	**1,317**	**20**	**1,208**	**$20**	**$50**	**0.350**	**0.292**

Type of Measure ELECTRIC	Baseline Product Description / Rating	Baseline Product kW Consumption	Baseline Peak Coincident kW per Participant (at customer)	Baseline kWh per Participant (at customer)	Coincidence Factor	High Efficiency Product Description / Rating	Efficient Product kW Consumption	H.E. Peak Coincident kW per Participant (at customer)	H.E. kWh per Participant (at customer)	Life of Product (years)	Hours of Operation per yr	Rebate Amount	Incremental Cost of Efficient Product	Customer kW Savings	Generator Peak kW Savings
Heat Pumps		**40.22**	**30.05**	**118,720**	**75.00%**		**34.99**	**25.02**	**103,635**	**128**	**2,951**	**$3,483**	**$6,954**	**5.232**	**4.312**
SEER 14 Air Source Heat Pump Equipment	SEER 13 ASHP, 3.5 tons average size	4.73	3.53	13,967	75.00%	14 SEER ASHP, 3.5 tons average size	4.48	3.28	13,236	15	2,951	$160	$316	0.25	0.21
SEER 14 ASHP Cooling Component	SEER 13 ASHP, 3.5 tons average size	4.71	3.53	6,386	75.00%	14 SEER ASHP, 3.5 tons average size	4.38	3.28	5,929	15	1,355				
SEER 14 ASHP Heating Component	HSPF 8.0; 3.5 tons average size	4.75	0.00	7,581	0.00%	14 SEER ASHP, 3.5 tons, 38,000 BTUh; 8.6 HSPF	4.58	0.00	7,307	15	1,596				
SEER 15 Air Source Heat Pump Equipment	SEER 13 ASHP, 3.5 tons average size	4.73	3.53	13,967	75.00%	14 SEER ASHP, 3.5 tons average size	4.04	3.00	11,940	15	2,951	$315	$632	0.69	0.57
SEER 15 ASHP Cooling Component	SEER 13 ASHP, 3.5 Tons	4.71	3.53	6,386	75.00%	15 SEER ASHP, 3.5 tons average size	4.00	3.00	5,420	15	1,355				
SEER 15 ASHP Heating Component	HSPF 8.0; 3.5tons average size	4.75	0.00	7,581	0.00%	15 SEER ASHP, 3.5 tons, 29,300 BTUh; 8.69 HSPF	4.09	0.00	6,520	15	1,596				
SEER 16 Air Source Heat Pump Equipment	SEER 13 ASHP, 3.5 tons average size	4.73	3.53	13,967	75.00%	14 SEER ASHP, 3.5 tons average size	4.07	2.87	12,081	15	2,951	$475	$948	0.66	0.54
SEER 16 ASHP Cooling Component	SEER 13 AC, 3.5 tons average size	4.71	3.53	6,386	75.00%	16 SEER ASHP, 3.5 tons average size	3.83	2.87	5,190	15	1,355				
SEER 16 ASHP Heating Component	HSPF 8.0; 3.5 tons average size	4.75	0.00	7,581	0.00%	14 SEER ASHP, 3.5 tons, 29,200 BTUh; 9.0 HSPF	4.32	0.00	6,892	15	1,596				
EER 14.1 Ground Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	3.68	2.42	10,970.14	75.00%	SEER 14.1 AC, 3.5 tons average size	3.20	2.25	9,493	15	2,951	$425	$850	0.48	0.40
EER 15 Ground Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	3.68	2.42	10,970.14	75.00%	SEER 15 AC, 3.5 tons average size	3.09	2.10	9,175	15	2,951	$425	$850	0.59	0.49
EER 16 Ground Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	3.68	2.42	10,970.14	75.00%	SEER 16 AC, 3.5 tons average size	2.93	1.97	8,728	15	2,951	$425	$850	0.75	0.62
Water Source Heat Pumps	Assume average size of 4 Tons, 12.0 EER	4.00	3.00	11,804	75.00%	Assume average size of 4 Tons, 15.14 EER	3.17	2.38	9,355	20	2,951	$245	$571	0.83	0.68
Chillers		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Centrifugal Chillers - 300 tons and less	Assume 300 Ton chiller, 0.634 kW/ton	190.20	144.48	509,356	75.96%	Assume 300 Ton chiller, an average of 0.567, 0.5 and 0.535 kW/ton	162.68	123.57	435,657	20	2,678	$5,692	$17,349	27.52	22.97
Centrifugal Chillers - greater than 300 tons	Assume 500 Ton chiller, 0.576 kW/ton	288.00	218.76	771,264	75.96%	Assume 500 Ton chiller, an average of 0.542 and .505 kW/ton	261.75	198.83	700,967	20	2,678	$10,192	$23,867	26.25	21.91
Air-Cooled Chillers - avg. capacity 250 tons	Air-cooled chiller average capacity 250 tons, 1.26 kW/ton	315.00	236.25	380,520	75.00%	Air-cooled chiller average capacity 250 tons, 1.15 kW/ton	287.50	215.63	347,300	20	1,208	$4,000	$8,608	27.50	22.66

Type of Measure ELECTRIC	Baseline Product Description / Rating	Baseline Product kW Consumption	Baseline Peak Coincident kW per Participant (at customer)	Baseline kWh per Participant (at customer)	Coincidence Factor	High Efficiency Product Description / Rating	Efficient Product kW Consumption	H.E. Peak Coincident kW per Participant (at customer)	H.E. kWh per Participant (at customer)	Life of Product (years)	Hours of Operation per yr	Rebate Amount	Incremental Cost of Efficient Product	Customer kW Savings	Generator Peak kW Savings
CUSTOM EFFICIENCY		kW					kW							kW	kW
Custom Efficiency		**5.972**	**5.972**	**48,104.967**	**100.00%**		**1.876**	**1.876**	**15,110**	**20**	**8,055**	**$1,230**	**$12,538.00**	**4.10**	**4.50**
Custom		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Custom - C&I	Old or less efficient systems or equipment	259.29	199.91	1,341,826	77.10%	New Equipment	188.01	144.96	972,952	19	5,175	$15,579.36	$131,504.06	71.28	58.46
Custom - SB	Old or less efficient systems or equipment	27.17	18.43	112,076	67.85%	New Equipment	13.75	9.33	56,711	18	4,125	$2,903.15	$29,241.93	13.42	9.69
Compressed Air Efficiency		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Average Custom Project	Old or less efficienct systems or equipement	130.74	104.98	1,017,680	80.30%	New Equipment	94.05	75.52	553,428	20	5,884	$7,159	$46,890	36.69	36.29
Average Study -Efficiency	Existing System in with Leaks & Waste that have not been repaired	154.50	139.05	1,202,628	90.00%	Leaks & Waste Found and Repaired	126.14	113.53	981,874	7	7,784	$5,407	$6,891	28.36	25.03
Custom Cooling		**131.71**	**113.78**	**129,157**	**80.00%**		**97.40**	**87.66**	**72,368**	**20**	**1,484**	**$5,746**	**$31,335**	**34.307**	**30.160**
SB Custom Cooling	varies by project	27.00	20.25	57,807	75.00%	Varies by project	0	0	0	20	2,141	$5,132	$22,500	27.00	22.25
C&I Custom Cooling	varies by project	68.12	51.09	106,764	75.00%	Varies by project	0	0	0	20	1,567	$11,107	$70,156	68.12	56.14
Cooling Towers	Standard cooling tower	300.00	270.00	222,900	90.00%	Oversized cooling tower	292.20	262.98	217,105	20	743	$1,000	$1,350	7.80	7.71
Custom Lighting		**5.97**	**5.97**	**48,105**	**100.00%**		**1.88**	**1.88**	**15,110**	**20**	**8,055**	**$1,230**	**$12,538**	**4.096**	**4.502**
Average CI Customer	Low Efficiency Lighting	*5.97*	*5.97*	*48,105*	*100.00%*	High Efficiency Lighting	*1.876*	*1.876*	*15,110*	*20*	*8,055*	*$1,230*	*$12,538*	*4.10*	*4.50*
Average SB Customer	Low EffiSBency Lighting	24.46	20.73	145,346	84.75%	High Efficiency Lighting	13.260	11.238	78,788	18	5,942	$2,243	$18,133	11.20	10.43
Motor Efficiency		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Plan A - New Motors C&I	EPACT Efficient Motors	140.97	98.68	800,005	70.00%	NEMA Premium Efficient Motors	139.17	97.42	789,790	20	5,675	$698	$1,310	1.80	1.38
Plan A - New Motors SB	EPACT Efficient Motors	140.97	98.68	800,005	70.00%	NEMA Premium Efficient Motors	139.17	97.42	789,790	20	5,675		$1,310	1.80	1.38
Plan B - Replacement Motors C&I	Earlier than or EPACT Efficient Motors	64.62	45.23	400,644	70.00%	NEMA Premium Efficient Motors	60.88	42.62	377,456	20	6,200	$1,430	$7,638	80.09	61.61
Plan B - Replacement Motors SB	Earlier than or EPACT Efficient Motors	64.62	45.23	400,644	70.00%	NEMA Premium Efficient Motors	60.88	42.62	377,456	20	6,200		$7,638	3.74	2.88
ASD's/VFD'S	Equipment without an ASD	126.04	76.13	658,564	60.40%	Equipment coupled with an ASD	89.89	54.29	469,675	20	5,225	$4,744	$11,070	36.15	23.99
Custom Motors C&I	Old or less efficient systems or equipment	388.64	301.78	1,554,560	77.65%	New Equipment	333.56	259.01	1,334,240	20	4,000	$20,529	$88,397	55.08	47.00
Custom Motors SB	Old or less efficient systems or equipment	32.45	23.56	42,185	72.60%	New Equipment	12.15	8.82	15,795	10	1,300	$3,832	$8,500	20.30	16.20
LIGHTING		kW					kW							kW	kW
Lighting Efficiency		**20.888**	**17.702**	**87,487.388**	**84.75%**		**15.368**	**13.025**	**64,372**	**18**	**4,188**	**$2,977**	**$7,782.89**	**5.52**	**5.14**
Lighting Retrofit		**20.89**	**17.70**	**87,487**	**84.75%**		**15.37**	**13.02**	**64,372**	**18**	**4,188**	**$2,977**	**$7,783**	**5.519**	**5.140**
Fluorescent Technologies		**20.89**	**17.70**	**87,487**	**84.75%**		**15.37**	**13.02**	**64,372**	**18**	**4,188**	**$2,977**	**$7,783**	**5.519**	**5.140**
T8 Ballasts, 4 ft. or less, 1 and 2 lamp	T12 systems	0.072	0.06	303	84.75%	T8 systems	0.053	0.045	224	18	4,202	$10	$32	0.02	0.02
T8 Ballasts, 4 ft. or less, 3 and 4 lamp	T12 systems	0.135	0.11	563	84.75%	T8 systems	0.099	0.083	411	18	4,169	$20	$35	0.04	0.03

Type of Measure ELECTRIC	Baseline Product Description / Rating	Baseline Product kW Consumption	Baseline Peak Coincident kW per Participant (at customer)	Baseline kWh per Participant (at customer)	Coincidence Factor	High Efficiency Product Description / Rating	Efficient Product kW Consumption	H.E. Peak Coincident kW per Participant (at customer)	H.E. kWh per Participant (at customer)	Life of Product (years)	Hours of Operation per yr	Rebate Amount	Incremental Cost of Efficient Product	Customer kW Savings	Generator Peak kW Savings
T8 Ballasts, Length > 4 ft. and <= 8 ft., 1 lamp	T12 systems	0.143	0.12	602	84.75%	T8 systems	0.075	0.064	316	18	4,202	$15	$56	0.07	0.06
T8 Ballasts, Length > 4 ft. and <= 8 ft., 2 lamp	T12 systems	0.160	0.14	672	84.75%	T8 systems	0.113	0.096	476	18	4,202	$20	$56	0.05	0.04
High-Bay Fluorescent T8, 6 and 8 lamp	Metal Halide	0.460	0.39	1,934	84.75%	T8 systems	0.212	0.180	892	18	4,207	$75	$265	0.25	0.23
Super T8 1 and 2 Lamp	T12 systems	0.076	0.06	317	84.75%	Super T8 Lamps and Ballasts	0.041	0.035	171	18	4,159	$15	$40	0.04	0.03
Super T8 3 and 4 Lamp	T12 systems	0.156	0.13	650	84.75%	Super T8 Lamps and Ballasts	0.089	0.076	371	18	4,159	$18	$44	0.07	0.06
T5 Ballasts 1 and 2 Lamp	T12 systems	0.094	0.08	398	84.75%	T5 ballasts	0.057	0.049	242	18	4,219	$10	$27	0.04	0.03
T5 Ballasts 3 and 4 Lamp	T12 systems	0.097	0.08	406	84.75%	T5 ballasts	0.060	0.051	251	18	4,183	$16	$48	0.04	0.03
T5 Ballasts High-Bay 4 Lamp	Metal Halide	0.460	0.39	1,886	84.75%	T5 HO ballasts	0.234	0.198	960	18	4,100	$75	$270	0.23	0.21
Low Wattage T8 4' lamps	4' 32 W T8 lamps	0.026	0.02	109	84.75%	4' 25 or 28W T8 lamps	0.024	0.020	100	7	4,159	$0.75	$1.73	0.00	0.00
Compact Fluorescent Lamps (CFL), less than 19W	Incandescent	0.053	0.04	216	84.75%	Hardwired or modular CFL	0.012	0.010	50	18	4,082	$10	$50	0.04	0.04
CFL, 19 to 32 W	Incandescent	0.095	0.08	394	84.75%	Hardwired or modular CFL	0.026	0.022	108	18	4,149	$18	$57	0.07	0.06
CFL, 33 to 56W	Incandescent	0.160	0.14	661	84.75%	Hardwired or modular CFL	0.040	0.034	164	18	4,128	$24	$95	0.12	0.11
Industrial Multi-CFL	Metal Halide	0.460	0.39	1,946	84.75%	Multi-CFL	0.320	0.271	1,354	18	4,230	$25	$125	0.14	0.13
HID Technologies		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
HID, 151 to 250W	Mercury Vapor, High Pressure Sodium	0.422	0.36	1,755	84.75%	Metal Halide	0.278	0.236	1,156	18	4,157	$30	$173	0.14	0.13
HID, 251 to 1000W	Mercury Vapor, High Pressure Sodium	1.075	0.91	4,406	84.75%	Metal Halide	0.460	0.390	1,885	18	4,098	$45	$180	0.62	0.57
Pulse-Start Metal Halide, <= 175W	Metal Halide, Mercury Vapor, High Pressure Sodium	0.241	0.20	1,002	84.75%	Pulse Start Metal Halide	0.169	0.143	702	18	4,166	$40	$161	0.07	0.07
Pulse-Start Metal Halide, 176W-319W	Metal Halide, Mercury Vapor, High Pressure Sodium	0.455	0.39	1,897	84.75%	Pulse Start Metal Halide	0.283	0.239	1,177	18	4,166	$60	$280	0.17	0.16
Pulse-Start Metal Halide, 320W-749W	Metal Halide, Mercury Vapor, High Pressure Sodium, Incadescent	0.476	0.40	1,984	84.75%	Pulse Start Metal Halide	0.365	0.309	1,519	18	4,166	$75	$283	0.11	0.10
Pulse-Start Metal Halide, 750W+	Metal Halide	1.080	0.92	4,499	84.75%	Pulse Start Metal Halide	0.812	0.688	3,383	18	4,166	$100	$381	0.27	0.25
LED Technologies		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
12""Red LED Traffic Signal	Incandescent	0.145	0.08	699	55.00%	Light Emitting Diodes (LED)	0.011	0.006	53	18	4,818	$40	$125	0.13	0.08
8" Red LED Traffic Signal	Incandescent	0.067	0.04	323	55.00%	LED	0.008	0.004	39	18	4,818	$40	$85	0.06	0.04
12" Green LED Traffic Signal	Incandescent	0.145	0.06	533	42.00%	LED	0.015	0.006	55	18	3,679	$40	$275	0.13	0.06
8" Green LED Traffic Signal	Incandescent	0.067	0.03	247	42.00%	LED	0.012	0.005	44	18	3,679	$40	$175	0.06	0.03
Pedestrian Traffic Signal 12" Size and larger	Incandescent	0.070	0.07	613	100.00%	LED	0.012	0.012	105	18	8,760	$40	$175	0.06	0.06
Pedestrian Traffic Signal 9" Size	Incandescent	0.070	0.07	613	100.00%	LED	0.010	0.010	88	18	8,760	$40	$175	0.06	0.07
RED LED Traffic Arrow Signal	Incandescent	0.145	0.13	1,111	87.50%	LED	0.006	0.005	46	18	7,665	$40	$134	0.14	0.13

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Exit sign retrofit and replacement	Incandescent	0.035	0.03	146	84.75%	Light Emitting Diodes (LED)	0.002	0.002	8	18	4,175	$6	$80	0.03	0.03
Automatic Controls		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Wall mount occupancy sensor	Lighting Systems without Occupancy Sensor	0.300	0.25	1,250	84.75%	Lighting Systems with Occupancy Sensor	0.218	0.184	906	18	4,166	$15	$60	0.08	0.08
Ceiling mount occupancy sensor	Lighting Systems without Occupancy Sensor	0.550	0.47	2,291	84.75%	Lighting Systems with Occupancy Sensor	0.350	0.297	1,458	18	4,166	$40	$175	0.20	0.19
Photocell	Lighting Systems without Photosensor	0.427	0.36	1,778	84.75%	Lighting Systems with Photosensor	0.337	0.286	1,405	18	4,166	$25	$80	0.09	0.08
Reflectors		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Reflector	T12 with more lamps	0.107	0.09	451	84.75%	T8 system with reflector and fewer lamps	0.086	0.073	364	18	4,227	$0.50	$12	0.02	0.02
Lighting New Construction		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Fluorescent Technologies		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
High-Bay Fluorescent T8, 6 and 8 lamp	Metal Halide	0.460	0.39	1,919	84.75%	T8 systems	0.212	0.180	884	18	4,171	$20	$85	0.25	0.23
Super T8 1 and 2 Lamp	Standard T8 lamps and ballasts	0.053	0.05	223	84.75%	Super T8 Lamps and Ballasts	0.041	0.035	172	18	4,188	$2.50	$7	0.01	0.01
Super T8 3 and 4 Lamp	Standard T8 lamps and ballasts	0.099	0.08	412	84.75%	Super T8 Lamps and Ballasts	0.087	0.074	363	18	4,188	$3.00	$10	0.01	0.01
Low Wattage T8	Standard T8 lamps	0.026	0.02	109	84.75%	Low Wattage T8 lamps	0.024	0.020	100	7	4,153	$0.75	$2	0.00	0.00
Lighting - T5 Ballasts 3 and 4 Lamp	T8 systems	0.086	0.07	353	84.75%	T5 systems	0.060	0.051	246	18	4,098	$10	$33	0.03	0.02
Lighting - T5 Ballasts High-Bay 4 Lamp	Metal Halide	0.460	0.39	1,883	84.75%	T5 HO systems	0.234	0.198	958	18	4,093	$20	$90	0.23	0.21
Lighting - CFL <=18W	Incandescent	0.053	0.04	217	84.75%	Hardwired or modular CFL	0.012	0.010	50	18	4,098	$8	$30	0.04	0.04
Lighting - CFL19-32W	Incandescent	0.095	0.08	389	84.75%	Hardwired or modular CFL	0.026	0.022	107	18	4,098	$10	$36	0.07	0.06
Lighting - CFL, 33 W-56W	Incandescent	0.175	0.15	717	84.75%	Hardwired or modular CFL	0.046	0.039	186	18	4,098	$12	$41	0.13	0.12
HID Technologies		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Lighting - Pulse-Start Metal Halide, <= 175W	High Pressure Sodium, Mercury Vapor, Metal Halide	0.241	0.20	1,012	84.75%	Pulse Start Metal Halide	0.169	0.143	709	18	4,207	$6	$21	0.07	0.07
Lighting - Pulse-Start Metal Halide, 176W-319W	High Pressure Sodium, Mercury Vapor, Metal Halide	0.455	0.39	1,916	84.75%	Pulse Start Metal Halide	0.283	0.239	1,188	18	4,207	$20	$119	0.17	0.16
Lighting - Pulse-Start Metal Halide, 320W-749W	High Pressure Sodium, Mercury Vapor, Metal Halide	0.476	0.40	1,954	84.75%	Pulse Start Metal Halide	0.365	0.309	1,496	18	4,103	$18	$106	0.11	0.10
Lighting - Pulse-Start Metal Halide, 750W+	High Pressure Sodium, Mercury Vapor, Metal Halide	1.080	0.92	4,431	84.75%	Pulse Start Metal Halide	0.812	0.688	3,332	18	4,103	$15	$71	0.27	0.25

Type of Measure ELECTRIC	Baseline Product Description / Rating	Baseline Product kW Consumption	Baseline Peak Coincident kW per Participant (at customer)	Baseline kWh per Participant (at customer)	Coincidence Factor	High Efficiency Product Description / Rating	Efficient Product kW Consumption	H.E. Peak Coincident kW per Participant (at customer)	H.E. kWh per Participant (at customer)	Life of Product (years)	Hours of Operation per yr	Rebate Amount	Incremental Cost of Efficient Product	Customer kW Savings	Generator Peak kW Savings
RESIDENTIAL															
		kW					kW							kW	kW
Electric Heat Weatherization	Electric heat non-weatherization	18.400	0.00	5,000	0.00%	Electric heat weatherization	10.616	0.000	2,885	15	272	$500	$500	7.78	0.00
Residential Home Lighting	**75 Watt non-CFL bulb**	**0.075**	**0.009**	**114.000**	**12.50%**	**23 Watt CFL**	**0.023**	**0.003**	**35**	**6**	**1,520**	**$3**	**$3.90**	**0.05**	**0.01**
Living Wise® Program		**0.254**	**0.122**	**1,797**	**47.89%**		**0.170**	**0.112**	**1,417**		**4,550**	**$0**	**$0.00**	**0.08**	**0.04**
14W CFL	75 Watt incandescent	0.075	0.008	114	10.00%	14 Watt CFL	0.014	0.001	21	6	1,520	$0	N/A	0.06	0.01
Low-flow showerhead	4 gal/minute	0.114	0.009	995	8.00%	1.5 gal/minute	0.043	0.003	373	10	8,760	$0	N/A	0.07	0.01
Low-flow faucet aerator	2.5 gal/minute	0.029	0.002	253	8.00%	1.5 gal/minute	0.017	0.001	152	5	8,760	$0	N/A	0.01	0.00
Filter Alarm	no filter alarm	0.342	0.267	3,000	78.00%	filter alarm installed	0.332	0.259	2,910	10	8,760	$0	N/A	0.01	0.01
Limelite Nightlight	Average nightlight	0.007	0.000	32	0.00%	Limelite nightlight	0.000	0.000	0	10	4,500	$0	N/A	0.01	0.00
Air-Source Heat Pumps		**5.32**	**3.98**	**15,713**	**78.00%**		**4.66**	**3.41**	**13,792**	**15**	**2,951**	**$434**	**$711**	**0.659**	**0.564**
SEER 14 Air Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	4.73	3.53	13,967	78.00%	14 SEER ASHP, 3.5 tons average size	4.48	3.282	13,236	15	2,951	$473	$316	0.25	0.22
SEER 15 Air Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	4.73	3.53	13,967	78.00%	15 SEER ASHP, 3.5 tons average size	4.04	3.000	11,940	15	2,951	$315	$632	0.69	0.59
SEER 16 Air Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	4.73	3.53	13,967	78.00%	16 SEER ASHP, 3.5 tons average size	4.07	2.873	12,081	15	2,951	$475	$948	0.66	0.56
EER 14.1 Ground Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	3.68	2.42	10,970	78.00%	14 SEER ASHP, 3.5 tons average size	3.20	2.250	9,493	15	2,951	$425	$850	0.48	0.41
EER 15 Ground Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	3.68	2.42	10,970	78.00%	15 SEER ASHP, 3.5 tons average size	3.09	2.100	9,175	15	2,951	$425	$850	0.59	0.51
EER 16 Ground Source Heat Pump Equipment	SEER 13 AC, 3.5 tons average size	3.68	2.42	10,970	78.00%	16 SEER ASHP, 3.5 tons average size	2.93	1.965	8,728	15	2,951	$425	$850	0.75	0.64
SAVER'S SWITCH		Kilo Watts					Kilo Watts							kW	kW
Saver's Switch - TOTAL		**#DIV/0!**			#DIV/0!		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Average Customer New AC	No Control, No Switch	3.00	1.12	13	37.33%	Utility Load Control for control period	0	0	0	15	4	$0	$0	3.00	1.23
Average Customer New AC and Wtr Heater	No Control, No Switch	6.02	1.42	42	23.51%	Utility Load Control for control period	0	0	0	15	7	$0	$0	6.02	1.56
Average Customer Maintenance AC	No Control, Switch is not working	3.00	1.12	13	37.33%	Utility Load Control for control period	0	0	0	15	4	$0	$0	3.00	1.23
LOW-INCOME															
		kW					kW							kW	kW
Low-Income Energy Services		**0.06**	**0.01**	**92**	**9.81%**		**0.02**	**0.00**	**23**	**6**	**1,500**	**$4**	**$4**	**0.046**	**0.005**
Low-Income - TOTAL		**0.062**	**0.01**	**92**	**10.00%**		**0**	**0**	**23**	**6**	**1,521**	**$4.06**	**$4.06**	**0.046**	**0.005**
Lighting Giveaway	60 Watt bulb	0.06	0.01	91	10.00%	15 Watt CFL	0.02	0.002	23	6	1,520	$4	$4	0.05	0.00
Refrigerator Upgrade	Older Refrigerator, 18 cu. Ft.	0.24	0.03	1,199	13.00%	Energy Star Refrigerator, 18 cu. Ft.	0.08	0.023	413	15	4,995	$365	$365	0.16	0.02
Electric Heat Weatherization	Electric heat non-weatherization	18.40	0.00	5,000	0.00%	Electric heat weatherization	10.62	0.000	2,885	15	272	$500	$500	7.78	0.00