Demand-Side Management Annual Status Report

Electric and Natural Gas

Public Service Company of Colorado

April 1, 2014 / Docket No. 11A-631EG

2013

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2013 Demand-Side Management Annual Status Report

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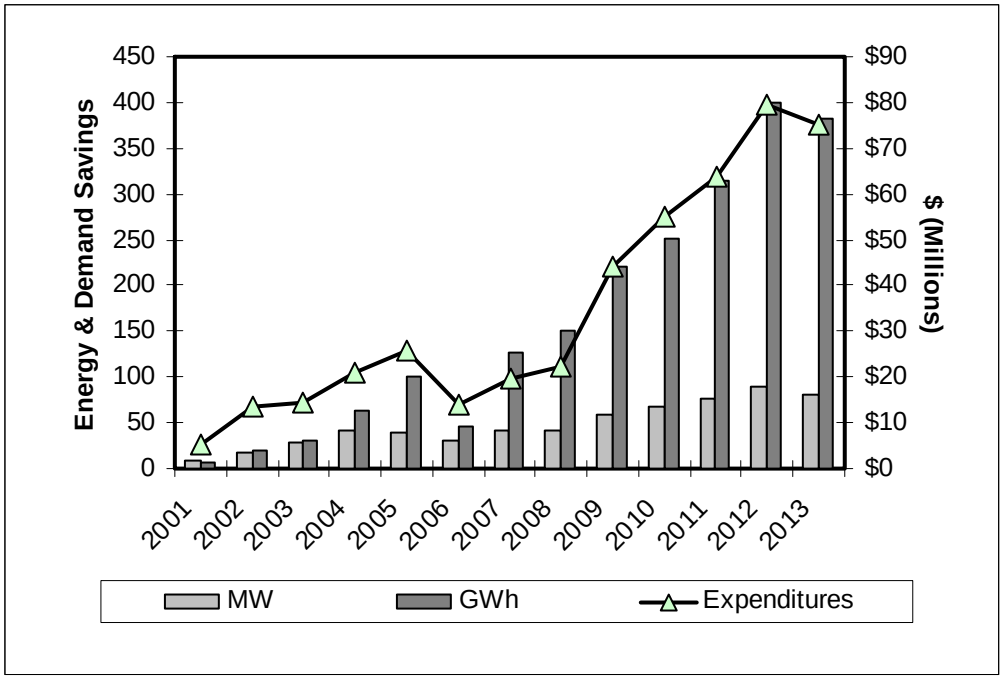
Executive Summary

Public Service Company of Colorado ("Public Service" or the "Company") submits this combined electric and natural gas 2013 Colorado Demand-Side Management (DSM) Annual Status Report ("Status Report") to the Colorado Public Utilities Commission ("Commission") at the conclusion of 2013, the second year of the 2012/2013 DSM Plan (Proceeding No. 11A-631EG). In this filing, the Company will report on its 2013 electric and natural gas DSM Programs.

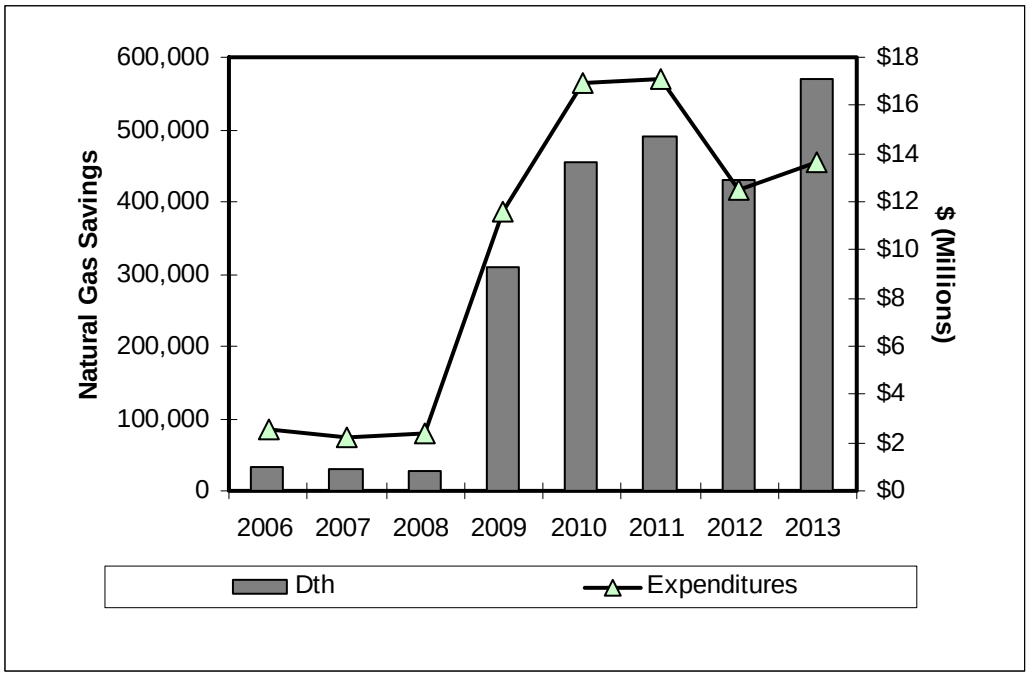
The electric savings of 384.2 GWh are a significant accomplishment equaling 108% of the Commission approved goal of 356 GWh.[1] Natural gas savings of 570,575 Dth was 133% of our approved goal of 428,760 Dth. To achieve these savings, the Company spent a total of $88.9 million ($75.3 million – electric, $13.6 million – natural gas) on its electric and natural gas programs, less than the approved electric budget of $83.0 million and slightly above (2.7%) the approved gas budget of $13.3 million. Below in Figure 1 and 2 are Public Service's historical achievements and expenditures for its electric and natural gas DSM Programs.

Figure 1: Historical Electric Program Savings and Expenditures



[1] Decision No. C11-0442 in Proceeding No. 10A-554EG; issued April 26, 2011.

Figure 2: Historical Natural Gas Program Savings and Expenditures



History of the Plan

Between 1996 and 2003, Public Service entered into several regulatory settlements involving electric DSM, in conjunction with its integrated resource/least-cost planning process. The following paragraphs describe those settlements:

- In the 1996 Integrated Resource Plan (IRP) Settlement Agreement (Decision C98-1042, Proceeding No. 97A-297E), the Company committed up to $10 million for DSM over four years through two bid processes. The first focused on residential air conditioning load control and lighting for commercial customers ("Bid 2000") and the second followed the completion of the Bid 2000 program.
- In the 1999 IRP DSM Stipulation and Settlement Agreement (Decision C00-1057, Proceeding No. 00A-008E), the Company committed to use its best efforts to acquire 124 MW of cost-effective DSM resource through the 1999 IRP Resource Acquisition Period ending December 31, 2005. The Company was authorized to spend no more than $75 million (Year 2000 Dollars) to obtain the 124 MW of DSM. This amount included total capital costs and operating expenses incurred by the Company, but excluded expenses for the natural gas Energy $avings Partners ("E$P") low-income weatherization program. The 1999 Agreement identified target savings by customer class and program type.
- As part of the 2003 Least-Cost Resource Plan Settlement Agreement (Decision C05-0049, Docket Nos. 04A-214E, 04A-215E, 04A-216E), the Company committed to obtain 320 MW and 800 GWh of cost-effective conservation for $196 million (Year 2005 Dollars) between 2006 and 2013.

In 2007, the Colorado General Assembly passed House Bill 07-1037 to promote the acquisition of DSM by investor-owned utilities in Colorado. Governor Ritter signed the bill and it has been codified in relevant part at §§ 40-1-102(5), (6) and (7), C.R.S. and §§ 40-3.2-101 through 40-3.2-104, C.R.S. That bill provides:

> …cost-effective natural gas and electricity demand-side management programs will save money for consumers and utilities and protect Colorado's environment. The general assembly further finds, determines, and declares that providing funding mechanisms to encourage Colorado's public utilities to reduce emissions or air pollutants and to increase energy efficiency are matters of statewide concern and that public interest is served by quality of life and health of Colorado citizens and an increase in the attractiveness of Colorado as a place to live and conduct business.[2]

On September 28, 2007, the Commission issued Decision No. C07-0830, the Notice of Propose Rulemaking required by §40-3.2-103, C.R.S., to implement rules establishing specific natural gas DSM requirements for jurisdictional natural gas utilities. Following informal workshops and several rounds of comments, the Commission issued Decision No. C08-0248 adopting the Rules regarding Natural Gas Demand Side Management, pursuant to House Bill 07-1037, enacted as § 40-3.2-103.

Also in response to the 2007 Demand-Side Management (DSM) legislation, on October 31, 2007, Public Service filed Proceeding No. 07A-420E, an application to significantly expand its electric energy efficiency program. Public Service requested approval to implement an enhanced electric DSM program and to revise its demand-side management cost adjustment mechanism (DSMCA) to include current cost recovery and incentives designed to reward Public Service for successfully implementing cost-effective electric DSM programs and measures. On June 5, 2008, the Commission issued its Decision No. C08-0560 approving, in part, the enhanced DSM Plan proposed by the Company and establishing annual electric energy savings goals for Public Service from 2009 through 2020. As part of Decision No. C08-0560, the Commission also endorsed the Company's proposal to file biennial DSM plans and to combine gas and electric DSM plans in one filing, and approved a waiver of the gas DSM rules' requirement for the Company to file triennial natural gas DSM Plans.

In compliance with Decision No. C08-0560, Public Service filed its first combined gas and electric 2009/2010 Biennial DSM Plan on August 11, 2008. In this Plan, the Company proposed a comprehensive portfolio of electric and natural gas DSM programs for 2009 and 2010 as well as annual budgets and annual goals for the natural gas DSM programs. The Commission initiated Proceeding No. 08A-366EG to consider the initial Biennial Plan filing and numerous parties intervened. However, prior to hearings, the majority of the Intervenors, the Commission Staff, and the Company entered into a Stipulation and Settlement Agreement. The Settling Parties recommended approval of the Plan subject certain amendments and changes to specific DSM programs agreed to and described in the Appendix to the Agreement. The Settling Parties further agreed to recommend to the Commission that the Company be afforded the discretion to modify the Plan during the course of the Plan period and agreed to a process for providing notice of changes to

[2] § 40-3.2-101, C.R.S.

interested stakeholders. The Commission accepted the 2009/2010 Biennial DSM Plan Stipulation in Decision R08-1243, issued on November 28, 2008.

Public Service made its second combined DSM plan filing on July 1, 2010 (Proceeding No. 10A-471EG) but limited the filing to only one year, 2011, to give the Commission the opportunity to reconsider various strategic issues pertaining to DSM prior to filing its next biennial plan in mid-2011. The 2011 Plan Application was settled on substantially the same terms as the 2009/2010 Plan Application and on December 16, 2010 the Administrative Law Judge (ALJ) issued Decision No. R10-1336 accepting the Stipulation and approving the 2011 Plan Application.

On August 10, 2010 Public Service filed its second DSM strategic issues application (Proceeding No. 10A-554EG). The Application proposed new increased electric savings goals and revisions to the electric incentive mechanism then in place among other changes. Hearings were held early in 2011. Following the hearing, on April 26, 2011, the Commission issued Decision No. C11-0442 approving Public Service's Application with modifications. Among the more significant modifications approved by the Commission were increases in electric energy savings goals beyond what had been proposed by the Company.

On August 1, 2011 the Company filed a combined electric and natural gas 2012/2013 DSM Plan (Proceeding No. 11A-631EG). On November 10, 2011 a Stipulation and Settlement Agreement along with the Joint Motion to Approve the Stipulation Agreement were filed by Public Service. The Stipulation and Settlement Agreement was approved by the ALJ on December 9, 2011 in Decision No. R11-1326. The 2013 Plan as approved by the Commission was designed to achieve energy savings that were 11.2 GWh short of the 356 GWh energy savings goal that had been established in Proceeding No. 10A-554EG. Accordingly, as required by the Stipulation, on November 1, 2012, the Company filed a Notice of Specific Plan for Meeting the 11.2 GWh Shortfall in its Electric DSM Portfolio for 2013 which identified products and measures that would be implemented in 2013 in order to achieve the Commission ordered goal of 356 GWh.

High-Level Achievements

In 2013, Public Service's electric portfolio achieved demand savings of 81,040 generator kW (99% of goal) and energy savings of 384,229,680 generator kWh (108% of goal) at a cost of $75,331,240 (91% of budget). The gas portfolio achieved savings of 570,575 Dth (133% of goal) at a cost of $13,643,136 (103% of budget).

Table 1a below shows the Company's electric portfolio achievements, including Modified Total Resource Cost (MTRC) test ratio results at the program level.

Table 1a: High-Level Electric Targets and Achievements for 2013

2013 Programs	Electric Budget	Electric Expenditures (Actual)	Gen. kW Target	Net Gen. Realized kW	Net Gen. kWh Target	Net Gen. Realized kWh	MTRC Target	MTRC (Actual)
Business	$43,716,462	$39,678,530	38,184	38,569	214,341,071	220,305,292	2.27	2.06
Residential	$29,037,610	$27,356,764	41,646	37,854	103,553,286	137,938,824	4.19	3.65
Low-Income	$3,085,129	$2,845,437	1,169	948	10,226,160	7,508,561	1.71	1.32
Indirect	$7,161,999	$5,450,508	684	3,670	17,121,642	18,477,003	n/a	n/a
2013 TOTAL	**$83,001,201**	**$75,331,240**	**81,683**	**81,040**	**345,242,160**	**384,229,680**	**2.54**	**2.30**

Table 1b below shows the Company's natural gas portfolio achievements, including MTRC test ratio results at the program level.

Table 1b: High-Level Natural Gas Targets and Achievements for 2013

2013 Programs	Natural Gas Budget	Natural Gas Expenditures (Actual)	Dth Target	Net. Realized Dth	MTRC Target	MTRC (Actual)
Business	$1,506,725	$1,414,936	95,420	119,322	2.57	1.87
Residential	$6,049,007	$6,315,147	250,289	269,047	1.39	1.82
Low-Income	$3,742,068	$4,437,329	59,293	112,092	1.39	1.71
Indirect	$1,986,561	$1,475,723	23,758	70,115	n/a	n/a
2013 TOTAL	**$13,284,361**	**$13,643,136**	**428,760**	**570,575**	**1.47**	**1.73**

The achievements shown in Tables 1a and 1b have provided electric net benefits of approximately $174.5 million and natural gas net benefits of $24.8 million. Based on these achievements and net benefits, the Company has calculated an associated financial incentive of $16.7 million for its electric portfolio and a gas bonus of $3.9 million for its gas portfolio. The gas bonus includes $3,410,784 for the incentive and an acknowledgement of lost revenues associated with gas DSM programs of $503,081. The DSM portfolio's overall costs and benefits, as determined by the Modified Total Resource Cost (MTRC) test, along with the Company's lost revenue and incentive resulting from these achievements, is shown in Table 1c below. Additional incentive calculation details are shown in the Financial Incentive Calculation section of this Report).

Table 1c: MTRC Test Results with Financial Incentive

	Electric	Gas
MTRC Benefits w/Adder	$360,381,000	$58,763,967
MTRC Costs	$156,392,932	$33,916,736
MTRC Ratio	2.30	1.73
MTRC Benefits w/Adder	$360,381,000	$58,763,967
Incentive	$16,695,245	$3,410,784
Acknowledgement of Lost Revenue (ALR)	n/a	$503,081
MTRC Costs w/Incentive & ALR	$173,088,177	$37,830,601
MTRC Ratio w/Incentive & ALR	2.08	1.55

Some of the products that are part of the Company's portfolio did not pass the MTRC test in 2013. While each of the products listed below are discussed in more detail in the 2013

Status Report section of this report, below is a bulleted summary of the primary reason for the failing of MTRC test ratios (gas and/or electric), and a brief discussion of plans to improve the ratios in 2014.

Business Program

- *Custom Efficiency – Electric (0.99 MTRC).*

    - The product was nearly cost-effective in 2013. However some of the customer efficiency projects actually implemented resulted in lower net-benefit results than were calculated when the projects were pre-screened.

  Efforts to improve for 2014: The failure of the Custom Efficiency projects to pass cost-effectiveness stems from the lag between the time a project is pre-screened and the time the project is actually implemented. In those cases where a project is pre-screened in one year and implemented in another, the change in technical assumptions, including updates in avoided costs, can lead a project that was cost-effective when pre-screened to fall below a MTRC of 1.0 once implemented. Going forward we intend to look more carefully at those projects that are close to "1.0."

- *Self-Directed Custom Efficiency – Electric (0.79 MTRC)*
    - Participation in the product was lower than anticipated due to customers' completion of several projects being pushed into 2014.

  Efforts to improve for 2014: The Company will hold targeted workshops for both customers and trade partners, to expand knowledge of product benefits and build the project pipeline.

Residential Program

- *Pool Pumps – Electric (0.27 MTRC)*
    - The product significantly under-achieved its participation target. The underachievement was due to a later than anticipated launch of the new product.
    - The market for this product in Colorado may be smaller than anticipated.
    - The third-party implementer has had difficulty identifying qualifying customers.

  Efforts to improve for 2014: The Company's third-party implementer is researching data on market size and potential customers to use for direct mail and other targeted marketing. The Company is also increasing customer rebates and the number of trade partners participating in the product by selling, installing, and calibrating qualifying equipment for point-of-sale rebates.

- *Water Heater Rebate – Electric & Natural Gas (0.89 and 0.93 MTRC)*
    - More customers opted to install a 0.62 Energy Factor system, with the lowest qualifying efficiencies, than had been anticipated. (Customers did purchase higher efficiency technologies, 36% at 0.67 Energy Factor, but not at a rate that outweighed the impact of those purchasing lower efficiency technologies).
    - Although more customers participated in electric heat pump water heaters in 2013 than in previous years, the product still only achieved approximately 28% of its projected participation for the year.

  Efforts to improve for 2014: The Company is repositioning its marketing messages and education for contractors and retailers to push for sales of higher efficiency units that qualify for rebates; and the lowest efficiency units will no longer be offered in 2014.

Low-Income Program

- *Single Family Weatherization – Electric (0.87 MTRC)*
    - Much of the electric savings for the product resulted from refrigerator rebates, a measure with a high cost per kWh.
    - The market opportunity for electric building shell measures, such as insulation and storm windows, is very low.

  Efforts to improve for 2014: The Company will initiate a targeted electric heating campaign to capture energy saving building shell measures.

- *Non-Profit Energy Efficiency – Natural Gas (0.89 MTRC)*
    - Higher than expected rebate costs for measures, such as boiler replacements and windows, were included in projects as a bundle with other cost-effective measures. Project bundles were necessary to motivate some customers to move forward with comprehensive building retrofits.

  Efforts to improve for 2014: The Company and the third-party implementer for the product will look for opportunities to lower costs on traditionally expensive rebate measures and optimize benefits with cost-effective measures like showerheads, aerators, and controls.

Summary of Program Changes via 60/90-Day Notice

In recognition of the need to afford the Company discretion to make changes to the Plan in order to achieve the greatest level of energy savings, the 2008 and 2010 Stipulation and Settlement Agreements provided for a 60/90-Day Notice process to advise interested stakeholders of changes to the Plan. A 60-Day Notice is required for any proposal to add a new DSM product, reduce rebate levels, adopt new or discontinue existing measures, or change technical assumptions or eligibility requirements. A 90-Day Notice is required for any product discontinuation. DSM roundtable participants have 30 days from the time of the Notice date to provide comments to Public Service on the proposed changes. The Company then has 30 days to consider comments.

In 2013, the Company added two new products—Commercial Refrigeration and Pool Pumps—and one new measure—Direct-Evaporative Pre-cooling for Air-Cooled Condensers (DEPACC) for the Cooling Efficiency (Business) product—to its portfolio; expanded the Process Efficiency (Business) product offering beyond industrial customers to include commercial customers; and retired one offering, Standard Offer (Business), which consistently had been under-performing in recent years in terms of energy savings and participation, and was found to not be cost-effective. The Company also made quality assurance improvements to its Insulation (Residential) rebate product to require air sealing, blower door testing, and use of a Building Performance Institute certified contractors. A detailed description of the changes made via 60/90-Day Notice can be found on the Company's Colorado DSM webpage: http://www.xcelenergy.com/About_Us/Rates_&_Regulations/Regulatory_Filings/CO_DSM.

The 60/90-Day Notices that were issued during 2013 are listed below in Table 2. Additional detail on the changes can be found in the 2013 Status Report section of this report, within each DSM product summary.

Table 2: 60/90-Day Notices Submitted in 2013

Product	Notice Date	Notice Type	
Business Program			
Commercial Refrigeration	6/17/2013	60-Day	New Product Launch
Compressed Air	5/22/2013	60-Day	Technical Assumption (TA) Updates
Cooling Efficiency	1/25/2013	60-Day	New Measure (DEPACC)
	5/22/2013	60-Day	Measure Retirement (RTU)
	12/17/2013	60-Day	TA Updates
Data Center Efficiency	5/22/2013	60-Day	TA Updates
Heating Efficiency	5/22/2013	60-Day	Rebate Revision and TA Updates
Lighting Efficiency	2/27/2013	60-Day	Rebate Revision and TA Updates
Motor & Drive Efficiency	5/22/2013	60-Day	TA Updates
Process Efficiency	4/17/2013	60-Day	Product Evaluation
Standard Offer	3/19/2013	90-Day	Product Retirement
Residential Program			
Heating System Rebates	5/22/2013	60-Day	TA Updates
High Efficiency A/C	4/17/2013	60-Day	Product Evaluation
	5/22/2013	60-Day	TA Updates
Home Performance w/ENERGY STAR®	5/22/2013	60-Day	TA Updates
Insulation	1/2/2013	60-Day	Quality Assurance Updates
Pool Pumps	12/18/2012	60-Day	New Product Launch
Showerheads	5/22/2013	60-Day	TA Updates
Low-Income Program			
Low-Income Energy Savings Kits	4/17/2013	60-Day	Product Evaluation

RFP Administrative Costs for Third-Party Implementation

As required in Decision No. C11-0442 (Proceeding No. 10A-554EG),[3] the Company continues to track administrative costs incurred for conducting requests for proposals (RFPs), shown in Table 3 below.

Table 3: RFP Administrative Costs in 2013

Product	2013 Expenditures
Small Business Lighting	$21,491
Home Lighting & Recycling	$7,106
School Education Kits	$11,182
Innovative Technology RFP Finalization[4]	$30,888
TOTAL	**$70,667**

Program Achievements and Expenditures

The following Tables 4a and 4b, respectively, provide the 2013 electric targets and budgets, and the Company's 2013 achievements, actual expenditures, and cost-effectiveness results by product. Tables 5a and 5b provide the same information with respect to the Company's natural gas DSM portfolio.

[3] Paragraph 81 of Decision C11-0442 in Docket 10A-554EG, pages 33, states that "…Public Service is directed to quantify and track any additional costs it incurs in the use of third-party DSM providers." The directive is mentioned again on page 52 of the Order.

[4] Innovative Technology RFP expenditures included work to finalize technical assumptions for Commercial Refrigeration and DEPACC measures; as well as negotiate a contract for a third-party implementer for Pool Pumps.

Table 4a: 2013 Electric Program Targets and Budgets

2013	Electric Participants	Electric Budget	Net Gen. kW	Net Gen. kWh	Electric MTRC Test Ratio
Business Program					
Commercial Refrigeration	n/a	n/a	n/a	n/a	n/a
Compressed Air Efficiency	73	$888,648	620	4,137,552	2.26
Computer Efficiency	2,816	$564,924	1,074	7,849,377	2.71
Cooling Efficiency	304	$3,125,756	2,131	7,466,289	1.55
Custom Efficiency	38	$2,044,473	825	8,748,317	2.16
Data Center Efficiency	18	$1,166,224	755	9,138,385	4.54
Energy Management Systems	62	$1,657,636	269	9,406,168	1.77
Heating Efficiency	n/a	n/a	n/a	n/a	n/a
Lighting Efficiency	981	$8,530,227	10,880	58,957,958	2.69
Motor & Drive Efficiency	1924	$5,883,811	3,860	23,994,123	2.22
New Construction	74	$7,299,374	9,808	24,790,163	2.42
Process Efficiency	15	$2,569,383	1,228	17,332,277	2.57
Recommissioning	84	$1,227,650	328	5,868,657	1.31
Segment Efficiency	73	$1,269,669	554	4,164,250	1.82
Self-Directed Custom Efficiency	13	$1,914,342	1957	8,975,070	1.83
Small Business Lighting	195	$3,938,056	2,609	14,373,890	1.88
Standard Offer	12	$1,636,288	1,287	9,138,595	1.17
Business Program Energy Efficiency Total	**6,682**	**$43,716,462**	**38,184**	**214,341,071**	**2.27**
Residential Program					
ENERGY STAR New Homes	2,629	$548,054	97	1,615,423	1.35
Evaporative Cooling Rebates	4,630	$2,515,410	6,550	4,086,155	9.63
Heating System Rebates	n/a	n/a	n/a	n/a	n/a
High Efficiency Air Conditioning	2,010	2,415,130	2,871	2,372,400	1.34
Home Lighting & Recycling	535,000	$5,549,253	9,180	82,827,177	3.28
Home Performance with ENERGY STAR	300	$328,344	442	451,624	3.91
Insulation Rebate	3,120	$115,505	540	428,993	3.63
Pool Pumps	n/a	n/a	n/a	n/a	n/a
Refrigerator Recycling	8,600	$1,790,121	620	5,561,042	2
School Education Kits	30,000	$1,538,732	422	4,528,665	1.25
Energy Efficient Showerheads	2,631	$61,600	0	466,836	3.11
Water Heater Rebate	200	$100,100	59	517,787	1.43
Residential Program Energy Efficiency Total	**589,120**	**$14,962,249**	**20,781**	**102,856,103**	**4.45**
Load Management – Residential Saver's Switch	19,500	$14,075,362	20,865	697,183	3.88
Residential Program Total	**608,620**	**$29,037,610**	**41,646**	**103,553,286**	**4.19**
Low-Income Program					
Energy Savings Kit	8,250	$510,957	194	3,497,334	2.22
Multi-Family Weatherization	12	$389,446	112	1,283,333	1.74
Non-Profit Energy Efficiency	25	$930,248	506	1,800,234	1.97
Single-Family Weatherization	2,860	$1,254,478	356	3,645,259	1.35
Low-Income Program Total	**11,147**	**$3,085,129**	**1,169**	**10,226,160**	**1.71**
Indirect Products & Services					
Education/Market Transformation					
Business Energy Analysis	400	$1,029,449			
Community Energy Efficiency Planning	n/a	n/a			
Consumer Education - Business	1,385	$153,765			
Consumer Education - Residential	34,000	$1,232,674			
Residential Home Energy Audit	2,175	$581,677			
Energy Efficiency Financing	n/a	n/a			
Education/Market Transformation Total	**37,960**	**$2,997,565**			
Planning and Research					
DSM Planning & Administration		**$305,838**			
Program Evaluations		**$596,873**			
Measurement & Verification		**$102,223**			
DSM Market Research		**$263,011**			
DSM Product Development		**$1,031,536**			
Energy Feedback Pilot	100,000	$861,048	684	17,121,642	1.28
In-Home Smart Device Pilot	600	$983,906			
Electric Vehicle Charging Station Pilot	0	$20,000			
Building Code Support Pilot	n/a	n/a			
DSM Product Development Total	**100,600**	**$2,896,489**	**684**	**17,121,642**	
Planning and Research Total	**100,600**	**$4,164,434**	**684**	**17,121,642**	
Indirect Products & Services Total	**138,560**	**$7,161,999**	**684**	**17,121,642**	
PORTFOLIO TOTAL	**765,009**	**$83,001,201**	**81,683**	**345,242,160**	**2.54**
ISOC		**$32,581**	**1,300**	**0**	**1.9**
Energy Efficiency Total		**$68,925,839**	**60,817**	**344,544,977**	
Load Management Total		**$14,107,943**	**22,165**	**697,183**	

Table 4b: 2013 Electric Program Achievements and Expenditures

2013	Electric Participants	Electric Expenditures	Net Gen. kW	Net Gen. kWh	Electric MTRC Test Ratio
Business Program					
Commercial Refrigeration	185	$212,900	58	727,846	1.52
Compressed Air Efficiency	64	$665,671	533	3,093,549	1.99
Computer Efficiency	53,593	$876,093	1,807	13,211,369	2.18
Cooling Efficiency	223	$2,230,094	1,393	8,061,596	1.71
Custom Efficiency	47	$1,380,756	225	2,237,649	0.99
Data Center Efficiency	15	$808,100	156	6,306,901	1.94
Energy Management Systems	44	$951,435	54	6,983,847	1.93
Heating Efficiency					
Lighting Efficiency	2,295	$10,621,653	14,537	71,600,860	2.46
Motor & Drive Efficiency	586	$4,813,456	3,553	22,406,558	2.25
New Construction	83	$7,361,006	8,410	35,434,688	1.82
Process Efficiency	41	$2,653,596	1,570	13,789,785	2.20
Recommissioning	62	$774,946	223	5,033,043	1.97
Segment Efficiency	6	$159,251	75	390,426	1.53
Self-Directed Custom Efficiency	2	$200,142	46	308,236	0.79
Small Business Lighting	975	$4,349,623	3,963	17,146,531	1.96
Standard Offer	17	$1,619,809	1,966	13,572,408	1.64
Business Program Energy Efficiency Total	**58,238**	**$39,678,530**	**38,569**	**220,305,292**	**2.06**
Residential Program					
ENERGY STAR New Homes	1,977	$593,630	403	2,000,003	2.53
Evaporative Cooling Rebates	4,288	$2,724,653	6,157	3,815,751	8.52
Heating System Rebates					
High Efficiency Air Conditioning	2,752	$2,991,436	2,710	2,168,469	1.23
Home Lighting & Recycling	606,234	$5,649,204	14,847	117,945,589	3.43
Home Performance with ENERGY STAR	498	$237,560	162	479,970	1.51
Insulation Rebate	1,001	$138,044	295	369,872	1.58
Pool Pumps	63	$323,515	36	100,345	0.27
Refrigerator Recycling	7,502	$1,243,148	627	5,486,834	2.58
School Education Kits	30,006	$1,493,792	435	4,665,925	1.35
Energy Efficient Showerheads	3,033	$37,874	0	353,159	4.21
Water Heater Rebate	55	$78,594	16	146,575	0.89
Residential Program Energy Efficiency Total	**657,409**	**$15,511,451**	**25,688**	**137,532,491**	**4.20**
Load Management – Residential Saver's Switch	10,808	$11,845,313	12,165	406,333	2.71
Residential Program Total	**668,217**	**$27,356,764**	**37,854**	**137,938,824**	**3.65**
Low-Income Program					
Energy Savings Kit	10,875	$217,802	159	2,829,385	3.10
Multi-Family Weatherization	32	$759,878	237	1,900,818	1.35
Non-Profit Energy Efficiency	47	$727,155	374	1,158,852	1.46
Single-Family Weatherization	3,211	$1,140,603	178	1,619,506	0.87
Low-Income Program Total	**14,165**	**$2,845,437**	**948**	**7,508,561**	**1.32**
Indirect Products & Services					
Education/Market Transformation					
Business Energy Analysis	86	$379,392			
Community Energy Efficiency Planning		$129,511			
Consumer Education - Business	5,872	$142,204			
Consumer Education - Residential	36,362	$1,070,268			
Residential Home Energy Audit	2,684	$485,640			
Energy Efficiency Financing	0	$31,167			
Education/Market Transformation Total	**45,004**	**$2,238,182**			
Planning and Research					
DSM Planning & Administration		**$475,497**			
Program Evaluations		**$739,658**			
Measurement & Verification		**$8,073**			
DSM Market Research		**$182,854**			
DSM Product Development		**$681,157**			
Energy Feedback Pilot	93,004	$553,501	3,670	18,477,003	2.80
In-Home Smart Device Pilot	101	$323,682			
Electric Vehicle Charging Station Pilot		$54,798			
Building Code Support Pilot		$193,106			
DSM Product Development Total	**93,105**	**$1,806,245**	**3,670**	**18,477,003**	
Planning and Research Total	**93,105**	**$3,212,326**	**3,670**	**18,477,003**	
Indirect Products & Services Total	**138,109**	**$5,450,508**	**3,670**	**18,477,003**	
PORTFOLIO TOTAL	**878,729**	**$75,331,240**	**81,040**	**384,229,680**	**2.30**
ISOC		**$13,357**	**0**		**1.91**
PORTFOLIO TOTAL		**$75,344,597**	**81,040**	**384,229,680**	
Energy Efficiency Total		**$63,485,928**	**68,875**	**383,823,347**	
Load Management Total		**$11,858,670**	**12,165**	**406,333**	

Table 5a: 2013 Natural Gas Program Targets and Budgets

2013	Natural Gas Participants	Natural Gas Budget	Net Annual Dth Savings	Annual Dth / $M	Natural Gas MTRC Net Benefits	Natural Gas MTRC Test Ratio
Business Program						
Commercial Refrigeration						
Compressed Air Efficiency						
Computer Efficiency						
Cooling Efficiency						
Custom Efficiency	5	$232,361	6,778	29,170	$113,622	1.25
Data Center Efficiency						
Energy Management Systems	17	$38,195	3,069	80,351	$162,126	1.92
Heating Efficiency	208	746839	30,885	41,354	$365,945	1.16
Lighting Efficiency						
Motor & Drive Efficiency						
New Construction	31	$388,165	48,501	124,949	$3,526,247	4.64
Process Efficiency						
Recommissioning	8	$48,047	2,261	47,058	$233,040	4.59
Segment Efficiency	9	$22,540	2,171	96,318	$60,180	1.74
Self-Directed Custom Efficiency						
Small Business Lighting						
Standard Offer	6	$30,578	1,754	57,374	$2,041,581	20.8
Business Program Energy Efficiency Total	**284**	**$1,506,725**	**95,420**	**63,329**	**$6,502,741**	**2.57**
Residential Program						
ENERGY STAR New Homes	2,629	$2,638,304	73,357	27,805	$1,861,196	1.3
Evaporative Cooling Rebates						
Heating System Rebates	6500	945667	53,514	56,589	$1704355	1.49
High Efficiency Air Conditioning						
Home Lighting & Recycling						
Home Performance with ENERGY STAR	300	$326,542	11,672	35,744	$275,005	1.32
Insulation Rebate	8,000	$1,571,066	81,533	51,897	$2,117,244	1.27
Pool Pumps						
Refrigerator Recycling						
School Education Kits						
Energy Efficient Showerheads	21,286	$225,000	18,125	80,556	$1,769,351	7.25
Water Heater Rebate	2970	$342,428	12,088	35,301	$94,643	1.08
Residential Program Total	**41,685**	**$6,049,007**	**250,289**	**41,377**	**$7,821,794**	**1.39**
Low-Income Program						
Energy Savings Kit	8,249	$494,467	13,593	27,490	$1,402,244	3.62
Multi-Family Weatherization	12	$439,248	6,788	15,454	$30,615	1.04
Non-Profit Energy Efficiency	25	$628,334	6,970	11,093	$28,765	1.02
Single-Family Weatherization	1,830	$2,180,019	31,942	14,652	$1,039,271	1.26
Low-Income Program Total	**10,116**	**$3,742,068**	**59,293**	**15,845**	**$2,500,895**	**1.39**
Indirect Products & Services						
Education/Market Transformation						
Business Energy Analysis	100	$161,658				
Community Energy Efficiency Planning						
Consumer Education - Business	593	$50,002				
Consumer Education - Residential	34,000	$250,557				
Residential Home Energy Audit	2,400	$522,618				
Energy Efficiency Financing						
Education/Market Transformation Total	**37,093**	**$984,835**	**0**	**0**	**0**	
Planning and Research						
DSM Planning & Administration		**$117,300**				
Program Evaluations		**$267,182**				
Measurement & Verification		**$25,850**				
DSM Market Research		**$246,028**				
DSM Product Development		**$255,106**				
Energy Feedback Pilot	50,000	$90,260	23,758	263,217	$56,910	1.63
In-Home Smart Device Pilot						
Electric Vehicle Charging Station Pilot						
Building Code Support Pilot						
DSM Product Development Total	**50,000**	**$345,366**	**23,758**	**68,791**	**$-198,197**	
Planning and Research Total	**50,000**	**$1,001,726**	**23,758**	**23,717**	**$-854,556**	
Indirect Products & Services Total	**87,093**	**$1,986,561**	**23,758**	**11,959**	**$-1,590,991**	
PORTFOLIO TOTAL	**139,178**	**$13,284,361**	**428,760**	**32,275**	**$15,234,440**	**1.47**

Table 5b: 2013 Natural Gas Program Achievements and Expenditures

2013	Natural Gas Participants	Natural Gas Expenditures	Net Dth Savings	Annual Dth / $M	Gas MTRC Test Ratio
Business Program					
Commercial Refrigeration	40	$3,232	585	181,075	16.03
Compressed Air Efficiency					
Computer Efficiency					
Cooling Efficiency					
Custom Efficiency	11	$76,870	2,782	36,185	1.68
Data Center Efficiency					
Energy Management Systems	14	$40,766	7,219	177,092	1.80
Heating Efficiency	127	$508,846	14,089	27,688	1.07
Lighting Efficiency					
Motor & Drive Efficiency					
New Construction	50	$623,275	74,899	120,170	2.07
Process Efficiency					
Recommissioning	21	$90,564	12,219	134,924	4.19
Segment Efficiency	1	$9,639	735	76,263	1.95
Self-Directed Custom Efficiency					
Small Business Lighting					
Standard Offer	9	$61,744	6,794	110,033	1.73
Business Program Energy Efficiency Total	**273**	**$1,414,936**	**119,322**	**84,330**	**1.87**
Residential Program					
ENERGY STAR New Homes	2,883	$3,814,724	110,930	29,080	1.32
Evaporative Cooling Rebates					
Heating System Rebates	4,191	$696,289	59,521	85,484	2.34
High Efficiency Air Conditioning					
Home Lighting & Recycling					
Home Performance with ENERGY STAR	554	$573,129	18,609	32,469	2.31
Insulation Rebate	2,322	$694,483	46,254	66,602	2.36
Pool Pumps					
Refrigerator Recycling					
Saver's Switch					
School Education Kits	0	$870	0	0	
Energy Efficient Showerheads	22,874	$261,463	26,646	101,912	5.25
Water Heater Rebate	2,142	$274,190	7,086	25,844	0.93
Residential Program Total	**34,966**	**$6,315,147**	**269,047**	**42,603**	**1.82**
Low-Income Program					
Energy Savings Kit	12,136	$181,972	20,206	111,041	6.99
Multi-Family Weatherization	19	$557,957	10,242	18,357	1.02
Non-Profit Energy Efficiency	36	$240,005	3,600	14,998	0.89
Single-Family Weatherization	2,913	$3,457,394	78,043	22,573	1.72
Low-Income Program Total	**15,104**	**$4,437,329**	**112,092**	**25,261**	**1.71**
Indirect Products & Services					
Education/Market Transformation					
Business Energy Analysis		$27,161			
Community Energy Efficiency Planning		$21,209			
Consumer Education - Business		$45,729			
Consumer Education - Residential		$212,733			
Residential Home Energy Audit		$446,897			
Energy Efficiency Financing		$4,802			
Education/Market Transformation Total		**$758,530**			
Planning and Research					
DSM Planning & Administration		$125,991			
Program Evaluations		$195,316			
Measurement & Verification		$2,927			
DSM Market Research		$146,464			
DSM Product Development		$113,799			
Energy Feedback Pilot	93,004	$76,422	70,115	917,473	5.68
In-Home Smart Device Pilot					
Electric Vehicle Charging Station Pilot					
Building Code Support Pilot		$56,275			
DSM Product Development Total	**93,004**	**$246,496**	**70,115**	**284,447**	
Planning and Research Total	**93,004**	**$717,193**	**70,115**	**97,763**	
Indirect Products & Services Total	**93,004**	**$1,475,723**	**70,115**	**47,512**	
PORTFOLIO TOTAL	**143,347**	**$13,643,136**	**570,575**	**41,821**	**1.73**

Table 6 below provides the CO_2 and SO_x emissions avoided for 2013 and cumulatively over the lifetime for each product.

Table 6: 2013 Emissions Avoided

2013	Annual				Cumulative over Lifetime			
	Tons CO2			lbs SOx	Tons CO2			lbs SOx
	Electric	Gas	TOTAL	Electric	Electric	Gas	TOTAL	Electric
Business Program								
Commercial Refrigeration	531	35	567	433	5,603	307	5,910	2,648
Compressed Air Efficiency	2,258	0	2,258	1,840	43,620	0	43,620	20,748
Computer Efficiency	9,644	0	9,644	7,856	48,923	0	48,923	25,908
Cooling Efficiency	5,885	0	5,885	4,794	117,275	0	117,275	55,765
Custom Efficiency	1,633	168	1,802	1,331	30,219	2,861	33,080	14,610
Data Center Efficiency	4,604	0	4,604	3,751	55,248	0	55,248	27,564
Energy Management Systems	5,098	437	5,535	4,153	76,473	6,552	83,025	37,217
Heating Efficiency	0	852	852	0	0	13,850	13,850	0
Lighting Efficiency	52,269	0	52,269	42,579	830,485	0	830,485	403,569
Motor & Drive Efficiency	16,357	0	16,357	13,325	247,441	0	247,441	120,405
New Construction	25,867	4,531	30,399	21,072	517,346	90,628	607,974	240,712
Process Efficiency	10,067	0	10,067	8,200	171,131	0	171,131	83,728
Recommissioning	3,674	739	4,413	2,993	25,719	5,175	30,894	13,253
Segment Efficiency	285	44	329	232	4,811	667	5,478	2,338
Self-Directed Custom Efficiency	225	0	225	183	3,825	0	3,825	1,872
Small Business Lighting	12,517	0	12,517	10,197	202,075	0	202,075	98,255
Standard Offer	9,908	411	10,319	8,071	148,618	6,165	154,783	72,328
Business Program Total	**160,823**	**7,219**	**168,042**	**131,009**	**2,528,813**	**126,204**	**2,655,018**	**1,220,918**
Residential Program								
ENERGY STAR New Homes	1,460	6,711	8,171	1,189	28,169	132,790	160,959	13,398
Evaporative Cooling Rebates	2,785	0	2,785	2,269	41,782	0	41,782	20,678
Heating System Rebates	0	3,601	3,601	0	0	64,819	64,819	0
High Efficiency Air Conditioning	1,583	0	1,583	1,290	11,952	0	11,952	6,111
Home Lighting & Recycling	86,100	0	86,100	70,139	593,252	0	593,252	308,226
Home Performance with ENERGY STAR	350	1,126	1,476	285	4,517	19,948	24,465	2,254
Insulation Rebate	270	2,798	3,068	220	5,025	52,502	57,526	2,429
Pool Pumps	73	0	73	60	733	0	733	350
Refrigerator Recycling	4,005	0	4,005	3,263	34,292	0	34,292	17,069
School Education Kits	3,406	0	3,406	2,775	25,504	0	25,504	16,231
Showerhead	258	1,612	1,870	210	1,547	9,673	11,219	1,466
Water Heater Rebate	107	429	536	87	1,391	7,435	8,826	352
Residential Program Energy Efficiency Total	**100,399**	**16,277**	**116,676**	**81,787**	**748,162**	**287,166**	**1,035,329**	**388,562**
Load Management – Saver's Switch	297	0	297	242	4,449	0	4,449	2,543
Residential Program Total	**100,695**	**16,277**	**116,973**	**82,028**	**752,612**	**287,166**	**1,039,778**	**391,106**
Low-Income Program								
Energy Savings Kit	2,065	1,222	3,288	1,683	12,693	6,773	19,466	6,561
Multi-Family Weatherization	1,388	620	2,007	1,130	15,264	6,816	22,080	7,421
Non-Profit Energy Efficiency	846	218	1,064	689	14,381	3,702	18,084	7,036
Single-Family Weatherization	1,182	4,722	5,904	963	9,545	91,457	101,002	4,751
Low-Income Program Total	**5,481**	**6,782**	**12,263**	**4,465**	**51,882**	**108,749**	**160,631**	**25,768**
Planning and Research								
DSM Product Development								
Energy Feedback Pilot	13,488	4,242	17,730	10,988	13,488	4,242	17,730	10,988
In-Home Smart Device Pilot	0	0	0	0	0	0	0	0
Electric Vehicle Charging Station Pilot	0	0	0	0	0	0	0	0
Building Code Support Pilot	0	0	0	0	0	0	0	0
DSM Product Development Total	**13,488**	**4,242**	**17,730**	**10,988**	**13,488**	**4,242**	**17,730**	**10,988**
Planning and Research Total	**13,488**	**4,242**	**17,730**	**10,988**	**13,488**	**4,242**	**17,730**	**10,988**
Indirect Products & Services Total	**13,488**	**4,242**	**17,730**	**10,988**	**13,488**	**4,242**	**17,730**	**10,988**
PORTFOLIO TOTAL	**280,488**	**34,520**	**315,007**	**228,490**	**3,346,796**	**526,361**	**3,873,157**	**1,648,781**

* Emissions assumptions: To calculate the avoided CO2 and SOx emission resulting from its 2013 electric DSM programs, Public Service used the same emissions intensity (lbs/kWh) used to determine the avoided emissions values in the 2012/2013 DSM Plan. For natural gas, Public Service assumed 121 lbs of CO2 avoided per Dth saved. Emissions reduction of SOx for natural gas are negligible and not reported here.

Program Costs by Budget Category

The Company uses the following six budget categories to track and report its annual expenditures for DSM programs and products within its portfolio:

1. **Program Planning and Design**
   Expenditures for:
   - Labor for product development and product managers.
   - Expenditures related to product development, planning, and design.
2. **Administration and Program Delivery**
   Expenditures for:
   - Labor for product managers, sales representatives, call center, rebate processing, technical consulting, and other fulfillment activities associated with delivering a product directly to the customer.
   - Labor for installation contractors, vendors, technical consultants, fulfillment contractors, and alternative providers that Xcel Energy contracts with to provide DSM services.
   - Project fulfillment, implementation and program support activities associate with delivering a program directly to the customer.
3. **Advertising / Promotion / Customer Education**
   Expenditures for:
   - Labor for communication staff and others.
   - TV, radio, newspaper, and print media; direct promotion and sales support materials; postage, promotional events; contracted outbound telephone sales.
   - Customer education through seminars, pamphlets, videos, and computer games.
4. **Participant Rebates and Incentives**
   Expenditures for:
   - Customer rebates, finance interest subsidies, subsidies for engineering studies, trade incentives, and incentives given in the form of subsidized products or equipment.
5. **Equipment and Installation**
   Expenditures for:
   - The costs to purchase energy efficient equipment and to install efficiency equipment at the customer site.
6. **Measurement and Verification**
   Expenditures for:
   - Labor for market research and load research.
   - Labor product development staff, product development, external consultants, and product development research activities.
   - Customer surveys, program evaluation expenses.

Table 7a: 2013 Electric Program Costs by Category (Budget)

2013	Program Planning & Design	Administration & Program Delivery	Advertising/ Promotion/ Customer Ed	Participant Rebates and Incentives	Equipment & Installation	M&V	Total
Business Program							
Commercial Refrigeration							
Compressed Air Efficiency	$56,135	$191,785	$112,199	$481,006	$0	$47,523	$888,648
Computer Efficiency	$1,592	$463,231	$22,682	$54,000	$0	$23,420	$564,924
Cooling Efficiency	$88,412	$411,163	$331,368	$2,266,013	$0	$28,800	$3,125,756
Custom Efficiency	$235,766	$805,324	$385,586	$565,298	$0	$52,500	$2,044,473
Data Center Efficiency	$67,362	$104,208	$237,622	$732,032	$0	$25,000	$1,166,224
Energy Management Systems	$26,664	$341,645	$176,990	$1,032,828	$0	$79,510	$1,657,636
Heating Efficiency							
Lighting Efficiency	$116,480	$1,231,429	$435,402	$6,506,736	$0	$240,180	$8,530,227
Motor & Drive Efficiency	$44,908	$558,860	$394,770	$4,722,117	$0	$163,155	$5,883,811
New Construction	$26,034	$2,566,586	$243,190	$4,173,565	$0	$290,000	$7,299,374
Process Efficiency	$30,874	$842,594	$33,212	$1,582,703	$0	$80,000	$2,569,383
Recommissioning	$25,261	$242,344	$152,960	$797,086	$0	$10,000	$1,227,650
Segment Efficiency	$0	$459,189	$156,968	$553,523	$0	$99,990	$1,269,669
Self-Directed Custom Efficiency	$16,840	$143,024	$18,358	$1,736,120	$0	$0	$1,914,342
Small Business Lighting	$1,403	$2,291,113	$201,471	$1,385,376	$0	$58,692	$3,938,056
Standard Offer	$35,084	$181,237	$39,003	$1,344,964	$0	$36,000	$1,636,288
Business Program Total	**$772,814**	**$10,833,731**	**$2,941,781**	**$27,933,367**	**$0**	**$1,234,770**	**$43,716,462**
Residential Program							
ENERGY STAR New Homes	$9,824	$139,858	$15,966	$177,293	$0	$205,113	$548,054
Evaporative Cooling Rebates	$4,210	$398,204	$296,696	$1,720,300	$0	$96,000	$2,515,410
Heating System Rebates							
High Efficiency Air Conditioning	$7,017	$314,837	$375,249	$1,683,027	$0	$35,000	$2,415,130
Home Lighting & Recycling	$5,614	$1,186,726	$1,703,413	$2,653,500	$0	$0	$5,549,253
Home Performance with ENERGY STAR	$5,613	$127,347	$11,458	$169,226	$0	$14,700	$328,344
Insulation Rebate	$0	$0	$6,000	$78,505	$0	$31,000	$115,505
Pool Pumps							
Refrigerator Recycling	$2,807	$622,689	$719,625	$430,000	$0	$15,000	$1,790,121
School Education Kits	$1,403	$990,929	$0	$491,400	$0	$55,000	$1,538,732
Showerhead		$43,770	$600	$7,630	$0	$9,600	$61,600
Water Heater Rebate	$0	$0	$1,100	$90,000	$0	$9,000	$100,100
Residential Program EE Total	**$36,487**	**$3,824,361**	**$3,130,108**	**$7,500,881**	**$0**	**$470,413**	**$14,962,249**
Load Management - Residential Saver's Switch	$0	$885,940	$1,612,392	$7,397,280	$4,064,750	$115,000	$14,075,362
Residential Program Total	**$36,487**	**$4,710,301**	**$4,742,500**	**$14,898,161**	**$4,064,750**	**$585,413**	**$29,037,610**
Low-Income Program							
Energy Savings Kit	$1,403	$336,991	$70,385	$96,177	$0	$6,000	$510,957
Multi-Family Weatherization	$19,647	$53,462	$40,039	$264,946	$0	$11,352	$389,446
Non-Profit Energy Efficiency	$23,857	$62,531	$15,086	$806,299	$0	$22,475	$930,248
Single-Family Weatherization	$2,807	$87,141	$145,039	$961,300	$0	$58,192	$1,254,478
Low-Income Program Total	**$47,715**	**$540,125**	**$270,549**	**$2,128,722**	**$0**	**$98,019**	**$3,085,129**
Indirect Products & Services							
Education/Market Transformation							
Business Energy Analysis	$51,988	$762,954	$214,507	$0	$0	$0	$1,029,449
Commercial Energy Efficiency Planning							
Consumer Education - Business	$0	$6,496	$147,269	$0	$0	$0	$153,765
Consumer Education - Residential	$19,647	$382,978	$830,049	$0	$0	$0	$1,232,674
Residential Home Energy Audit	$0	$266,279	$47,799	$211,600	$0	$56,000	$581,677
Energy Efficiency Financing							
Education/Market Transformation Total	**$71,635**	**$1,418,707**	**$1,239,624**	**$211,600**	**$0**	**$56,000**	**$2,997,565**
Planning and Research							
DSM Planning & Administration	$0	$305,838	$0	$0	$0	$0	$305,838
Program Evaluations	$0	$11,599	$192	$0	$0	$585,082	$596,873
Measurement & Verification	$0	$0	$0	$0	$0	$102,223	$102,223
DSM Market Research	$0	$262,914	$97	$0	$0	$0	$263,011
DSM Product Development	$314,939	$696,597	$0	$0	$20,000	$0	$1,031,536
Energy Feedback Pilot	$825,048	$0	$0	$0	$0	$36,000	$861,048
In-Home Smart Device Pilot	$0	$829,456	$63,200	$56,250	$0	$35,000	$983,906
Electric Vehicle Charging Station Pilot	$0	$0	$0	$20,000	$0	$0	$20,000
Building Code Support Pilot							
DSM Product Development Total	**$1,139,987**	**$1,526,053**	**$63,200**	**$76,250**	**$20,000**	**$71,000**	**$2,896,489**
Planning and Research Total	**$1,139,987**	**$2,106,404**	**$63,488**	**$76,250**	**$20,000**	**$758,305**	**$4,164,434**
Indirect Products & Services Total	**$1,211,621**	**$3,525,111**	**$1,303,112**	**$287,850**	**$20,000**	**$814,305**	**$7,161,999**
PORTFOLIO TOTAL	**$2,068,637**	**$19,609,267**	**$9,257,941**	**$45,248,100**	**$4,084,750**	**$2,732,506**	**$83,001,201**
ISOC	$0	$28,928	$780	$2,873	$0	$0	$32,581
PORTFOLIO TOTAL	**$2,068,637**	**$19,638,195**	**$9,258,721**	**$45,250,973**	**$4,084,750**	**$2,732,506**	**$83,033,782**
Energy Efficiency Total	**$2,068,637**	**$18,723,327**	**$7,645,549**	**$37,850,820**	**$20,000**	**$2,617,506**	**$68,925,839**
Load Management Total	**$0**	**$914,867**	**$1,613,172**	**$7,400,153**	**$4,064,750**	**$115,000**	**$14,107,943**

Table 7b: 2013 Electric Program Costs by Category (Actual Expenditures)

2013	Program Planning & Design	Administration & Program Delivery	Advertising / Promotion / Customer Ed	Participant Rebates and Incentives	Equipment & Installation	M&V	Total
Business Program							
Commercial Refrigeration	$4,023	$179,991	$0	$27,687	$0	$1,200	**$212,900**
Compressed Air Efficiency	$22,912	$159,709	$43,660	$419,700	$0	$19,690	**$665,671**
Computer Efficiency	$2,479	$845,665	$749	$26,400	$0	$800	**$876,093**
Cooling Efficiency	$82,144	$510,879	$103,793	$1,496,116	$0	$37,162	**$2,230,094**
Custom Efficiency	$281,167	$583,435	$268,263	$214,282	$0	$33,610	**$1,380,756**
Data Center Efficiency	$47,920	$116,845	$163,818	$463,502	$0	$16,015	**$808,100**
Energy Management Systems	$22,597	$282,352	$147,735	$493,894	$0	$4,858	**$951,435**
Heating Efficiency	$0	$0	$0	$0	$0	$0	**$0**
Lighting Efficiency	$250,173	$1,728,896	$356,464	$8,215,226	$0	$70,895	**$10,621,653**
Motor & Drive Efficiency	$26,858	$547,258	$337,716	$3,857,460	$0	$44,164	**$4,813,456**
New Construction	$15,232	$3,038,659	$221,363	$3,725,462	$0	$360,291	**$7,361,006**
Process Efficiency	$84,376	$380,695	$17,164	$2,143,371	$0	$27,991	**$2,653,596**
Recommissioning	$60,441	$201,750	$100,395	$412,360	$0	$0	**$774,946**
Segment Efficiency	$244	$69,661	$75,675	$13,671	$0	$0	**$159,251**
Self-Directed Custom Efficiency	$22,506	$110,172	$18,787	$48,677	$0	$0	**$200,142**
Small Business Lighting	$0	$2,149,104	$113,702	$2,044,199	$0	$42,618	**$4,349,623**
Standard Offer	$57,371	$95,601	$10,823	$1,449,536	$0	$6,478	**$1,619,809**
Business Program Energy Efficiency Total	**$980,443**	**$11,000,671**	**$1,980,106**	**$25,051,540**	**$0**	**$665,770**	**$39,678,530**
Residential Program							
ENERGY STAR New Homes	$3,425	$157,103	$1,368	$287,535	$0	$144,200	**$593,630**
Evaporative Cooling Rebates	$3,638	$592,738	$351,555	$1,739,672	$0	$37,050	**$2,724,653**
Heating System Rebates	$0	$0	$0	$0	$0	$0	**$0**
High Efficiency Air Conditioning	$1,812	$526,798	$446,314	$1,976,600	$0	$39,912	**$2,991,436**
Home Lighting & Recycling	$14,498	$696,142	$901,940	$4,025,824	$0	$10,800	**$5,649,204**
Home Performance with ENERGY STAR	$6,080	$100,686	$14,047	$88,630	$0	$28,119	**$237,560**
Insulation Rebate	$1,669	$24,243	$2,453	$87,812	$0	$21,868	**$138,044**
Pool Pumps	$0	$145,666	$164,399	$6,300	$0	$7,150	**$323,515**
Refrigerator Recycling	$1,281	$602,340	$268,077	$360,650	$0	$10,800	**$1,243,148**
Saver's Switch	$179	$3,312,913	$1,707,889	$6,689,382	$0	$134,950	**$11,845,313**
School Education Kits	$1,399	$1,116,756	$0	$375,638	$0	$0	**$1,493,792**
Energy Efficient Showerheads	$719	$22,670	$5,177	$9,310	$0	$0	**$37,874**
Water Heater Rebate	$0	$38,478	$12,981	$25,185	$0	$1,950	**$78,594**
Residential Program EE Total	**$34,518**	**$4,023,621**	**$2,168,310**	**$8,983,154**	**$0**	**$301,849**	**$15,511,451**
Load Management – Residential Saver's Switch	$179	$3,312,913	$1,707,889	$6,689,382	$0	$134,950	**$11,845,313**
Residential Program Total	**$34,697**	**$7,336,534**	**$3,876,199**	**$15,672,536**	**$0**	**$436,798**	**$27,356,764**
Low-Income Program							
Energy Savings Kit	$505	$87,279	$17,667	$110,954	$0	$1,397	$217,802
Multi-Family Weatherization	$15,453	$111,310	$208	$621,554	$0	$11,352	$759,878
Non-Profit Energy Efficiency	$23,201	$85,814	$0	$595,665	$0	$22,475	$727,155
Single-Family Weatherization	$4,388	$118,718	$91,813	$862,815	$0	$62,870	$1,140,603
Low-Income Program Total	**$43,546**	**$403,120**	**$109,688**	**$2,190,989**	**$0**	**$98,094**	**$2,845,437**
Indirect Products & Services							
Education/Market Transformation							
Business Energy Analysis	$5,383	$313,097	$80,571	$-19,660	$0	$0	$379,392
Community Energy Efficiency Planning	$0	$128,874	$638	$0	$0	$0	$129,511
Consumer Education - Business	$0	$32,594	$109,610	$0	$0	$0	$142,204
Consumer Education - Residential	$0	$338,437	$731,831	$0	$0	$0	$1,070,268
Residential Home Energy Audit	$1,360	$387,565	$59,926	$0	$0	$36,789	$485,640
Energy Efficiency Financing	$0	$20,903	$10,264	$0	$0	$0	$31,167
Education/Market Transformation Total	**$6,744**	**$1,221,469**	**$992,840**	**$-19,660**	**$0**	**$36,789**	**$2,238,182**
Planning and Research							
DSM Planning & Administration	**$0**	**$475,322**	**$174**	**$0**	**$0**	**$0**	**$475,497**
Program Evaluations	**$0**	**$24,079**	**$0**	**$0**	**$0**	**$715,579**	**$739,658**
Measurement & Verification	**$0**	**$8,073**	**$0**	**$0**	**$0**	**$0**	**$8,073**
DSM Market Research	**$4,460**	**$178,393**	**$0**	**$0**	**$0**	**$0**	**$182,854**
DSM Product Development	**$456,118**	**$202,313**	**$3,651**	**$0**	**$0**	**$19,075**	**$681,157**
Energy Feedback Pilot	$16,759	$536,743	$0	$0	$0	$0	$553,501
In-Home Smart Device Pilot	$28,773	$225,452	$23,914	$0	$0	$45,544	$323,682
Electric Vehicle Charging Station Pilot	$820	$23,239	$0	$2,200	$28,539	$0	$54,798
Building Code Support Pilot	$11,173	$118,623	$547	$0	$0	$62,763	$193,106
DSM Product Development Total	**$513,642**	**$1,106,371**	**$28,112**	**$2,200**	**$28,539**	**$127,381**	**$1,806,245**
Planning and Research Total	**$518,102**	**$1,792,238**	**$28,286**	**$2,200**	**$28,539**	**$842,961**	**$3,212,326**
Indirect Products & Services Total	**$524,846**	**$3,013,707**	**$1,021,126**	**-$17,460**	**$28,539**	**$879,750**	**$5,450,508**
PORTFOLIO TOTAL	**$1,583,532**	**$21,754,032**	**$6,987,119**	**$42,897,606**	**$28,539**	**$2,080,412**	**$75,331,240**
ISOC	$0	$13,357	$0	$0	$0	$0	$13,357
PORTFOLIO TOTAL	**$1,583,532**	**$21,767,389**	**$6,987,119**	**$42,897,606**	**$28,539**	**$2,080,412**	**$75,344,597**
Energy Efficiency Total	**$1,583,353**	**$18,441,120**	**$5,279,230**	**$36,208,224**	**$28,539**	**$1,945,462**	**$63,485,928**
Load Management Total	**$179**	**$3,326,269**	**$1,707,889**	**$6,689,382**	**$0**	**$134,950**	**$11,845,670**

Table 8a: 2013 Gas Program Costs by Category (Budget)

2013	Program Planning & Design	Administration & Program Delivery	Advertising/ Promotion/ Customer Ed	Participant Rebates and Incentives	Equipment & Installation	M&V	Total
Business Program							
Commercial Refrigeration							
Compressed Air Efficiency							
Computer Efficiency							
Cooling Efficiency							
Custom Efficiency	$91,219	$61,382	$45,356	$29,154	$0	$5,250	$232,361
Data Center Efficiency							
Energy Management Systems	$8,420	$14,996	$332	$12,943	$0	$1,504	$38,195
Heating Efficiency	$2,807	$128,915	$33,283	$553,895	$0	$27,940	$746,839
Lighting Efficiency							
Motor & Drive Efficiency							
New Construction	$15,033	$84,495	$16,214	$261,423	$0	$11,000	$388,165
Process Efficiency							
Recommissioning	$8,420	$23,187	$7,923	$7,517	$0	$1,000	$48,047
Segment Efficiency	$0	$8,928	$606	$12,007	$0	$1,000	$22,540
Self-Directed Custom Efficiency							
Small Business Lighting							
Standard Offer	$7,017	$11,551	$0	$8,410	$0	$3,600	$30,578
Business Program Total	**$132,916**	**$333,452**	**$103,714**	**$885,349**	**$0**	**$51,294**	**$1,506,725**
Residential Program							
ENERGY STAR New Homes	$7,017	$532,676	$63,711	$1,208,013	$0	$826,887	$2,638,304
Evaporative Cooling Rebates							
Heating System Rebates	$2,807	$59,900	$85,500	$772,460	$0	$25,000	$945,667
High Efficiency Air Conditioning							
Home Lighting & Recycling							
Home Performance with ENERGY STAR	$4,210	$41,071	$10,305	$254,900	$0	$16,056	$326,542
Insulation Rebate	$1,403	$46,203	$0	$1,259,460	$0	$264,000	$1,571,066
Pool Pumps							
Refrigerator Recycling							
School Education Kits							
Showerhead	$0	$151,271	$2,400	$61,729	$0	$9,600	$225,000
Water Heater Rebate	$5,614	$15,015	$12,800	$279,000	$0	$30,000	$342,428
Residential Program Total	**$21,050**	**$846,136**	**$174,716**	**$3,835,562**	**$0**	**$1,171,543**	**$6,049,007**
Low-Income Program							
Energy Savings Kit	$1,403	$431,287	$21,553	$40,224	$0	$0	$494,467
Multi-Family Weatherization	$5,614	$55,562	$20,039	$340,984	$0	$17,049	$439,248
Non-Profit Energy Efficiency	$5,613	$41,068	$20,000	$528,241	$0	$33,412	$628,334
Single-Family Weatherization	$2,807	$124,465	$144,296	$1,817,573	$0	$90,879	$2,180,019
Low-Income Program Total	**$15,437**	**$652,382**	**$205,888**	**$2,727,022**	**$0**	**$141,340**	**$3,742,068**
Indirect Products & Services							
Education/Market Transformation							
Business Energy Analysis		$144,956	$5,902	$0	$0	$0	$161,658
Consumer Education - Business		$6,496	$43,506	$0	$0	$0	$50,002
Consumer Education - Residential		$149,963	$100,594	$0	$0	$0	$250,557
Residential Home Energy Audit		$198,599	$45,619	$248,400	$0	$30,000	$522,618
Education/Market Transformation Total		**$500,014**	**$195,621**	**$248,400**	**$0**	**$30,000**	**$984,835**
Planning and Research							
DSM Planning & Administration		$117,300	$0	$0	$0	$0	$117,300
Program Evaluations		$11,599	$0	$0	$0	$255,582	$267,182
Measurement & Verification		$0	$0	$0	$0	$25,850	$25,850
DSM Market Research		$246,003	$25	$0	$0	$0	$246,028
DSM Product Development		$134,193	$0	$0	$0	$0	$255,106
Energy Feedback Pilot	$81,260	$0	$0	$0	$0	$9,000	$90,260
In-Home Smart Device Pilot		$0	$0	$0	$0	$0	$0
Electric Vehicle Charging Station Pilot							
DSM Product Development Total	**$202,173**	**$134,193**	**$0**	**$0**	**$0**	**$9,000**	**$345,366**
Planning and Research Total	**$202,173**	**$509,096**	**$25**	**$0**	**$0**	**$290,432**	**$1,001,726**
Indirect Products & Services Total	**$212,973**	**$1,009,110**	**$195,645**	**$248,400**	**$0**	**$320,432**	**$1,986,561**
PORTFOLIO TOTAL	**$382,376**	**$2,841,080**	**$679,963**	**$7,696,333**	**$0**	**$1,684,610**	**$13,284,361**

Table 8b: 2013 Gas Program Costs by Category (Actual Expenditures)

2013	Program Planning & Design	Administration & Program Delivery	Advertising / Promotion / Customer Ed	Participant Rebates and Incentives	Equipment & Installation	M&V	Total
Business Program							
Commercial Refrigeration	$0	$2,032	$0	$0	$0	$1,200	$3,232
Compressed Air Efficiency							
Computer Efficiency							
Cooling Efficiency							
Custom Efficiency	$34,570	$17,911	$1,305	$22,185	$0	$900	$76,870
Data Center Efficiency							
Energy Management Systems	$0	$11,488	$0	$29,278	$0	$0	$40,766
Heating Efficiency	$18,904	$156,789	$4,962	$292,402	$0	$35,790	$508,846
Lighting Efficiency							
Motor & Drive Efficiency							
New Construction	$376	$126,948	$252	$476,756	$0	$18,942	$623,275
Process Efficiency							
Recommissioning	$191	$3,185	$2,042	$85,145	$0	$0	$90,564
Segment Efficiency	$0	$4,886	$687	$4,066	$0	$0	$9,639
Self-Directed Custom Efficiency							
Small Business Lighting							
Standard Offer	$2,868	$2,448	$430	$55,999	$0	$0	$61,744
Business Program Energy Efficiency Total	**$56,908**	**$325,687**	**$9,677**	**$965,832**	**$0**	**$56,832**	**$1,414,936**
Residential Program							
ENERGY STAR New Homes	$4,157	$576,249	$6,559	$2,650,959	$0	$576,800	$3,814,724
Evaporative Cooling Rebates							
Heating System Rebates	$787	$115,399	$39,368	$511,260	$338	$29,138	$696,289
High Efficiency Air Conditioning							
Home Lighting & Recycling							
Home Performance with ENERGY STAR	$2,983	$105,297	$4,319	$432,410	$0	$28,119	$573,129
Insulation Rebate	$3,458	$127,414	$8,738	$530,826	$0	$24,048	$694,483
Pool Pumps							
Refrigerator Recycling							
School Education Kits	$723	$147	$0	$0	$0	$0	$870
Energy Efficient Showerheads	$1,231	$157,578	$41,115	$61,538	$0	$0	$261,463
Water Heater Rebate	$1,199	$91,760	$9,681	$146,150	$0	$25,400	$274,190
Residential Program Total	**$14,538**	**$1,173,844**	**$109,780**	**$4,333,142**	**$338**	**$683,504**	**$6,315,147**
Low-Income Program							
Energy Savings Kit	$505	$77,453	$16,787	$85,830	$0	$1,397	$181,972
Multi-Family Weatherization	$10,253	$37,198	$0	$493,457	$0	$17,049	$557,957
Non-Profit Energy Efficiency	$24,220	$29,598	$0	$152,776	$0	$33,412	$240,005
Single-Family Weatherization	$332	$174,613	$113,303	$3,037,025	$0	$132,121	$3,457,394
Low-Income Program Total	**$35,309**	**$318,863**	**$130,090**	**$3,769,088**	**$0**	**$183,979**	**$4,437,329**
Indirect Products & Services							
Education/Market Transformation							
Business Energy Analysis		$27,161	$0	$0	$0	$0	$27,161
Community Energy Efficiency Planning		$20,553	$656	$0	$0	$0	$21,209
Consumer Education - Business		$14,897	$30,832	$0	$0	$0	$45,729
Consumer Education - Residential		$82,101	$130,632	$0	$0	$0	$212,733
Residential Home Energy Audit		$396,780	$13,783	-$240	$0	$36,573	$446,897
Energy Efficiency Financing		$1,922	$2,879	$0	$0	$0	$4,802
Education/Market Transformation Total		**$543,414**	**$178,783**	**-$240**	**$0**	**$36,573**	**$758,530**
Planning and Research							
DSM Planning & Administration		**$125,971**	**$19**	**$0**	**$0**	**$0**	**$125,991**
Program Evaluations		**$13,129**	**$0**	**$0**	**$0**	**$182,187**	**$195,316**
Measurement & Verification		**$2,927**	**$0**	**$0**	**$0**	**$0**	**$2,927**
DSM Market Research		**$144,845**	**$1,618**	**$0**	**$0**	**$0**	**$146,464**
DSM Product Development	**$76,864**	**$36,935**	**$0**	**$0**	**$0**	**$0**	**$113,799**
Energy Feedback Pilot	$3,858	$72,564	$0	$0	$0	$0	$76,422
In-Home Smart Device Pilot		$0	$0	$0	$0	$0	$0
Electric Vehicle Charging Station Pilot		$0	$0	$0	$0	$0	$0
Building Code Support Pilot	$2,679	$37,308	$597	$0	$0	$15,691	$56,275
DSM Product Development Total	**$83,402**	**$146,807**	**$597**	**$0**	**$0**	**$15,691**	**$246,496**
Planning and Research Total	**$83,402**	**$433,679**	**$2,235**	**$0**	**$0**	**$197,878**	**$717,193**
Indirect Products & Services Total	**$83,402**	**$977,094**	**$181,017**	**-$240**	**$0**	**$234,451**	**$1,475,723**
PORTFOLIO TOTAL	**$190,157**	**$2,795,488**	**$430,565**	**$9,067,822**	**$338**	**$1,158,767**	**$13,643,136**

Flood Victim DSM Rebate Program

On October 28, 2013 the Company filed an Unopposed Verified Petition for Expedited Approval of a Full Waiver of the DSM 60-Day Notice Requirement for the Purposes of Implementing a Flood Victim DSM Rebate Program, and Motion for Waiver of Intervention and Response Time to the Petition, as Proceeding No. 13M-1152EG. The Petition and Motion were granted on October 31, 2013, in Decision No. C13-1380.

The Program is aimed at influencing and assisting victims of 2013 Colorado flooding to rebuild with energy efficient options. This effort leads to new DSM energy savings potential resulting from the urgency in replacing energy-consuming equipment following devastating flooding in Colorado in September 2013. The approved Program allowed for an increase in the level of rebates offered through 10 of the Company's prescriptive business and residential DSM products, to up to 100 percent of the incremental cost of installation, for flood victims.[5] The total budget for the Flood Victim DSM Rebate Program was estimated at $2.6 million—$1.6 million in 2013 and $1.0 million in 2014.[6]

The 10 DSM products that are offering these rebates in 2013 (and 2014) include:

Business Program

- Cooling Efficiency (electric only)
- Heating Efficiency (gas only)

Residential Program

- Heating System Rebate (gas only)
- High Efficiency Air Conditioning (electric only)
- Evaporative Cooling Rebate
- Water Heater Rebate

Low-Income Program

- Energy Savings Kit
- Multi-Family Weatherization
- Non-Profit Energy Efficiency
- Single-Family Weatherization

The Company worked with the Colorado Energy Office (CEO) and Energy Efficiency Business Coalition (EEBC) to promote flood relief activities to affected customers; and coordinated with trade organizations and other stakeholders to promote program messaging.

In 2013, flood victim DSM rebates were largely utilized by residential customers for installing heating systems and water heaters. Actual energy savings achieved and costs incurred associated with the Flood Victim program are shown in Table 4b and Table 5b of this report.

[5] Flood Victims are Public Service customers that registered a Disaster Survivor Application with the Federal Emergency Management Agency (FEMA) on or before September 12, 2013.
[6] The Flood Victim DSM Rebate Program will continue throughout the 2014 DSM Plan year.

Compliance

Table 9: Reporting Requirements and Compliance

Item #	Compliance Point – Description	Statute / Rule / Docket Reference	Status Report Reference	Comments
ELECTRIC				
1	The annual DSM report will be filed with the Commission on April 1 of each year, starting in 2010.	Docket. 07A-420E, Decision C08-560, p.53, ¶173.	---	Report filed April 1, 2014.
2	We accept the modification proposed by PSCo that the avoided costs underlying the net economic benefits not be updated between the first and second installment calculation. Also, we find that the avoided cost data shall be updated with each annual report so that the degree of change can be assessed and this issue incorporated into the overall review of DSM incentives in 2010. We will thereby consider whether avoided costs should be updated more frequently.	Docket. 07A-420E, Decision C08-0769 p.18, ¶58	See Avoided Cost Assumptions	Reference values: Proceeding No. 11A-631EG, 2012/2013 DSM Plan, Appendix C – Avoided Cost Assumptions, pgs. 290-292.
3	Shall include the results achieved during the previous plan year in total and by program, including achieved energy and demand savings, avoided annual and cumulative CO_2 and SO_x emissions in metric tons, actual expenditures, expenditures expressed in terms of $/kWh over the lifetime of the measures installed, and net economic benefits achieved.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.16	See Tables 4a - 6	$/kWh over lifetime and net economic benefits achieved by product in Cost-Effectiveness Section.
4	Use deemed savings from the technical assumptions to calculate the prescriptive program savings.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.14 Proceeding No. 11A-631EG, 2012/2013 DSM Plan, Appendix E – Technical Reference Manual, pgs. 294-597.	---	Deemed savings approved in Proceeding No. 11A-631EG, 2012/2013 DSM Plan or as amended in a 60-Day Notice were used in the calculation of prescriptive program savings.

5	Use the methodology described in the Direct Testimony of Company witness Jeremy Petersen (JP) to determine DSM portfolio and program cost-effectiveness.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.14 Proceeding No. 11A-631EG, 2012/2013 DSM Plan, pgs. 262-277.	See Cost-Effectiveness	---
6	Use this same JP methodology for calculating the net economic benefit associated with DSM measures actually installed.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.14 Proceeding No. 11A-631EG, 2012/2013 DSM Plan, pgs. 262-277.	See Cost-Effectiveness	---
7	All Participant O&M data should be treated as proprietary in the absence of a written agreement signed by the Participant authorizing disclosure.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.8 Dkt. No. 11A-631EG, 2012/2013 DSM Plan, pg. 106	---	Confirmed
8	Do not include Participant O&M data in incentive calculations unless there is authorization to disclose such data.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.8 Dkt. No. 11A-631EG, 2012/2013 DSM Plan, pg. 106	See Financial Incentive Calculations	---

9	PSCo may only disclose the results, by cost category, of calculations made using the privileged values, but not values themselves, by making such results available for inspection by both the Staff of CO PUC and OCC at the Company's Colorado offices, pursuant to the following procedures: o PSCo will provide the customer 10 business-days notice of the place and time of the inspection and provide the opportunity for a customer representative to be present during the inspection. o PSCo shall maintain a log of persons, dates, times and documents reviewed. o Participant O&M data shall not be disclosed to any other party or by any other means, except after receipt of written authorization from the Participant	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.9	---	Participant O&M data has been neither requested nor disclosed to any external party.
10	Verify results of Self-Directed customers' energy savings calculations and evaluation, M&V results.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.7 Proceeding No. 11A-631EG, 2012/2013 DSM Plan, pg. 104.	See Evaluation, Measurement and Verification	---
11	Approve Self-Directed customers' projects for which the customer meets TRC test value at least equal to one (1), rather than limiting this program to installations that have a TRC value at least equal to the TRC value for the overall DSM portfolio.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.7	---	Ongoing.
12	Offer the Self-Directed Custom Efficiency Program to commercial and industrial customers who have an aggregated peak demand at all meters of at least 2 MW in any single month and an aggregated annual energy usage of at least 10 GWh. The customer of record must be the same for all meters aggregated to qualify for this program.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.8	---	Ongoing.
13	Track expenditures, energy savings, and paybacks associated with each approved project under the Self-Directed Custom Efficiency Program.	Proceeding No. 08A-366EG, Decision No. R08-1243, Stipulation & Settlement Agreement, p.8	---	Ongoing.

14	All incentive payments must be included in the final TRC calculation. At the time of the annual report following the DSM performance year, the incentive amounts will be "proposed" versus "final". PSCo shall include the proposed incentive amounts in their annual report.	Dkt. 07A-420E, Decision C08-560, p.37, ¶117	See Financial Incentive Calculations	---
15	For any low-income program that achieves a TRC<1.0, the costs and benefits may be excluded from the calculation of net economic benefits. The energy and demand savings may be applied toward the calculation of overall energy and demand savings, for the purposes of determining progress toward annual goals.	Dkt. 07A-420E, Decision C08-560, p.44, ¶140	See Financial Incentive Calculations	---
16	Beginning with the 2012 Annual Status Report, we will quantify and track certain costs incurred through the use of third-party providers.	Proceeding No. 10A-554EG Decision C11-0442, p. 52, ¶4	See Executive Summary	---
17	The Annual Status Report of 2012 and 2013 results, the Company will include a comparison of the resulting net benefits and TRC tests using the former avoided cost methodology and the updated methodology.	Docket. No. 11A-631EG Stipulation & Settlement Agreement, p. 17 – 18	See Avoided Cost Assumptions	---
18	For any pilot that does not pass the MTRC test at the end of the year, Public Service will explain the causes and provide recommendations on the pilot's continuation in the annual status report. For pilots that are also considered Market Transformation and are not claiming savings in 2012 or 2013, the Commission Decision allows a presumptive TRC of 1.0 for purposes of calculating the financial incentive.	Proceeding No. 11A-631EG, 2012/2013 DSM Plan, pg. 14.	See Indirect Program	Included within Report filed April 1, 2014.
19	The Company will include in the 2012 and 2013 annual status reports tables that display the gross and the net savings for each program and product.	Proceeding No. 11A-631EG, 2012/2013 DSM Plan Settlement Agreement, pg. 19.	See Evaluation, Measurement and Verification	Included within Report filed April 1, 2014.
NATURAL GAS				
1	Beginning April 1, 2010 and each April 1st thereafter, each utility shall submit its annual DSM report, application for bonus and DSMCA filing.	Rule 4752(b)	---	Report filed April 1, 2013.
2	Each utility shall also file an annual DSM report and an application for bonus.	Rule 4750(b)	---	Included with Report filed April 1, 2013.

3	The utility's annual expenditure target for DSM programs shall be, at a minimum, two percent of a natural gas utility's base rate revenues, (exclusive of commodity costs), from its sales customers in the 12-month calendar period prior to setting the targets, or one-half of one percent of total revenues from its sales customers in the 12-month calendar period prior to setting the targets, whichever is greater.	Rule 4753(h)(I)	---	PSCo spent a total of $13.6 million on its natural gas DSM programs. This surpassed the expenditure targets – $7,273,307 (2% of gas base rate revenues), and $4,809,597 (0.5% of total gas revenues) set in Proceeding No. 08A-366EG.
4	In the annual DSM report the utility shall describe its actual DSM programs as implemented. For each DSM program, the utility shall document actual program expenditures, energy savings, participation levels and cost-effectiveness.	Rule 4754(a)	See 2013 Status Report	---
5	Annual program expenditures shall be separated into cost categories contained in the approved DSM plan.	Rule 4754(b)	See Tables 7a, 7b, 8a, 8b	---
6	For each DSM program, the utility shall compare the program's proposed and actual expenditures, savings, participation rate, and cost-effectiveness; in addition, the utility shall prepare an assessment of the success of the program, and list any suggestions for improvement and greater customer involvement.	Rule 4754(c)	See 2013 Status Report	---
7	The utility shall provide actual benefit/cost results for the overall DSM plan and individual DSM programs implemented during the plan year. The benefit/cost analysis shall be based on the costs incurred and benefits achieved, as identified in the modified TRC test. Benefit values are to be based upon the results of M&V evaluation, when such has been conducted as set forth in rule 4755. Otherwise, the benefit values of the currently approved DSM plan are to be used.	Rule 4754(d)	See Cost-Effectiveness	Business, Residential, and Low-Income cost-benefit analysis (CBA) results are included in CBA work paper.
8	If the annual report covers a year within which an M&V evaluation was completed, the complete M&V results are to be included as part of the annual report.	Rule 4754(e)	See Evaluation, Measurement & Verification	--

9	The utility may file an application for bonus, pursuant to rule 4760. The application for bonus shall include the utility's calculation of estimated bonus applying the methodology set forth in this rule to the utility's actual performance. (II) As a threshold matter, the utility must expend at least the minimum amount set forth in rule 4753 (g)(I), except during a phase-in period as set forth in rule 4753 (g)(III), in order to earn a bonus. (III) The bonus amount is a percentage of the net economic benefits resulting from the DSM plan over the period under review. The percentage value is the product of the two factors: (A) The Energy Factor is determined by the percentage of the energy target achieved by the utility. The energy factor is zero plus 0.5% for each one percent above 80 percent of the energy target achieved by the utility. (B) The Savings Factor is the actual savings achieved divided by the approved savings target. Each of these quantities is expressed in dekatherms saved per dollar expended. (IV) The following is provided as an example of the bonus calculation, using these illustrative numbers: utility achieves 106 percent of its energy target; the utility's savings target is 15,000 dekatherms per $1 million expended, and the utility's actual savings is 18,000 dekatherms per $1 million.	Rule 4754(f)	See Financial Incentive Calculations	Included within Report filed April 1, 2014.
10	Acknowledgment of Lost Revenues (ALR) - Separate from any bonus determined by the Commission, the Commission may authorize a utility to recover a calculated amount of revenue that acknowledges that an effective DSM program reduced the utility's revenue. The amount shall be calculated as set forth in Rule 4754(g)(I) (A)-(F)	Rule 4754(g)	See Financial Incentive Calculations	--

Financial Incentive Calculations

Electric Financial Incentive

The Commission approved the financial incentive mechanism—which includes a "Disincentive Offset" and "Performance Incentive"— applicable for 2013 electric DSM programs in Proceeding No.10A-554EG (Decision C11-0442). A Disincentive Offset of $3.2 million (grossed up for income taxes[7]) is awarded when Public Service achieves 80% of the annual energy savings goal. The Disincentive Offset increases to $5.0 million when Public Service achieves 100% of the annual energy savings goal. The Performance Incentive is 1% of net economic benefits[8] when the Company achieves 80% of the annual energy savings goal, and escalates to 2% at 85 % of the energy savings goal, 3% at 90% of the energy savings goal, 4 % at 95% of the energy savings goal, and 5% at 100% of the energy savings goal. The Performance Incentive share of net economic benefits continues in a pattern where each 5% increase in energy savings achievement above 100% achievement of the annual energy savings goal results in a 1% addition to the Company's share of net economic benefits, up to a maximum of 15% at 150% of goal. The combination of the pre-tax Disincentive Offset and the Performance Incentive may not exceed $30 million. That total financial incentive is recovered in the year following the 2013 performance year.

Based upon the Company's achievement of 384.2 GWh and net benefits of $174,595,376 the total Disincentive Offset and Performance Incentive for 2013 was not limited by the $30 million cap. Table 10 below summarizes the Company's financial incentive for electric DSM.

Table 10: Summary of 2013 Electric Incentive

	Amount
Disincentive Offset	$5,000,000
Performance Incentive	$11,695,245
Total	**$16,695,245**

The full calculation of the Company's financial incentive for electric DSM is shown in Table 11 below.

[7] Combined Federal and State income tax rate in 2013 was 38.01%.

[8] A minor adjustment is made for market transformation programs, allowing for the costs of these programs to be excluded from net economic benefits.

Table 11: Public Service 2013 Electric DSM Incentive

Disincentive Offset (Grossed-up for Income Taxes)	**$5,000,000**
Performance Incentive Calculation	
Approved 2013 kWh Goal	356,000,000
kWh from YE Achievements	384,229,680
Net Economic Benefits from YE Achievements	**$174,595,376**
Net Economic Benefits Adjustments	
Total Low-Income Allowance from YE Achievements	$425,590
Total Market Transformation Allowance from YE Achievements	$2,238,182
Incremental Participant O&M - Excluded for 2013 Incentive Calculation	(58,471)
FINAL Net Benefits from YE Achievements	**$177,200,677**
% of Goal Achieved	108%
% of Net Benefits Awarded	6.6%
Performance Incentive	**$11,695,245**
Total Incentive - Subject to CAP	**$16,695,245**
Incentive Cap (Subject to Hard Cap of $30,000,000)	**$30,000,000**
Total 2013 Proposed Electric Financial Incentive Pre-Tax	**$16,695,245**

Natural Gas Bonus

The natural gas bonus mechanism (Gas DSM "Bonus") is calculated as set forth in 4 CCR 723-4-4754 ("Rule 4754"). The natural gas DSM Bonus is awarded in a single installment, requested by application and approved in the first status report year following the Gas DSM program year in which the savings were achieved. The approved Gas DSM Bonus amount is recovered through the Gas Demand-Side Management Cost Adjustment ("G-DSMCA"), over the same twelve-month period as set forth in 4 CCR 723-4-4752 (b) (I). (See, Rule 4752(g)(I)(E))

The natural gas incentive is awarded on a sliding scale of net benefits, calculated based on an Energy Factor (percent of Dth goal achieved) and a Savings Factor (Dth per $1 million spend). The natural gas DSM Bonus is capped at 25% of expenditure, or 20% of net benefits, whichever is less. For 2013, the natural gas incentive is calculated to be $3,410,784. This bonus is at the expenditure cap of $3,410,784 and below the net benefits cap of $4,981,465. In addition, the Company is filing for an acknowledgement of lost revenues associated with gas DSM programs of $503,081 for a total award of $3,913,865. The full calculation of Public Service's 2013 Natural Gas Bonus is detailed in Table 12 below.

Table 12: Public Service 2013 Natural Gas Bonus and Acknowledgement of Lost Revenue

Approved Energy Target (Goal)	428,760	dekatherm per year		
Energy Target Achieved - YE Forecast	570,575	dekatherm per year		
% of Energy Target Achieved	133.1%			
			Dth	**Spend**
Approved Savings Target	32,535	dekatherm per $1M	428,760	$ 13,284,361
Savings Target Achieved - Portfolio Total	41,821	dekatherm per $1M	570,575	$ 13,643,136
Savings Target Achieved - Low-Income Program Adjustments				
Energy Savings Kit			20,206	$ 181,972
Multi-Family Weatherization			10,242	$ 557,957
Non-Profit Energy Efficiency			3,600	$ 240,005
Single-Family Weatherization			78,043	$ 3,457,394
Total Savings Target Achieved - Low-Income Program Adjustments	25,261	dekatherm per $1M	112,091	$ 4,437,329
Savings Target Achieved - Adjusted*	49,804	dekatherm per $1M	458,484	$ 9,205,807
Total DSM Expenditures	$13,643,136	From 2013 YE Actual SpendForecast		
Energy Factor	26.5%			
Savings Factor	1.543082338			
% of Net Benefits Awarded	40.9%	= Energy Factor * Savings Factor		
Net Economic Benefits Achieved	**$24,847,230**			
Net Economic Benefits Adjustments				
Energy Savings Kit	$ -			
Multi-Family Weatherization	$ -			
Non-Profit Energy Efficiency	$ 60,096			
Single-Family Weatherization	$ -			
Low-Income Allowance from Plan	$ 60,096			
FINAL Net Economic Benefits Achieved	**$24,907,326**			
Incentive Cap	**$3,410,784**	= 20% of net economic benefits or 25% of expenditures, whichever is less		
Total 2013 Proposed Gas Financial Incentive Pre-Tax	**$3,410,784**			
Business/Residential Allocation		**%**		
Business Actual Savings (Dth)	119,322	21%		
Residential & Low Income Actual Savings (Dth)	451,253	79%		
Total Savings	570,575	100%		
Allocated Bonus				
Business	713,283			
Residential & Low Income	2,697,501			
Total	3,410,784			
Acknowledgement of Lost Revenue [ALR] Calculation:				
Dollar Value Per Therm				
Business (Non-residential)	$ 0.10391			
Residential	$ 0.08401			
12-Month Therm Reduction Impact From 2013 Programs				
Business (Non-residential)	1,193,220			
Residential	4,512,535			
ALR Totals				
Business (Non-residential)	$ 123,988			
Residential	$ 379,093			
Total ALR	**$ 503,081**			
Total Gas Bonus and ALR	**$ 3,913,865**			

Business Program

The Company's Business Program—for commercial and industrial customers of all sizes—offers a broad portfolio of DSM products designed to meet the needs of this varied segment. Eligible customers are on a Public Service business rate for electric service and/or retail natural gas service. The portfolio has three primary components:

1. *Prescriptive products* focus on the most common equipment.
2. *Custom products* encourage savings from unique situations, often involving newer technologies or measures.
3. *Study and educational products* help customers identify energy efficiency opportunities.

Electric

In 2013, the performance of the electric products in the Company's business program was just above target—at 102% of anticipated Net Generator kWh. Lighting Efficiency was the largest contributor to business program achievements, as anticipated; and New Construction far exceeded expected achievements due to economic improvements in 2013. Additionally Computer Efficiency exceeded its electric savings target due to strong partnerships with upstream manufacturers; and Small Business Lighting also exceeded electric savings targets in 2013. Standard Offer participation and achievements were driven by expediting the close of projects due to the termination of the program through a 90-Day Notice.

A summary of the Company's business program achievements for electric products is shown in Table 13a below.

Table 13a: 2013 Business Program – Electric Products

	Budget / Targets					Actual Achievements				
2013	Electric Participants	Electric Budget	Net Gen. kW	Net Gen. kWh	MTRC	Electric Participants	Electric Expenditures	Net Gen. kW	Net Gen. kWh	MTRC
Business Program										
Commercial Refrigeration	n/a	n/a	n/a	n/a	n/a	185	$212,900	58	727,846	1.52
Compressed Air Efficiency	73	$ 888,648	620	4,137,552	2.26	64	$665,671	533	3,093,549	1.99
Computer Efficiency	2,816	$ 564,924	1,074	7,849,377	2.71	53,593	$876,093	1,807	13,211,369	2.18
Cooling Efficiency	304	$3,125,756	2,131	7,466,289	1.55	223	$2,230,094	1,393	8,061,596	1.71
Custom Efficiency	38	$2,044,473	825	8,748,317	2.16	47	$1,380,756	225	2,237,649	0.99
Data Center Efficiency	18	$1,166,224	755	9,138,385	4.54	15	$808,100	156	6,306,901	1.96
Energy Management Systems	62	$1,657,636	269	9,406,168	1.77	44	$951,435	54	6,983,847	1.93
Heating Efficiency	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Lighting Efficiency	981	$8,530,227	10,880	58,957,958	2.69	2,295	$10,621,653	14,537	71,600,860	2.46
Motor & Drive Efficiency	1,924	$5,883,811	3,860	23,994,123	2.22	586	$4,813,456	3,553	22,406,558	2.25
New Construction	74	$7,299,374	9,808	24,790,163	2.42	83	$7,361,006	8,410	35,434,688	1.82
Process Efficiency	15	$2,569,383	1,228	17,332,277	2.57	41	$2,653,596	1,570	13,789,785	2.20
Recommissioning	84	$1,227,650	328	5,868,657	1.31	62	$774,946	223	5,033,043	1.97
Segment Efficiency	73	$1,269,669	554	4,164,250	1.82	6	$159,251	75	390,426	1.53
Self-Directed Custom Efficiency	13	$1,914,342	1,957	8,975,070	1.83	2	$200,142	46	308,236	0.79
Small Business Lighting	195	$3,938,056	2,609	14,373,890	1.88	975	$4,349,623	3,963	17,146,531	1.96
Standard Offer	12	$1,636,288	1,287	9,138,595	1.17	17	$1,619,809	1,966	13,572,408	1.64
Business Program Total	**6,682**	**$43,716,462**	**38,184**	**214,341,071**	**2.27**	**58,238**	**$39,678,530**	**38,569**	**220,305,292**	**2.06**

Natural Gas

In 2013, the performance of the natural gas products in the Company's business program led to achievements of 125% of the anticipated Dth savings target. These achievements were the result of an improved economy which led to more growth, and as a result, more participation in the Company's New Construction and Recommissioning products. Custom Efficiency, Heating Efficiency, and Segment Efficiency under-performed in 2013 due to capital-intensive measures with longer payback periods being less attractive to customers in the low-cost natural gas environment.

A summary of the Company's business program achievements for natural gas products is shown in Table 13b below.

Table 13b: 2013 Business Program – Gas Products

	Budget and Targets						Actual Achievements					
2013	Gas Participants	Gas Budget	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC Test Ratio	Gas Participants	Gas Expenditures	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC
Business Program												
Commercial Refrigeration							40	$3,232	585	181,075	$74,629	16.03
Compressed Air Efficiency												
Computer Efficiency												
Cooling Efficiency												
Custom Efficiency	5	$232,361	6,778	29,172	$113,622	1.25	11	$76,870	2,782	36,185	$102,212	1.68
Data Center Efficiency												
Energy Management Systems	17	$38,195	3,069	80,361	$162,126	1.92	14	$40,766	7,219	177,092	$298,560	1.80
Heating Efficiency	208	$746,839	30,885	41,354	$365,945	1.16	127	$508,846	14,089	27,688	$86,451	1.07
Lighting Efficiency												
Motor & Drive Efficiency												
New Construction	31	$388,165	48,501	124,950	$3,526,247	1.00	50	$623,275	74,899	120,170	$3,622,149	2.07
Process Efficiency												
Recommissioning	8	$48,047	2,261	47,067	$233,040	4.59	21	$90,564	12,219	134,924	$436,964	4.19
Segment Efficiency	9	$22,540	2,171	96,296	$60,180	1.74	1	$9,639	735	76,263	$31,192	1.95
Self-Directed Custom Efficiency												
Small Business Lighting												
Standard Offer	6	$30,578	1,754	57,374	$2,041,581	20.80	9	$61,744	6,794	110,033	$236,941	1.73
Business Program Total	**284**	**$1,506,725**	**95,420**	**63,329**	**$6,502,741**	**2.57**	**273**	**$1,414,936**	**119,322**	**84,330**	**$4,889,099**	**1.87**

Electric spending in the business program was below budgeted levels. Electric spending was lower than anticipated due to the later than anticipated, mid-year launch of Commercial Refrigeration, and few Segment and Self-Directed Custom Efficiency projects closing by year-end. Gas spending was largely on budget.

Business Products

The following provides a brief summary of the performance of each business product in 2013.

Commercial Refrigeration

The Commercial Refrigeration efficiency product is designed to offer refrigeration maintenance and upgrades to commercial customers with significant refrigeration loads, notably restaurants, and grocery, convenience, and liquor stores. The product offers four major components to provide

customers with the resources necessary to reduce their energy usage. These include a free energy audit, direct install of complimentary energy saving measures, identification of prescriptive measures and proactive project management to assist customers in implementing energy efficient measures.

Deviation from Goal

The product did not meet its 2013 targets. The Company had developed targets that anticipated product launch early 2013, but the product was not able to be fully launched until mid-year which delayed marketing and customer outreach efforts. The participation pipeline began to build in October and customer participation in the product has been consistent and continues to increase. Despite the delay in product launch, the direct install component—enabling installation of some measures during onsite energy assessments—contributed nearly half of the 2013 realized savings for the product, and is serving as the basis for a very robust 2014 pipeline.

60-Day Notice

The Company proposed to offer Commercial Refrigeration efficiency as a new product within the Business Program, via 60-Day Notice, implemented in July 2013.

Compressed Air Efficiency

The Compressed Air Efficiency product helps customers identify and address inefficiencies in their compressed air systems. The product encourages the repair and redesign of existing systems and the purchase of efficient options for new and replacement systems. The product has three components:

1. Prescriptive rebates for new no-loss air drains and for Variable Frequency Drive (VFD) compressors of 10 hp to 50 hp.
2. Rebates for studies of 50 hp to 99 hp systems of up to $2,500; and for systems of at least 100 hp, 75% of the study costs. To receive study rebates, the customer must repair at least half of the leaks identified in the study. Leak repairs usually require no customer capital expense but significantly reduce energy waste.
3. Custom rebates of up to $600 per kW saved for improvements identified in the system studies. Energy saving opportunities can include a wide range of capital purchases and "process" improvements, such as piping modifications or horsepower reductions.

Trade partners support the product through direct equipment sales and system studies.

Deviation from Goal

The product fell short of its energy savings targets, and expenditures were proportionately under budget. The lack of in-territory trade partner interest continued to be a problem, especially in the beginning of 2013. During the year, however, a few trade partners who had focused entirely on out-of-territory oil field services began to regain interest within the metropolitan area. The Company's efforts to encourage trade partner interest began to yield results in the second half of the year. Full-year impacts grew substantially compared to the prior year, and the current pipeline of projects is the strongest the program has had in the last four years.

Computer Efficiency

The Computer Efficiency product provides prescriptive electric offerings to business customers who install PC Power Management and Virtual Desktop Infrastructure (VDI). These products are marketed directly to the Company's business customers through trade partners and sales channels.

Incentives are also offered directly to desktop personal computer (PC) manufacturers that design, manufacture, and sell PCs with energy efficient power supplies to the Company's electric business customers. These incentives are marketed through a third-party implementer that works directly with the PC manufacturers to track equipment sold in the Company's service territory.

Deviation from Goal or Budget

The product significantly exceeded its participation, savings, and spending goals for 2013. This continued success is largely due to strong partnerships with manufacturers participating in the upstream component of the program. In 2013, participating manufacturers began reporting the sales of Platinum-level power supplies which garnered higher savings. These are the first Platinum-level products that the Company has seen since entering the market a year-and-a-half ago.

Cooling Efficiency

The Cooling Efficiency Product offers incentives to customers who purchase and install high efficiency cooling equipment. Rebate dollars and study funding are offered to assist in "buying down" the incremental cost associated with purchasing high efficiency equipment, and to shorten the associated payback period. Customers may qualify for a mix of prescriptive rebates for common high efficiency equipment and custom rebates for newer and more system-based high efficiency solutions. Marketing efforts and events are directed toward educating customers on making strategic decisions that will benefit their facility, as well as to vendors who work with customers on a daily basis.

Deviation from Goal

The product exceeded its initial filed energy savings target for 2013. Although the Direct Evaporative Pre-Cooling for Air-Cooled Condensers (DEPACC) measure was estimated to achieve 3.2 GWh in additional savings on top of the Company's filed target in the 2012/2013 DSM Plan (Proceeding No. 11A-631EG), per the filed Notice of November 2012, it did not meet forecasted expectations due to market adoption being slower than anticipated.

60-Day Notice

Three notices were filed in 2013.

In January 2013, the Company added the new DEPACC measure, in response to the Innovative Technology RFP issued mid-2012 and the *Notice of Specific Plan for Meeting the 11.2 GWh Shortfall in its Electric DSM Portfolio for 2013*, filed in November 2012. The measure is being implemented by a third-party contractor.

In May 2013, pursuant to the Stipulation and Settlement Agreement filed in Proceeding No. 10A-471EG, the Company filed the final update and conclusion on the early replacement of working commercial roof-top units (RTUs). Due to high cost per kWh, as-well-as its marginal cost effectiveness, the Company decided not to add this measure to the product.

In December 2013, the Company filed a second Notice on the DEPACC measure to correct the technical assumptions, which decreased the energy savings expectations. The Notice also added a prescriptive rebate for Air-Cooled Chillers that utilize evaporative pre-cooling.

Custom Efficiency

The Custom Efficiency product is designed to provide rebates on a wide variety of equipment and 33 process improvements that do not fall within the Company's prescriptive rebate products. All Custom Efficiency projects require pre-approval before customer and/or contractor purchase and installation, and must pass the MTRC test as part of that analysis. This process is in place to help ensure that participation in the product significantly influences the project and that rebates are awarded to projects that are technically and financially sound.

Deviation from Goal

The Custom Efficiency product did not meet its electric or gas savings targets in 2013. Several large projects were moved into 2014 and are expected to close next year.

Data Center Efficiency

The Data Center Efficiency product offers evaluations and rebates to customers who make energy saving improvements to a data center. The product encourages a holistic approach by providing energy efficiency information, site evaluations, and project analyses for customers. The Company's portfolio of prescriptive and custom DSM rebates is also available to encourage the implementation of additional energy saving upgrades.

Deviation from Goal

Although the product did not meet its energy savings target, its achievement was greater than the prior year, and expenses were below budget. In 2013, the Company completed detailed studies of three large data centers, although the customers have been reluctant to make upgrades due to the risk of downtime. Data Center Efficiency continues to have uniquely long sales cycles and lengthy implementation periods due to the need to coordinate with many different stakeholders within the customer's facility.

The Company will continue outreach and education for trade partners, to reduce analysis times, and to pilot third-party implementation by an organization that specializes in data center project management.

60-Day Notice

A 60-Day Notice was implemented that clarified the intent of the Data Center Efficiency product within the original filing, related to net-to-gross (NTG) ratios. The revision clarified that both custom and prescriptive study-driven projects should have the same NTG; and that non-study-driven projects use the NTGs of custom or end-use technologies, to prevent any NTG benefit from program crossover. Since the correct NTG ratios were used in the forecasting and calculation of actual achievements, these changes did not affect the product budget, targets, or achievements.

Energy Management Systems

The Energy Management Systems (EMS) product is designed to encourage customers to install or upgrade building control systems. An EMS system typically includes a centralized network programmed to monitor and control lighting or mechanical systems within a building, which allows customers to reduce energy costs by centrally managing the usage of equipment.

The product covers new energy management systems in an existing building, replacement of an obsolete energy management system, and adding functionality and/or control points to an existing system. Ineligible measures include duplicate system functions, in-room thermostats, set-point adjustment, and the rebalancing of existing systems. Systems installed as part of new construction projects are also ineligible.

The product offers incentives totaling up to $600 per implied kW, such that both the kWh savings and actual on-peak demand savings can contribute to the incentive. Incentives of $4.00 per Dth saved are also available for retail gas customer savings.

Deviation from Goal

The EMS product did not meet its electric savings goal because many projects did not complete installation in 2013, but the year ended with a relatively strong pipeline of projects. However, the product's savings were substantially greater than the prior year, and expenditures were proportionately under budget. The current backlog of preapproved projects that are pending implementation is stronger than at any time since the product's introduction.

The product did surpass natural gas performance targets.

Heating Efficiency

The Heating Efficiency product provides rebates for retail natural gas business customers who purchase high efficiency natural gas or dual-fuel commercial equipment for heating or process loads. Product rebates are designed to promote the installation of high-efficiency boilers, commercial water heaters, pipe insulation, boiler tune-ups, and boiler system auxiliary equipment that improves combustion and seasonal efficiency. The Company communicated with customers and contractors, as well as engaged the Heating Advisory Board.

Deviation from Goal

The product did not meet its participation or energy savings targets in 2013. Product awareness remained high in 2013, however, momentum slowed due to customers reacting to low natural gas prices and subsequently the lower benefits of investing in energy efficiency.

Lighting Efficiency

The Lighting Efficiency product offers rebates to customers who purchase and install qualifying energy efficient lighting in existing or new construction buildings. Prescriptive rebates are offered to encourage customers to purchase energy efficient lighting by lowering the up-front premium costs associated with this equipment. Custom Efficiency Lighting and Lighting Redesign rebates are also available for energy-saving lighting solutions not included in the prescriptive rebate menu, and require pre-approval prior to purchasing equipment and beginning a project.

Deviation from Goal

The product exceeded its energy savings and expenditure goal due to the product's over-performance in T12 to T8 fixture rebates which attributed 16 percent of the product's savings. 2013 was the last year the product claimed T12 to T8 retrofits savings as the linear fluorescent baseline has moved from the T12 to a T8. Secondary drivers are the increase achievement from prescriptive lighting optimization and increase participation by lighting trade partners. The lighting trade participation has continually increased year over year.

60-Day Notice

In February 2013, the Company posted a 60 Day Notice to expand deemed savings technical assumptions to add fluorescent T12 to T8 optimization and high efficient ballast rebates for T12 to T8 retrofits. The addition of T12 to T8 optimization rebates allowed a wider range of projects to qualify for prescriptive rebates. The Company had anticipated a discontinuation of T12 retrofit rebates in 2013 due to updated equipment standards set by the U.S. Department of Energy (DOE) taking effect; however, upon further evaluation, the Company decided to revise T12 retrofit rebates rather than eliminate them. (Lighting standards changes applied through this Notice also impacted Small Business Lighting).

Motor and Drive Efficiency

The Motor & Drive Efficiency product is designed to encourage customers to purchase high efficiency motors and variable frequency drives (VFDs) used on fans, pumps, and eligible industrial equipment. The Company offers prescriptive rebates to customers who install qualifying equipment, and custom rebates to those customers whose projects do not meet the prescriptive criteria.

Deviation from Goal

Product expenditures were substantially under budget and yet achievements were only slightly below target. The product closed no custom projects in 2013 (for the first time since introduction of the product), and many of the larger prescriptive projects were captured within the Company's holistic programs.

New Construction

The New Construction product's mission is to help business customers prioritize energy efficiency when constructing new buildings. By providing whole building energy analysis for larger buildings and checklists of energy savings opportunities for smaller buildings, we help customers achieve their energy and sustainability goals.

The Energy Design Assistance (EDA) component of the New Construction product was the primary offering to customers in 2013. Features include comprehensive energy consulting services in support of integrated design processes by providing computer modeling of planned designs; funding to offset the cost of design time associated with increased energy analyses; financial rebates to improve the cost-effectiveness of packages of energy-efficient measures; and field verification to ensure that the strategies are installed per the design intent. Construction rebates were $400 per kW, $0.04 per kWh, and $4.00 per Dth in 2013.

The Energy Efficient Buildings (EEB) component of the product is a combination of prescriptive measures and custom analyses that allows customers to package numerous measures in a calculator and fill out just one application versus multiple applications. The calculator provides immediate, preliminary rebate amounts per measure, giving the customer the tools to make early decisions to influence better energy efficiency equipment choices. Rebates vary by project and are based on prescriptive levels for measures such as cooling, heating, and motors. Rebates for non-prescriptive measures, such as lighting and building envelope, were $400 per kW, $0.04 per kWh, and $4.00 per Dth in 2013.

Deviation from Goal

The product exceeded electric and gas savings goals in 2013 due mainly to an improvement in the economy which fostered more new construction projects, as well as an increase in the number of energy modeling companies that were deemed qualified to participate as EDA vendors.

Changes in 2013

An "open" path was added to EDA for additional, qualified energy modelers to participate as providers, allowing customers to have a greater choice in energy modelers. The "open" consultants are paid on a pay-for-performance basis, whereas, traditionally, EDA consultants were chosen with a Request for Proposal every 3-4 years and paid on a fee-for-service basis).

Process Efficiency

Process Efficiency was designed to target energy-intensive processes at large facilities with 2 GWh or more of potential energy savings. The product is primarily intended to identify and influence improvements on large systems not being evaluated through the Company's Custom Efficiency or prescriptive products, and establish business practices that drive additional conservation measures in the future.

Process Efficiency involves a three-phased approach to provide customers with the resources necessary to drive conservation through the development and implementation of a holistic, sustainable energy management plan. Participation in this product results in not only a list of conservation opportunities, with a plan for implementation of those measures, but also involves integrating energy efficiency into how the customer completes their daily business practices.

Deviation from Goal

The Process Efficiency product continues to penetrate the Colorado industrial market with significantly more customers participating and actively implementing projects. Although many of the identified savings opportunities were implemented in 2013, the majority of the larger, longer lead-time projects will not be completed until 2014. Expenditures for the product were over budget in comparison to achievements due in large part to this delay in project implementation. However, even with this lower than expected energy savings, the product has a very favorable MTRC, which shows the value of this in-depth service.

Recommissioning

The Recommissioning product is designed to assist electric and/or natural gas customers in improving the efficiency of their existing building operations. The product focuses on tuning up business customers' existing systems to run as efficiently as possible and to operate as intended, as an alternative to purchasing new equipment. The product offers study funding to identify measures and rebates to encourage the implementation of those recommissioning measures. Additionally, the studies identify prescriptive and custom opportunities when, once implemented, are transitioned for participation in the prescriptive and custom end-use products within the Company's DSM portfolio.

Deviation from Goal

As anticipated, the product did not achieve its filed GWh energy savings target due to several customers pushing their project completion dates to 2014. As a result, the product's expenditures were under the filed electric budget. The product did, however, exceed its filed natural gas savings target significantly. The filed gas budget was exceeded in 2013, which is consistent with the achievement realized. The 2014 pipeline remains strong with continued interest from commercial building segment participants.

Segment Efficiency

The Segment Efficiency product was designed to target specific market segments by offering a comprehensive assessment of building systems and operations. Currently, the product is targeting the commercial real estate sector, with emphasis on buildings of at least 50,000 square feet. The assessment of the building provides a comprehensive list of energy conservation opportunities, including:

- An initial assessment report describing the building's energy-consuming systems and energy conservation opportunities, and estimates of the projected savings, costs, and rebates for each measure. Customers are charged $2,500 in on-bill fees for completion of the report.

- An optional Investigative Study includes a net operating income analysis and detailed engineering calculations for specific energy conservation opportunities. Customers receive funding for an Investigative Study—up to 75 percent of the study cost, not to exceed $25,000.
- Customers can earn up to 30 percent in bonus rebates on items identified in the initial report that are implemented.
- An ENERGY STAR® Benchmarking score is identified during the initial assessment.

Deviation from Goal

The Segment Efficiency product did not meet its savings or participation goals in 2013. While the studies conducted in 2013 identified significant savings potential, capital-intensive measures were not implemented; customers chose to implement lower cost measures with short payback times. The product did bring in more participants and savings in 2013 then in the previous year. This can be attributed to the program bringing in a new, well- received third-party implementer.

The product continues to close outstanding projects from previous years.

Changes in 2013

The Company hired a new, third-party study implementer for the Segment Efficiency product in 2013. The new implementer has begun to build a pipeline of studies and identify energy savings opportunities for future years.

Self-Directed Custom Efficiency

The Self-Directed Custom Efficiency product provides large commercial and industrial electric customers in Colorado the opportunity to control all stages of their energy saving project's rebate application process. The product allows the customer to perform all of the required activities and incur all the costs for the identification study, design, engineering, measurement & verification (M&V), and reporting work associated with the energy saving projects. These steps are comparable to the Company's Custom Efficiency product but because the customer is responsible for the majority of the administrative and engineering activities, the customer is eligible to receive a higher rebate than is offered through the Custom Efficiency product. The Company's role in this process is one of support through the project stages including verification of customer eligibility, pre-approval of proposed projects, development of the approved M&V plan, and verification of project completion prior to rebate distribution.

The product is open to those customers who have an aggregated peak load of at least 2 MW in any single month and an aggregated annual energy consumption of at least 10 GWh.

Deviation from Goal

The Self-Direct product fell short of its 2013 participation and electric savings targets due to several large projects that were forecast for completion being postponed by customers until 2014. Although the forecast is based on pipeline information, actual achievement is dependent on the pace the customer determines for project completion.

Small Business Lighting

The Small Business Lighting product offers free lighting audits, recommendations for energy-saving measures, special services, and attractive cash rebates to business customers who purchase and install energy efficient lighting equipment in existing facilities. The product is available to businesses with peak demand of up to 400 kW, and seeks to overcome barriers that often prevent small businesses from investing in energy efficient lighting, including limited financial resources and time, low awareness of lighting equipment, and lack of access to quality contractors.

Deviation from Goal

The product exceeded its electric energy savings target, as it has in past years, although expenditures were slightly over the filed budget, but only to an extent commensurate with the savings achieved. Lighting optimization and LED incentives coupled with a free lighting assessment, contributed heavily to 2013 achievements.

Standard Offer

The Standard Offer product was designed to provide customers with an opportunity to identify and implement a comprehensive package of cost-effective efficiency measures using their internal resources and funding, or using outside resources such as those from an Energy Services Company (ESCO). The product differed from the Company's other DSM offerings in that it allowed customers to work with ESCOs, if the customer desired to do so. Working with an ESCO provided customers an alternative funding mechanism for their energy efficiency projects that was not available through the Company's other products. The technical energy audit used as part of this product was an investment-grade audit, which provided an additional resource for the customer to secure internal or external funding for the project. Additionally, bundling individual measures into comprehensive projects minimized needed resources from both the Company and the customer, and potentially increased the size of the projects, which was intended to draw more interest from contractors, equipment suppliers, and ESCOs.

In spite of the perceived advantages of the product, business customers and trade partners consistently demonstrated a clear preference for other DSM products that competed directly with Standard Offer product's target market since the introduction of the product in 2009.

Deviation from Goal

The product exceeded its filed energy savings targets both for electric and gas in 2013. Expenditures were proportional to the increase in achievement for both fuel types as well. These achievements were directly attributed to the December 31, 2013 program close deadline, and the ensuing submission of all remaining open projects. The product is anticipated to further realize some small achievement through the 2016 final measurement and verification fulfillment phase. As predicted, the product discontinuation has encouraged customers to choose to rebate their projects through the Company's other DSM products.

90-Day Notice

A 90-Day Notice was posted in March 2013 to discontinue the product. The product will remain in a maintenance phase as the measurement and verification of energy savings continues through December 31, 2016.

Residential Program

The Residential Program serves customers who live in single-family dwellings, apartments and condominiums and receive electric and/or natural gas from Public Service. The Company focuses on cost-effective, direct impact products that target household appliances and lighting. This effort is supplemented with educational services intended to further increase customer understanding and interest in conservation and energy efficiency.

Electric

In 2013, the electric products in the Company's residential program performed very well. The following products exceeded target: ENERGY STAR® New Homes, Home Lighting & Recycling, Home Performance with ENERGY STAR, and School Education Kits. The Home Lighting & Recycling product led performance in the residential electric segment, with more than 600,000 participants, resulting from successful advertising and promotions. A new product—Pool Pumps—was launched within the program in 2013, but underperformed due to slow market traction.

A summary of the Company's residential program achievements for electric products is shown in Table 14a below.

Table 14a: Residential Program – Electric Products (Budget to Actual)

	Budget / Targets					Actual Achievements				
2013	Electric Participants	Electric Budget	Net Gen. kW	Net Gen. kWh	MTRC	Electric Participants	Electric Expenditures	Net Gen. kW	Net Gen. kWh	MTRC
Residential Program										
ENERGY STAR New Homes	2,629	$548,054	97	1,615,423	1.35	1,977	$593,630	403	2,000,003	2.53
Evaporative Cooling Rebates	4,630	$2,515,410	6,550	4,086,155	9.63	4,288	$2,724,653	6,157	3,815,751	8.52
Heating System Rebates	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
High Efficiency Air Conditioning	2,010	$2,415,130	2,871	2,372,400	1.34	2,752	$2,991,436	2,710	2,168,469	1.23
Home Lighting & Recycling	535,000	$5,549,253	9,180	82,827,177	3.28	606,234	$5,649,204	14,847	117,945,589	3.43
Home Performance with ENERGY STAR	300	$328,344	442	451,625	3.91	498	$237,560	162	479,970	1.51
Insulation Rebate	3,120	$115,505	540	428,993	3.63	1,001	$138,044	295	369,872	1.58
Pool Pumps	n/a	n/a	n/a	n/a	n/a	63	$323,515	36	100,345	0.27
Refrigerator Recycling	8,600	$1,790,121	620	5,561,042	2.00	7,502	$1,243,148	627	5,486,834	2.58
School Education Kits	30,000	$1,538,732	422	4,528,665	1.25	30,006	$1,493,792	435	4,665,925	1.35
Energy Efficient Showerheads	2,631	$61,600	0	466,836,	3.11	3,033	$37,874	0	353,159	4.21
Water Heater Rebate	200	$100,100	59	517,787	1.43	55	$78,594	16	146,575	0.89
Residential Program EE Total	**589,120**	**$14,962,249**	**20,781**	**102,856,103**	**4.45**	**657,409**	**$15,511,451**	**26,688**	**137,532,491**	**4.20**
Load Management – Saver's Switch	19,500	$14,075,362	20,865	697,183	3.88	10,808	$11,845,313	12,165	406,333	2.71
Residential Program Total	**608,620**	**$29,037,610**	**41,646**	**103,553,286**	**4.19**	**668,217**	**$27,356,764**	**37,854**	**137,938,824**	**3.65**

The residential natural gas program achieved its target and had corresponding expenditures above target due to achievements in ENERGY STAR New Homes, Heating System Rebates, Home Performance with ENERGY STAR, and Showerheads. Water Heaters and Insulation were the only products to falter due to continued low natural gas prices which have reduced the potential benefits for customers, making those projects appear less attractive and lengthening project payback periods.

A summary of the Company's residential program achievements for natural gas products is shown in Table 14b below.

Table 14b: Residential Program – Gas Products (Budget to Actual)

	Budget and Targets						Actual Achievements					
2013	Gas Participants	Gas Budget	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC Test Ratio	Gas Participants	Gas Expenditures	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC
Residential Program												
ENERGY STAR New Homes	2,629	$2,638,304	73,357	27,805	$1,861,196	1.30	2,883	$3,814,724	110,930	29,080	$3,012,396	1.32
Evaporative Cooling Rebates												
Heating System Rebates	6,500	$945,667	53,514	56,589	$1,704,355	1.49	4,191	$696,289	59,521	85,484	$3,091,212	2.34
High Efficiency Air Conditioning												
Home Lighting & Recycling												
Home Performance with ENERGY STAR	300	$326,542	11,672	35,744	$275,005	1.32	554	$573,129	18,609	32,469	$2,221,373	2.31
Insulation Rebate	8,000	$1,571,066	81,533	51,896	$2,117,244	1.27	2,322	$694,483	46,254	66,602	$5,369,910	2.36
Pool Pumps												
Refrigerator Recycling												
School Education Kits								$870				
Energy Efficient Showerheads	21,286	$225,000	18,125	80,556	$1,769,351	7.25	22,874	$261,463	26,646	101,912	$1,387,513	5.25
Water Heater Rebate	2,970	$342,428	12,088	35,300	$94,643	1.08	2,142	$274,190	7,086	25,844	-51,954	0.93
Residential Program Total	**41,685**	**$6,049,007**	**250,289**	**41,377**	**$7,821,794**	**1.39**	**34,966**	**$6,315,147**	**269,047**	**42,603**	**$15,029,580**	**1.82**

The residential program was slightly under budget if increased budget for Flood Victim DSM Rebates is considered. The program was over budget for natural gas, but to a lesser degree than the savings achievements exceeded targets.

Residential Products

The following provides a brief summary of the performance of each residential product in 2013.

ENERGY STAR New Homes

The ENERGY STAR® New Homes (ESNH) Product provides homebuilders with an incentive to install energy efficient measures that exceed state and local building codes and common construction practices. This product encourages homebuilders to consider a "whole-house" approach to energy conservation when building new single-family and small multi-family homes. This approach combines energy saving construction methods with energy efficient appliances to achieve significantly higher energy savings and provide the customer with lower energy bills, fewer maintenance concerns, higher resale value, and a more comfortable, quiet home.

Builders receive a rebate for installing energy efficient measures of their choosing that achieve an overall Home Energy Rating System (HERS®) Index of 75 or less (a lower HERS is better, more efficient). Rebate levels increase with lower HERS indexes. Residential Energy Services Network (RESNET) certified HERS raters complete the performance rating and provide the data to the Company. The raters receive a fee from the Company for enrolling the home and providing the required data.

Deviation from Goal

The Company was successful in keeping the product open all year and avoided closing it prior to the year end, which occurred in 2012; but by doing so, the product exceeded its gas and electric budgets.

The product exceeded its gas participation target—driven by increased expenditures—while electric participation was below target due to an incorrect assumption in the Company's forecast that all participants would be combined gas/electric participants. Ultimately, 31% of participants were natural gas only customers. Both gas and electric savings targets were exceeded. The Company continues to see an increase in average Dth savings at the participant level due to builders choosing more efficient measures when constructing their homes—driving the average HERS index down. The increase in electric savings was impacted by increased participation and builders choosing more efficient equipment such as ENERGY STAR appliances.

Changes in 2013

Builder rebates were reduced from 2012 levels.

60-Day Notice

The Company posted a 60-Day Notice in June 2012 to make changes to the ESNH product. The Notice impacted both the 2012 and 2013 products. The primary driver for the change was to maintain product cost-effectiveness while meeting the ENERGY STAR brand requirements. Changes for 2013 included closure of the product when the natural gas savings goal was achieved, and a reduction in builder rebate levels. The Notice provided flexibility for the Company to keep the product open if additional funds became available. During the 2014 DSM Plan Settlement negotiations, conducted in fall 2013, the Company agreed to shift dollars among gas DSM products, up to the approved budget for the gas portfolio, to keep the product open.

Evaporative Cooling Rebate

The Evaporative Cooling Rebate product provides incentives to customers who purchase and permanently install high-efficiency evaporative cooling units for Standard, Premium, or Whole House residential systems. This product offers tiered rebates, providing up to $250 or the cost of the unit, which ever is less, for Standard System Tier 1 units with a cubic-feet-of-air-blown-per-minute of 2,500 or greater; up to $600 for Premium System Tier 2 units with a minimum media saturation effectiveness of 85%, a remote thermostat, and a periodic purge water control; and $1,000 for Whole House System Tier 3 units that use an approved premium system with a minimum media saturation effectiveness of 85%, a remote thermostat, a periodic purge water control and have at a minimum of four installed ducts per unit.

Deviation from Goal

In 2013, the Company rebated 4,288 qualifying evaporative cooling units. The product improved by 3% over 2012 and reached closer to the electric savings target for 2013, coming in at 93% with 3.8 GWh, while overspending by only 8%. The product fell slightly short of electric savings targets due to lower than forecasted replacement and first time installations in the Denver Metro/Front Range region and the Western Slope region. Expenditures were anticipated to come in over budget as the Company deployed integrated direct marketing campaigns to increase participation in the Premium and Whole House tiers and offered a bonus promotion to contractors, which did result in a slight lift in participation.

Heating System Rebate

The Heating System Rebate product provides cash rebates to the Company's natural gas customers who purchase high-efficiency heating equipment for residential use. Customers benefit because a high-efficiency furnace or boiler uses less natural gas and lowers monthly bills over the life of the equipment (typically 18 to 20 years). The rebate lowers the purchase price of the high-efficiency equipment and improves the project's payback.

Deviation from Goal

The Heating System Rebate product exceeded its gas savings goal and under-spent its filed budget as the majority of participants chose the tier of furnaces with the highest energy savings—94% Annual Fuel Utilization Efficiency (AFUE)—and the highest rebate ($120 per furnace). The top 25 residential heating, ventilation, and air conditioning (HVAC) and plumbing contractors completed a higher number of projects compared to 2012, which contributed to achieving the product goals.

60-Day Notice

In May 2013, the Company made minor corrections to Deemed Savings Technical Assumptions for the product by updating new furnace and boiler gas savings from a deemed-average-per-rebate tier to a more accurate calculation based on actual nameplate data of the new equipment, appropriate baseline efficiency, and equivalent full load heating hours.

High Efficiency Air Conditioning

The High Efficiency Air Conditioning product comprehensively addresses energy efficiency opportunities related to central air conditioning (A/C), air-source heat pumps (ASHPs), and ground source heat pumps (GSHPs). A participating North American Technician Excellence (NATE)-certified contractor must perform the improvement to earn the rebate. The product consists of three major components:

- **Equipment rebates** – Central A/C and ASHPs ranging from 14.5 to 16 SEER or greater are eligible for a rebate, ranging from $250 – $500 per unit. GSHPs with a minimum 3.3 COP and 14.1 EER or greater are eligible for a rebate of up to $1,500 per unit. All new equipment must be installed by a contractor registered to support the product.
- **Trade-In rebates** – Central A/C units of 12 SEER or under replaced by a new A/C unit of 14 SEER or greater and installed by a registered contractor are eligible for a trade-in rebate of $500.
- **Quality Installation** – This component is the cornerstone of the product. The process is based on standards developed by the Air Conditioning Contractors of America (ACCA), which dictate the steps a contractor must take to ensure a quality installation. The High Efficiency Air Conditioning product strives to create increased awareness of quality installation among customers and trade partners. Contractors who meet the quality installation requirements are eligible to receive a $100 incentive.

Deviation from Goal

The High Efficiency Air Conditioning product exceeded its 2013 participation goal by 137% but was unable to reach its energy savings goal. This was due to the decrease in the net-to-gross (NTG)

applied to the product. The product expenditures were over budget in order to pay customer rebates and contractor incentives. The Company continued to support contractors by offering A/C training instructed by industry experts, promotional items, and contractor recognition.

60-Day Notice

A 60-Day Notice was posted in May 2013 to make changes to the product; including a change in the methodology to calculate the incremental capital costs for new equipment, trade-in equipment and ground source heat pumps, and clarification on the losses associated with a non-quality installation of a GSHP. The change also addressed the adjustment in NTG from 89% to 68%.

Home Lighting & Recycling

The Home Lighting & Recycling product offers discounted prices, via upstream incentives, on compact fluorescent lights (CFLs) and light-emitting diodes (LEDs), as well as an environmentally-friendly way to dispose of spent CFLs. Energy efficient lights are an easy and low-cost way for customers to save energy and reduce their monthly electric bills.

The Company widely promoted the Home Lighting & Recycling product through a variety of marketing channels, including television, radio, internet, print publications, bill inserts, community events, and point-of-purchase displays. The Company continued a marketing relationship with the Colorado Avalanche hockey team and implemented a CFL giveaway and sweepstakes at the Pepsi Center.

In 2013, the Company put more focus on LED bulbs, including dedicated advertising and promotions as the price of the bulbs continued to drop.

Deviation from Goal

The product greatly exceeded its participation and savings goals, while spending was proportionally less per bulb than the anticipated budget. The excellent achievements were the result of extensive promotions, bringing energy efficiency to the top of mind for customers who were looking for ways to reduce their monthly bills.

Changes in 2013

The baselines for measures within the Home Lighting & Recycling product continue to change the as a result of the 2007 Energy Independence and Security Act standards are implemented.

Home Performance with ENERGY STAR®

The Home Performance with ENERGY STAR® (HPwES) product is a comprehensive, "whole house" retrofit product. This product is designed to give cash rebates to customers for implementation of measures identified during the Home Energy Audit. It is only available to the Company's residential combination gas and electric customers or all-electric customers with electric space heating. Customers residing in multi-unit complexes that have more than four units do not qualify. Participants have a limited amount of time from the program sign-up date to implement

three measures or more. Customers must implement air sealing, attic insulation, and energy-efficient lighting if recommended in their audit and not previously completed.

Upon completion of the product improvements, a post-improvement verification inspection is completed. The Company's third-party implementer is responsible for conducting quality assurance on the in-home inspections, the home energy audit report, and the audit itself. The implementer also provides customer support, contractor management, and oversight of the energy modeling software.

Deviation from Goal

HPwES did reach participation and natural gas savings targets in 2013, but did not achieve its electric savings targets due to low participation in cooling measures. Electric expenditures were under budget proportionally to the savings achieved. Natural gas savings exceeded the target, and expenditures were correspondingly over budget.

Changes in 2013

The Company posted a 60-Day Notice in May 2013 to make changes to the HPwES product, including measure savings calculations, modification to rebate values and deemed sheet impacts. The primary driver behind the changes was to align with the product with other DSM products with the same measures in the portfolio.

A third-party evaluation of HPwES was also conducted in 2013. The findings from that evaluation are being reviewed and appropriate program changes will be made in 2014.

Insulation Rebate

The Insulation Rebate product offers prescriptive rebates to combination electric and natural gas customers, natural gas residential customers, or electric heat customers to increase the insulation and air sealing in existing single-family homes or one-to-four unit residential properties. To qualify for the rebate, customers must have the insulation professionally installed by a contractor with a Building Performance Institute (BPI) certification. The program is marketed primarily using trade partner communications via trainings, newsletters, and email. The product is also promoted via cross-marketing opportunities with the Company's other DSM products, such as Heating System Rebate and Water Heating.

Deviation from Goal or Budget

The product did not achieve its electric and gas savings or participation targets given increased barriers with contractor requirements implemented for the product in 2013, which decreased expected participation. Electric savings was slightly lower due to fewer electric heat participants. Natural gas savings was higher due to larger homes participating and delivering significant air sealing leakage reductions. Expenditures were proportionate to the savings achieved.

Changes in 2013

The Company posted a 60-Day Notice in January 2013 to improve the product offering. Major changes to the product included the added requirement of air sealing and blower door testing for rebate eligibility, as well as use of a BPI-certified contractor; and onsite M&V.

Pool Pumps

The residential Pool Pumps product provides a point-of-purchase rebate to the Company's residential electricity customers and incentives for trade partners to install and calibrate qualifying energy-efficient variable speed swimming pool pumps. The product encourages customers to purchase qualifying pumps with electronically-commutated motors that use rare earth or permanently fixed magnets. It also encourages quality installation by requiring proper commissioning and calibration that sets the pump to run at lower speeds, capturing additional energy savings.

Deviation from Goal

The product significantly underachieved participation and energy savings targets. Expenditures were less than planned since fewer customer rebates and vendor incentives were awarded. The biggest impact to participation was the third-party implementer's challenge with determining market size in the Company's service territory and identifying customers who have qualifying in-ground swimming pools. Direct mail was found to be the most effective way to communicate with pool owners, and understanding where these customers reside is critical to securing participants.

The third-party implementer initiated a mid-year review to determine what was working and not working regarding product implementation and customer outreach. Due to the short pool season and timing of this review, most of what was learned from this effort will be applied towards improvements in 2014.

60-Day Notice

The product was first introduced in January 2013 via 60-Day Notice following a 2012 Innovative Technologies RFP.

Refrigerator Recycling

The Refrigerator Recycling product is designed to decrease the number of inefficient freezers and refrigerators in the Company's service territory in an environmentally safe and compliant manner, and by doing so, deliver electric energy savings and peak demand reduction. Customers receive an incentive and free pick up and disposal of their operable, inefficient freezers and refrigerators. This product is primarily marketed through bill inserts, direct mail, print, radio advertisements, and online/social media efforts.

Deviation from Goal

The Refrigerator Recycling product met its participation and savings goals in 2013. Expenditures were proportionate to electric savings achievement. The success of the product is attributed to the

inclusion of freezers and primary fridges—an ENERGY STAR® Refrigerator promotion—and a successful marketing campaign throughout the year. The average number of orders submitted per week in 2013 before the promotion began was 152; during the promotional period the average number of orders submitted per week was 268—a 76% increase in the average number of orders placed per week.

School Education Kits

The School Education Kits product combines a set of classroom and in-home activities with projects that enable students and parents to install energy efficiency products in their homes. The product is targeted at sixth grade students in the Company's Colorado service territory. A third-party contractor fully implements the product, including recruiting and training teachers, providing all materials, and tracking participation and installation rates among the students. Savings are based on the installation rates of the CFLs that students receive in the kits.

Deviation from Goal

The product slightly exceeded the participation and savings targets in 2013, while remaining under budget. The success of the product can be attributed to the continued efforts to emphasize the importance of installing the provided measures.

Energy Efficient Showerheads

The Energy Efficient Showerheads product provides a free energy-efficient showerhead to residential customers to help them save energy, water, and money. Qualifying customers receive a direct mail offer for a 1.5 gallon-per-minute showerhead during a specific campaign time period. Customers accept the offer by mailing in the business reply card or calling the toll free number prior to the deadline listed on the postcard. If they do so, they are mailed a showerhead kit, which includes the energy efficient showerhead, thread seal tape and installation instructions free of charge.

Deviation from Goal

This product exceeded its gas budget and correspondingly its natural gas savings targets in 2013 due to an enhanced marketing campaign and more customers with natural gas water heaters than expected. The electric budget and savings were lower than targeted due to less electric water heater participation than expected.

60-Day Notice

The Company posted a 60-Day Notice in May 2013 to lower the total water quantity and hot water saved per showerhead; reduce the deemed customer kW savings per showerhead; and capture the customer's actual water heater fuel type and incorporate it into the calculations.

Water Heater Rebate

The Water Heater Rebate product leverages incentives to encourage residential customers to purchase energy saving water heating equipment. Rebates are available for:

- Energy-efficient natural gas storage and tankless water heaters and;
- Electric-only heat pump water heaters.

As a result of the product, participating customers reduce their natural gas and electricity usage and long-term operating costs.

Deviation from Goal

The product did not meet the participant and energy savings goals in 2013. Expenditures were in line with participation levels for natural gas water heaters, but marketing expenses increased for electric heat pump water heaters. The Company continued to significantly increase outreach, education and awareness for electric-only heat pump water heaters and the strategy included a targeted direct mail campaign encouraging customers to take advantage of the rebates while also cashing in on the $300 Federal tax credit which ended December 31, 2013. This resulted in a trend of increased participation over 2012. The product is being evaluated to see how it could achieve greater cost-effectiveness.

Saver's Switch®

Saver's Switch is an integral part of the Company's load management efforts. The product offers bill credits as an incentive for residential customers with central air conditioners to allow the Company to control operation of their air conditioners on hot summer days when the system is approaching its peak. Residential customers receive a $40 annual discount on their October bill each year they participate. Control periods for central air conditioners are declared an average of five to fifteen times per year; in 2013, there were ten events called. However, because only sub-segments of the population were activated in any given control event, the average participant experienced only two control events for the year.

Deviation from Goal

By the end of 2013, the product had about 168,000 residential participants enrolled in Colorado, but did not meet the participation target. As a result, expenditures were significantly under budget. The Company estimates that more than 50% of eligible customers in Colorado are enrolled Saver's Switch. While this is a very high penetration rate, it does leave the population of eligible and willing participants significantly reduced for future years. Therefore, signup rates and response rates to promotional activities have declined in recent years, despite significant marketing efforts.

Low-Income Program

The Low-Income Program consists of the Single-Family Weatherization, Multi-Family Weatherization, Energy Savings Kit, and Non-Profit Energy Efficiency products. These products analyze natural gas and electric consumption for low-income customers and provide them with products, services, and education designed to assist them in lowering their energy bills.

In 2013, the electric products within the Company's low-income program did not achieve energy savings targets, due to a shortfall in Non-Profit Energy Efficiency and Single-Family Weatherization. However, Multi-Family Weatherization exceeded its anticipated performance on the electric side due to higher than expected participation.

A summary of the Company's low-income program achievements for electric products is shown in Table 15a below.

Table 15a: Low-Income Program - Electric Products (Budget to Actual)

	Budget / Targets					Actual Achievements				
2013	Electric Participants	Electric Budget	Net Gen. kW	Net Gen. kWh	MTRC	Electric Participants	Electric Expenditures	Net Gen. kW	Net Gen. kWh	MTRC
Low-Income Program										
Energy Savings Kit	8,250	$510,957	194	3,497,334	2.22	10,875	$217,802	159	2,829,385	3.10
Multi-Family Weatherization	12	$389,446	112	1,283,333	1.74	32	$759,878	237	1,900,818	1.35
Non-Profit Energy Efficiency	25	$930,248	506	1,800,234	1.97	47	$727,155	374	1,158,852	1.46
Single-Family Weatherization	2,860	$1,254,478	356	3,645,259	1.35	3,211	$1,140,603	178	1,619,506	0.87
Low-Income Program Total	**11,147**	**$3,085,129**	**1,169**	**10,226,160**	**1.71**	**14,165**	**$2,845,437**	**948**	**7,508,561**	**1.32**

In 2013, the natural gas products within the Company's low-income program exceeded targets on the performance of Energy Savings Kit, Multi-Family Weatherization, and Single-Family Weatherization. The Single-Family Weatherization product established a new partnership with Energy Outreach Colorado (EOC) resulting in additional savings. Many weatherization measures favor natural gas, driving higher performance in this area.

A summary of the Company's low-income program achievements for natural gas products is shown in Table 15b below.

Table 15b: Low-Income Program - Gas Products (Budget to Actual)

	Budget and Targets						Actual Achievements					
2013	Gas Participants	Gas Budget	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC Test Ratio	Gas Participants	Gas Expenditures	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC
Low-Income Program												
Energy Savings Kit	8,249	$494,467	13,593	27,490	$1,402,244	3.62	12,136	$181,972	20,206	111,041	1,396,833	6.99
Multi-Family Weatherization	12	$439,248	6,788	15,454	$30,615	1.04	19	$557,957	10,242	18,357	30,574	1.02
Non-Profit Energy Efficiency	25	$628,334	6,970	11,093	$28,765	1.02	36	$240,005	3,600	14,998	-60,096	0.89
Single-Family Weatherization	1,830	$2,180,019	31,942	14,652	$1,039,271	1.26	2,913	$3,457,394	78,043	22,573	4,602,874	1.72
Low-Income Program Total	**10,116**	**$3,742,068**	**59,293**	**15,845**	**$2,500,895**	**1.39**	**15,104**	**$4,437,329**	**112,092**	**25,261**	**5,970,185**	**1.71**

The electric low-income program budget was under spent due to fewer than expected electric measures being implemented. Natural gas spending was over-budget, but corresponding achievements out-paced spending, in part due to significant Energy Savings Kit program cost savings.

Low-Income Products

The following provides a brief summary of the performance of each low-income product in 2013.

Energy Savings Kits

Energy Savings Kits provide qualifying low-income customers with a bundle of home energy efficiency measures and educational materials. Customers prove income eligibility by applying for Federal Low-Income Housing Energy Assistance Program funding or other forms of energy assistance, such as that provided by Energy Outreach Colorado. In 2013, the kits included the following measures:

- 1.0 GPM faucet aerator
- 1.5 GPM faucet aerator
- 1.5 GPM showerhead
- Eight compact fluorescent light (CFL) bulbs

Deviation from Goal

The product exceeded the electric participant goal by 132% and the gas participant goal by 147%. Even though the product exceeded the electric participant goal, it fell short of the electric savings goal. This is a result of low installation rates among customers. Additional efforts were made to encourage customers to install their kit components through installation reminder pieces and how-to videos. The product exceeded the gas savings goal by 149%, mainly due to the additional participants reached. Product expenditures were under budget due to successful cost negotiations with the third-party implementer.

Multi-Family Weatherization

The Multi-Family Weatherization product provides funding on a wide variety of equipment and process improvements to natural gas and electric efficiency measures for low-income multi-family buildings. These buildings have common areas, greater square footage, and more appliances and potential measures than the homes within the Company's Single-Family Weatherization product.

The Company funds supplement Federal weatherization grants to produce incremental, cost-effective gas and electric savings. Each submitted project participates in a custom analysis by the Company's energy efficiency engineers to determine cost-effectiveness.

Deviation from Goal

The Multi-Family Weatherization product exceeded its electric and gas savings targets; and expenditures were commensurately over budget. The third-party implementer completed 32 low-

income multi-family projects containing electric measures and 19 projects containing gas measures in 2013.

Non-Profit Weatherization

The Non-Profit Weatherization product provides funding on a wide variety of equipment and process improvements to natural gas and electric efficiency measures for qualified non-profit organizations within the Company's service territory. The product's focus is helping organizations that serve low-income individuals, such as shelters, safe houses, and residential treatment centers.

The Company worked with a third-party implementer and supplemented Federal weatherization grants to produce incremental, cost-effective gas and electric savings. The third-party implementer identified and qualified non-profit facilities for the product. Each project submitted in 2013 went through a custom analysis by the Company's energy efficiency engineers to determine cost-effectiveness.

Deviation from Goal

The product exceeded participation targets by completing 47 low-income non-profit projects containing electric measures and 36 projects containing gas measures in 2013. Although the product served more low-income non-profit facilities than planned, the product fell short of its electric and natural gas savings targets, due to lower average savings per facility; the product was under-budget by a similar level.

Single Family Weatherization

The Single-Family Weatherization product offers natural gas and electric efficiency measures to low-income single-family households. Depending on the needs of the home, eligible customers will receive the cost-effective improvements that are recommended. In addition to these measures, a major focus of the product is customer education on ways to reduce energy use in the home and to make smart energy choices.

The Product is implemented in partnership with the Colorado Energy Office ("CEO") and the various weatherization agencies across the state. The Company funds supplement Federal weatherization grants to produce incremental, cost-effective gas and electric savings.

Deviation from Goal

In 2013, the product exceeded the gas savings target and did not meet the electric savings target. There were more opportunities for gas savings via building shell and equipment measures including insulation, furnaces, water heaters and storm windows. The product was challenged in achieving electric savings because of the low potential for electrically heated homes that allow for electric building shell measures. In partnership with CEO, the Company executed an outreach campaign to target these customers.

As the necessary leveraging funds continue to decrease at the federal and state level, CEO has not been able to meet energy savings targets established collaboratively with the Company at the start of

the year. As a supplemental plan to serve single families, Energy Outreach Colorado (EOC), the organization that administers the Company's Low-Income Multi-Family and Non-Profit products, identified customers that meet the CEO single-family participant qualification requirements. Establishing this new partnership allowed the Company to meet the natural gas savings target and come closer to meeting the electric savings target.

Changes in 2013

In addition to partnering with CEO to administer the product, the Company collaborated with EOC to identify eligible customers and ensure that new equipment met energy efficiency standards to qualify for an incentive. By establishing the partnership with EOC, the Company was able to increase its reach to the low-income sector to ensure that eligible customers are being served, and enabled the product to exceed natural gas savings targets. (The combined partnership model will continue in 2014).

Indirect Program

The Indirect Program includes products and services that support the overall development and implementation of the DSM Plan. Most of these products and services do not directly produce energy or demand savings and are not independently evaluated for cost-effectiveness. However, pilot products that are being evaluated to become direct impact products and have measured savings do go through a cost-effectiveness evaluation.[9] The costs of the entire indirect program are included in the overall portfolio cost-effectiveness evaluation. The Indirect Program has two core elements: Education / Market Transformation and Planning and Research.

Within Education / Market Transformation, the Company offered six customer-facing products in 2013, including: Business Energy Analysis, Community Energy Efficiency Planning, Consumer Education – Business, Consumer Education – Residential, Residential Home Energy Audit, and Energy Efficiency Financing. These products did not deliver measured savings in 2013 and, therefore, were not evaluated for cost-effectiveness.

Within Planning and Research, the Company operated five internal products: DSM Planning and Administration, Program Evaluations, Measurement and Verification (M&V), DSM Market Research, and DSM Product Development.

A summary of the Company's indirect program achievements for electric products is shown in Table 16a below.

Table 16a: Indirect Program – Electric Products (Budget to Actual)

	Budget / Targets					Actual Achievements				
2013	Electric Participants	Electric Budget	Net Gen. kW	Net Gen. kWh	MTRC	Electric Participants	Electric Expenditures	Net Gen. kW	Net Gen. kWh	MTRC
Indirect Program										
Education/Market Transformation										
Business Energy Analysis	400	$1,029,449				86	$379,392			
Community Energy Efficiency Planning							$129,511			
Consumer Education - Business	1,385	$153,765				5,872	$142,204			
Consumer Education - Residential	34,000	$1,232,674				36,362	$1,070,268			
Residential Home Energy Audit	2,175	$581,677				2,684	$485,640			
Energy Efficiency Financing							$31,167			
Education/Market Transformation Total	**37,960**	**$2,997,565**				**45,004**	**$2,238,182**			
Planning and Research										
DSM Planning & Administration		**$305,838**					**$475,497**			
Program Evaluations		**$596,873**					**$739,658**			
Measurement & Verification		**$102,223**					**$8,073**			
DSM Market Research		**$263,011**					**$182,854**			
DSM Product Development		**$1,031,536**					**$681,157**			
Energy Feedback Pilot	100,000	$861,048	684	17,121,642	1.28	93,004	$553,501	3,670	18,477,003	2.80
In-Home Smart Device Pilot	600	$983,906				101	$323,682			
Electric Vehicle Charging Station Pilot		$20,000					$54,798			
Building Code Support Pilot							$193,106			
DSM Product Development Total	**100,600**	**$2,896,489**	**684**	**17,121,642**		**93,105**	**$1,806,244**	**3,670**	**18,477,003**	
Planning and Research Total	**100,600**	**$4,164,434**	**684**	**17,121,642**		**93,105**	**$3,212,326**	**3,670**	**18,477,003**	
Indirect Products & Services Total	**138,560**	**$7,161,999**	**684**	**17,121,642**		**138,109**	**5,450,508**	**3,670**	**18,477,003**	

[9] In 2013, only the Energy Feedback Pilot delivered verified energy savings within the Indirect Program.

A summary of the Company's indirect program achievements for natural gas products is shown in Table 16b below.

Table 16b: Indirect Program – Gas Products (Budget to Actual)

	Budget and Targets						Actual Achievements					
2013	Gas Participants	Gas Budget	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC Test Ratio	Gas Participants	Gas Expenditures	Net Annual Dth Savings	Annual Dth/$M	MTRC Net Benefits	MTRC
Indirect Program												
Education/Market Transformation												
Business Energy Analysis	100	$161,658						$27,161				
Community Energy Efficiency Planning								$21,209				
Consumer Education - Business	593	$50,002						$45,729				
Consumer Education - Residential	34,000	$250,557						$212,733				
Residential Home Energy Audit	2,400	$522,618						$446,897				
Energy Efficiency Financing								$4,802				
Education/Market Transformation Total	**37,093**	**$984,835**						**$758,531**				
Planning and Research												
DSM Planning & Administration		**$ 117,300**						**$125,991**				
Program Evaluations		**$ 267,182**						**$195,316**				
Measurement & Verification		**$ 25,850**						**$2,927**				
DSM Market Research		**$ 246,028**						**$146,464**				
DSM Product Development		**$ 255,106**						**$113,799**				
Energy Feedback Pilot	50,000	$ 90,260	23,758	263,217	$56,910	1.63	93,004	$76,422	70,115	917,473	$357,908	5.68
In-Home Smart Device Pilot												
Electric Vehicle Charging Station Pilot												
Building Code Support Pilot								$56,275				
DSM Product Development Total	**50,000**	**$ 345,366**	**23,758**	**68,791**	**$-198,197**		**93,004**	**$246,496**	**70,115**	**284,447**	**$187,834**	
Planning and Research Total	**50,000**	**$1,001,726**	**23,758**	**23,717**	**$-854,556**		**93,004**	**$717,193**	**70,115**	**97,763**	**$-282,863**	
Indirect Products & Services Total	**87,093**	**$1,986,561**	**23,758**	**11,959**	**$-1,590,991**		**93,004**	**$1,475,723**	**70,115**	**47,512**	**$-1,041,633**	

The Indirect Program budget consists primarily of labor, educational materials, and study costs. Most studies are conducted by outside experts, generally selected through a competitive bid.

Education / Market Transformation Products

The following provides a brief summary of the performance of each education / market transformation product in 2013.

Business Energy Analysis

This indirect impact program offers analysis services to Colorado business customers to help identify energy saving opportunities. The product includes three different types of assessments (online assessments, onsite audits, and engineering assistance studies) which vary in customer involvement and capital investment. The reports for all three assessment types provide detailed information about costs and paybacks for measure implementation, which assist companies in creating the business case for implementing energy conservation opportunities.

Deviation from Goal

The product did not meet its electric or gas participation goals in 2013. The product finished the year under budget. The decrease in participation can be attributed largely to the reduced availability of Federal funds for cities and counties, which have historically participated at higher rates than other customer segments. Adjustments to the program and its marketing are being explored to increase participation and implementation rates in future years.

Consumer Education – Business

Consumer Education – Business is an indirect impact program focused on creating awareness of the benefits of electric and natural gas energy efficiency to businesses by providing information on no-cost and low-cost ways to reduce energy use in buildings. The program encourages business customers to make Xcel Energy their primary contact when considering energy efficiency solutions and promotes resources such as the Online Energy Assessment and the Business Solutions Center for small- to mid-size business customers. The program delivers its messages through energy saving workshops, seasonal ad campaigns, newsletters, Company websites, and the annual efficiency partner awards.

Deviation from Goal

The program exceeded the electric and natural gas participation goals for the program. For electric, there were 5,872 interactions compared to a target of 1,385 (exceeded target by 324%). For natural gas, there were 1,468 interactions compared to a target of 593 (exceeded target by 124%).

Consumer Education – Residential

Consumer Education – Residential is an indirect impact program that focuses primarily on creating awareness of energy conservation while providing residential customers with information on what they can do in their daily lives to reduce their energy usage. Because the residential segment in Colorado is demographically varied, Xcel Energy will continue to employ a wide variety of opportunities and resources to communicate the conservation message which includes community partnerships, events, seasonally-driven ad campaigns, and web-based resources.

Deviation from Goal

The program exceeded the electric and gas participation targets in 2013 by 107%.

Residential Home Energy Audit

The Residential Home Energy Audit product provides rebates to the Company's natural gas and/or electric customers that receive an in-home energy audit. Considered a gateway to other residential programs, this product is designed to encourage customers to understand their home's energy usage through an energy audit which can lead to improvements in energy savings in residential homes by influencing customer behavior through conservation education and implementation of energy

efficient improvements. There are three types of in-home audit rebates offered through this product that earn the customer a rebate:

- Standard audit for 60% of the cost, up to $100;
- Standard audit with blower door test for 60% of the cost, up to $160; or
- Infrared audit which includes the standard and the blower door test for 60% of the cost, up to $200.

Deviation from Goal

Participation in both the natural gas and electric product exceeded the targets and also remained under budget. The Company was able to work with its software provider for this product to enhance usability for the contractor community based on meetings with the trade. Throughout the year, the Company promoted the product through various marketing efforts such as advertising strategy, bill inserts, direct mail, and cross-promotion with the Energy Efficiency Financing pilot product.

Energy Efficiency Financing

Energy Efficiency Financing is an indirect impact pilot product that launched in the second quarter of 2013. There are no direct attributable energy, or demand, savings associated with the product. Instead, the initiative seeks to connect residential and business customers with third-party lending institutions. The Company has established formal alliances with several financial institutions and local programs that provide customers with easy access to the funds they need to be able to improve energy performance. All loans are made directly from third-party lenders—"Allies"—to customers.

Deviation from Goal

Due to a mid-2013 launch, both the natural gas and electric expenditures—primarily used for education and marketing initiatives—came in under budget.

Changes in 2013

The Company continues to work with established alliances to educate trade partners and connect customers with financing solutions to remove the up-front capital barrier for upgrading to energy efficient equipment. The Company continues to work with industry expert, Harcourt Brown & Carey to improve the program, including identifying gap offerings and the need for resources and tools that trade partners need to engage customers and continue to incorporate financing solutions into their customer service platform. Additional marketing efforts and Ally support continued through 2013.

Planning & Research Products

The following provides a brief summary of the performance of each planning and research product in 2013.

DSM Planning & Administration

DSM Planning & Administration is an indirect product with internal staff that manages all energy efficiency-related filings, including the annual DSM Status Report, DSM Plans and Notices, and Strategic Issues dockets. This group performs cost-benefit analyses of all the energy efficiency and demand response products, provides tracking of the energy and demand savings, and collaborates with the Company's Resource Planning group to develop inputs for the Company's resource plans. DSM Planning & Administration conducts all planning and implementation of the quarterly DSM Roundtable Meetings and associated filings; and provides management oversight of all evaluation, measurement and verification planning and policies. These staff work with outside consultants and stakeholders as needed throughout the year. These functions are necessary to ensure a cohesive and high quality DSM portfolio that meets all legal requirements as well as the expectations of our internal and external customers and the Colorado PUC.

Deviation from Goal

In 2013, the Company overspent the electric budget for DSM Planning & Administration due to a larger workload than anticipated, including preparation of: 18 60-Day Notices and one 90-Day Notice for product modifications, the 2014 DSM Plan and subsequent Settlement Agreement, and the DSM Strategic Issues Application.

Measurement and Verification

The Measurement and Verification (M&V) Plan for the Company's DSM portfolio was developed to measure and verify all direct electric and natural gas DSM savings on an ongoing basis during 2013 to ensure that technical assumptions, net-to-gross (NTG) ratios, and realization rates used in our savings calculations are as accurate as possible. The intensity of the M&V is balanced with the costs of the M&V approaches, being mindful of the objectives of ensuring accurate savings while keeping expenditures prudent and maintaining the cost-effectiveness of the products. Product savings are validated through a multi-step process designed to ensure that rebates are correctly processed, rebated measures were installed, and equipment is performing as intended. The M&V activities also provide opportunities to evaluate customer satisfaction and identify strategies for improving product delivery and effectiveness. Results of M&V activities are reported in the section of this Report labeled "Evaluation, Measurement, and Verification Results."

The expenditures associated with this line item include only the internal labor to manage the overall M&V process. M&V expenses from third-party evaluators are charged directly against each product budget.

Deviation from Goal

In 2013, many of the costs of performing M&V were shifted from this line-item to individual product budgets. As a result, both the electric and gas portions of this budget line-item were significantly under spent, as the costs were charged to product budgets. Going forward, this line-item budget will represent only the internal labor associated with managing the M&V process.

Market Research

Market Research conducts surveys and studies to gauge energy awareness and interest around DSM conservation. The functions are needed to provide overall support for clarifying DSM issues and thoroughly understanding current and potential DSM customers. In 2013, the Company conducted the following general research and analytical services:

- Contracting and Review of Demand Response Potential Study
- Contracting and Review of Updated Colorado DSM Market Potential Study
- Home Energy Audit Tracking
- Review of Measurement & Verification (M&V) Data for Prescriptive Products
- Residential and Business Advertising Tracking
- Contracting of a Portfolio Wide Technical Assumptions Review and Net-to-Gross Benchmarking
- Residential Attitude, Awareness and Usage (AAU) Study (initiated in late 2013, final report expected in Q2 2014)
- Dun & Bradstreet Business List Refresh
- E Source Consultative Services
- Customer Choice Research (Accenture)

Market Research also manages product-specific research, which includes process and impact evaluations of individual products. These functions are needed to identify product strengths and opportunities for improvement; and to enable comparison with industry best practices and appropriate attribution of savings generated from the products. In 2013, the Company completed three program evaluations: Compressed Air Efficiency, Segment Efficiency, and Home Performance with ENERGY STAR®.

Segment Efficiency was a process only study due to the small number of participants at the time the evaluation was initiated. Compressed Air Efficiency and Home Performance with ENERGY STAR were process *and* impact studies, obtaining an estimate of the net-to-gross ratio for each. High-level outcomes include:

- *Business Compressed Air Efficiency:* High satisfaction was found among the program participants and trade allies are effective in both promoting the program and assisting with the rebate application process. A 73% net-to-gross ratio was recommended for the prescriptive portion of the program and 87% for study participants.
- *Business Segment Efficiency:* While the product is currently only available to commercial real estate customers, the Company is exploring options for expanding eligibility to smaller-sized buildings and other hard-to-reach market segments, such as the hotel/hospitality segment. Participants reported high satisfaction, and evidence suggests that bonus incentives and subsidized energy assessments provide value to customers and are impactful on decisions to implement improvements.
- *Home Performance with ENERGY STAR:* The majority of participating customers were satisfied overall (98%), as well as with the information they received from their auditor (97%) and with their contractor (90%). In addition, 96% of participating customers indicated they are likely to or already have recommended the participation to a friend. The calculated 116% net-to-gross ratio recommendation is consistent with those of comparable

utility programs. A high level of spillover is generated by the program participants, where customers install additional energy efficiency measures without following through to obtain Company rebates.

Deviation from Goal

In 2013, expenditures were lower than anticipated due to cost savings achieved with renegotiated third-party contracts for program evaluations.

DSM Product Development

Product Development identifies, assesses, and develops new energy efficiency and load management products, services, and measures for the Company. This work enables the Company to identify and promote promising new conservation and load management opportunities for its customers. The product development process starts with ideas and concepts from customers, regulators, energy professionals, interest groups, and Company staff.

In 2013, Product Development initiated nine new products or measures:

- Commercial Refrigeration
- Direct Evaporative Pre-Cooling
- Residential Variable Speed Pool Pumps
- Building Tune Up Measure – Recommissioning
- Bathroom and Kitchen Aerators – Energy Efficient Showerheads
- Anti-Sweat Heater Controls – Cooling Efficiency
- Electronically Commutated Motors For Furnace Fans – Heating System Rebates
- Online Energy Feedback – Energy Feedback Pilot
- LED Parking Garage Retrofit and New Construction – Lighting Efficiency and Small Business Lighting
- Business Energy Feedback – Business Energy Feedback Pilot

In addition, Product Development developed a LED Troffers measure in 2013 to be implemented in 2014.

Deviation from Goal

Product Development expenditures were under budget in 2013 due to lower than anticipated spending for consulting services and association dues.

60-Day Notice

Product Development contributed analytical inputs to 60-Day Notices for 17 products and measures that the Company posted in 2013.

Energy Feedback Pilot

The Energy Feedback Pilot focused on testing options for energy-use feedback with residential customers to better understand what behavior-based energy conservation can be achieved by providing better feedback on energy use. The pilot tested various forms, frequencies, and contents of feedback including paper reports mailed periodically and emailed reports sent monthly to better understand which works better and why.

During 2013, the pilot yielded several useful observations, including:

- At steady state (after the pilot had been in the market for at least 12 months), the Company saw monthly electricity usage reductions between 1.5% and 2.5% (there is seasonal variation with a very strong summer peak pattern).
- The expansion group added in January 2013 ramped up very quickly, reaching the 2% electricity savings mark after approximately one year.
- On the gas side, the steady state group is delivering at ~1% monthly average savings in heating season with the 2013 expansion group achieving a little lower than that (monthly savings range from 0.5% to 1%; January through October)
- The pilot is very much in line with norms across the third-party implementer's utility customer base.

Deviation from Goal

The pilot's energy savings achievement exceeded targets set for 2013 – this was attributed to a healthier increase than expected resulting from increased participation in the print report delivery. Expenditures were significantly lower than budgeted due to payments made in 2012 for software licensing that extended into 2013.

In- Home Smart Device Pilot

The In-Home Smart Device Pilot was designed to test how residential customers respond to various demand control strategies and energy consumption information delivered to their homes through in-home energy management devices. Participants were expected to lower their energy consumption when provided with the tools to monitor and track their energy usage. The following devices were installed in the home of each participant:

- EnergyHub Home Base, a smart controller with in home display;
- Honeywell Wireless Thermostat, controllable by the Company;
- Two Sockets (15 amp smart plugs), controllable by the Company; and
- Wireless CT Sensor, which sends whole home electricity use to Home Base.

The pilot concluded at the end of September 2013 after two summers of demand response events and a year and a half of energy savings results. Participants were given the option to keep their device or have it removed. All 59 requested system removals (6% of participants) were completed by December 31, 2013.

The pilot achieved the following milestones and accomplishments in 2013:

- Successfully called 23 demand response control events. Because event responders were split into two groups, each pilot participant was called no more than 12 times.
- Initiated several outreach activities including how-to videos for common troubleshooting items, a control event kickoff email, control event notifications and outbound calls to offline customers to instruct them how to reconnect.
- Completed a customer survey in September 2013 to solicit feedback from pilot participants on their perception of the pilot, actions they took to reduce demand and save energy and future options that could make a program more appealing. Fifty-five percent of participants responded to the survey; 74% were very satisfied with the pilot (a score of 8, 9, or 10, on 1 to 10 scale) and 91% of participants were satisfied with the pilot (a score of 6-10, on a 1 to 10 scale).

Deviation from Goal

Expenditures in 2013 were significantly under budget. This was anticipated, as noted within the 2012 Status Report, because the total pilot budget was relatively equally budgeted over the two-year life of the pilot and all of the installation costs were incurred in the first year (2012). Thus, the 2012 expenditures were significantly over budget. The pilot's combined expenditures (across 2012 and 2013) came in under budget primarily because recruitment targets (and therefore installed costs) were slightly lower than goal. The pilot energy and demand savings will be evaluated in Q1-2014 and a final report will be filed upon completion.

Electric Vehicle Charging Station Pilot

The Electric Vehicle Charging Station Pilot is intended to provide insights into customer electric vehicle charging patterns and behaviors, how charging load coincides with Company's system peak and how these vehicles may impact the distribution system. The pilot will determine when customers are charging, the typical duration of the charge and frequency by which the charging load is available for demand response.

In 2013, the pilot was based on a two-way communications device designed similarly to the Saver's Switch, which is used to control central air conditioners. The Company recruited participants by making inquiries to the Repowering Transportation website and identifying customers within our service territory who were listed on the Electric Vehicle Information Exchange (EVIX) report. The charging device at each customer site was controlled 12 times during the summer control season. The customer was given a credit of $100 and access to the associated data related to the vehicle charging.

Seventeen installations were completed for a total of 20 active controllable charging stations (three installations were completed in 2012). Monitoring and control results were provided and will continue to be provided through 2014.

Deviation from Goal

The third phase of the pilot, working directly with Original Equipment Manufacturer (OEM) software to control/interrupt charging, was anticipated to have begun in 2013. However, only one

OEM appears to have a system that might work for the pilot, though several vehicle manufacturers were contacted and had initially expressed interest. The Company has submitted a proposal to the OEM for a concept test and expects a decision during Q1-2014.

Building Energy Code Support Pilot

The Building Code Support Pilot involved working with the local building community and jurisdictions in adopting and/or improving compliance to International Energy Conservation Code (IECC) 2009. The Company desired to determine if support, including code training and technical support, would enable the participants to accelerate adoption of higher building energy codes and/or increase code compliance.

The pilot was completed in 2013 with training being provided to six local jurisdictions. An evaluation was conducted to determine the impact of the training efforts. Based on the evaluation results, it was concluded that some level of increased code compliance could be identified, but due to relatively high existing compliance rates there would be minimal opportunity in pursuing a compliance-based program. Additionally, the Company investigated savings that could be generated from an accelerated code adoption program, but the difficulties in attributing savings to this type of program versus other market factors made it ill-advised to pursue.

Results of the pilot were reviewed during the Q3-2013 DSM Roundtable and the final report was posted to the Company's DSM website.

Deviation from Goal

Expenditures during 2013 exceeded the approved electric and gas budget. The additional expenditures were in proportion to the lower than anticipated expenditures in 2012, which had resulted from a delay in the pilot implementation.

The pilot was not able to evaluate code compliance rates of commercial buildings as none of the participating jurisdictions saw eligible buildings complete the construction process during the pilot evaluation timeframe.

Community Energy Efficiency Planning Pilot (CEEP)

CEEP is an indirect impact pilot designed to deliver a planning framework as a cohesive platform to engage communities to participate in the Company's DSM portfolio of products. This pilot was identified for development through the 2012 Innovative Technology RFP issued by the Company and three (of four) energy plans for communities have been successfully delivered through a third-party implementer (the fourth, City of Aurora, is currently in the process of developing their plan.)

The objective of the pilot is to determine if, by providing strategic support in the development and implementation of an energy plan at a community level, the Company can successfully drive increased energy efficiency activities of that community. As the pilot is still underway, the Company hopes to also gain insight as to what tools and resources are most useful in driving energy efficiency through this type of initiative. The pilot also tests support infrastructure, of volunteer and

professional organizations, as potential collaborators to help communities achieve energy efficiency goals.

Deviation from Goal

The Company achieved the target of enrolling at least 4 communities in CEEP. The pilot had a very successful year with four diverse communities signing on to participate, including Salida, Grand Junction, Lafayette, and Aurora. The initial pilot survey indicated a positive experience for the communities, making them likely to recommend it to other communities.

Interruptible Service Option Credit and Third-Party Demand Response

In 2013, the Company continued to operate its Interruptible Service Option Credit (ISOC) program and Peak Savings Program—filed as EnerNOC—to deliver controllable load through demand response.

Interruptible Service Option Credit (ISOC)

The Company's Interruptible Service Option Credit (ISOC) program offers significant savings opportunities for Colorado business customers who can reduce their electric demand when notified. In return for participating, customers receive a monthly credit based on the options they have selected.

The program is a tariff rate approved by the Colorado Public Utilities Commission, and is available to commercial customers in the Colorado service territory. To qualify, customers must have an interruptible demand of at least 300 kW during the months of June, July, August, and September. In addition, the customer must have a Contract Interruptible Load (CIL) of 300 kW or more. Customers choose the amount of interruption appropriate for their facility. The credit they receive is tied to the number of hours they contract to be interrupted each year and their advance notice option. Interruption periods are triggered as a result of capacity, contingency, and/or economic constraints. Economic interruptions are the only interruptions that offer a buy-through option for participants. Currently, all interruptions (events) last a minimum of 4 hours, unless the customer has chosen to waive the 4-hour minimum interruption timeframe.

Unless customers choose the *Within 10-Minute-notice* option, the Company does not reduce the amount of electricity available to their facility; it's up to the customer to take steps to reduce their load during control periods. If customers do not meet their agreed-upon load reduction, they will be charged penalties. In 2013, there were a total of 25 control events called; 24 economic and one contingency.

Deviation from Goal

There was a less than 2% deviation (under budget) from forecasted expenditure for 2013. Program expenses included slightly higher labor and administrative costs associated with managing a larger program but less than usual promotional costs due to "through the door interest" in the program.

As a tariff rate, ISOC is available to all customers that qualify. From a total demand credit budget perspective, dollars allocated for this initiative are based on the number of hours that customers contract to be controlled each year, the amount of controllable load they have available, and their advance notice option.

Peak Savings Program (EnerNOC)

The Peak Savings Program is a third-party demand response aggregation program managed by EnerNOC. It was developed as a result of Decision No. C08-0369 in Proceeding No. 07A-469E. The program was designed to price capacity at below the levelized avoided cost of a combustion turbine—this means that on purely a capacity basis, the program should always yield positive net benefits. The EnerNOC contract runs through 2016 and has a 40 MW demand response minimum. EnerNOC's branded the program "Peak Savings" to align with other load reduction programs offered by the Company.

Peak Savings participants range in size from 100 kW to 1 MW. EnerNOC seeks a diverse portfolio of participants in order to meet the 40 MW year-round demand response commitments required under the contract. The interruptible load available through the Peak Savings Program appears as one large resource to System Operators. The Company can choose to interrupt either when it believes such action will lower overall system costs, which is referred to as "an economic interruption," when there is a shortage of resources, which is referred to as "a capacity interruption," or when there is an unexpected loss of operating reserves due to an outage, which is referred to as "a contingency interruption."

Deviation from Goal

EnerNOC is contractually responsible for providing a minimum of 40 MW and a maximum of 44 MW of interruptible load for the Company each month. EnerNOC has maintained a MW load within this threshold for 2013.

Evaluation, Measurement, and Verification: 2013 Results

Background

An Evaluation, Measurement, and Verification (EM&V) Plan is necessary to help ensure that Public Service's DSM programs are delivering reliable energy and demand savings and to improve overall program design and operation. Public Service developed its EM&V Plan to evaluate, measure, and verify savings for gas and electric DSM products during and after each performance year, in order to confirm that savings and technical assumptions were accurate. The robustness of any EM&V Plan must be balanced against the cost of performing EM&V, keeping in mind the objectives of ensuring accurate savings calculations while keeping expenditures prudent and maintaining the cost-effectiveness of programs.

Description of Process

The Company's EM&V approach includes both performance year and post-performance year activities. Performance year activities are conducted on an ongoing basis during the reporting year and include rebate application validation and ongoing M&V. Post-performance year activities occur in the year following the reporting year and include all comprehensive product (process and impact) evaluations. Each of these EM&V activities is described in more detail below.

- **Rebate Application Validation** takes place on a daily basis during the program year and involves auditing all rebate applications received by the Company. The Company's Rebate Operations Department has a two-step process (described in the EM&V section of the 2012/2013 DSM Plan). The first step entails validating every application for accuracy and completeness as it is received prior to processing. In the second step, all rebates that have been entered into a tracking system are audited each day prior to issuing a rebate. The objective of this validation is to ensure that the rebate forms and the reported gross savings that are entered into the Company's databases are as accurate as possible and that customers are receiving the correct rebates.
- **Ongoing Measurement and Verification** is conducted with the primary objective of ensuring that the gross energy and demand savings reported by the Company are accurate. Ongoing M&V takes place during and just after the performance year.
    - For Prescriptive products, contractors or product implementers design samples with a target of either 90% confidence interval with ± 10% precision or 80% confidence interval with ± 20% precision around the realization rates for each product. They then select random samples and perform field inspections on product participants and verify that the measures are installed and operating, and that the critical features of the measures that determine the savings are accurate. If not, the product's reported savings are adjusted using a "realization rate" that reflects the results of these inspections.
    - For Custom products, the M&V process depends on the size and scope of the project. Projects are typically pre-approved through an engineering analysis performed by one of the Company's internal energy efficiency engineers. Within the initial engineering analysis, the expected project savings and payback are calculated

using technical assumptions that specifically fit the measure and application. Depending on the size of the project, these calculations are then reviewed by a second internal energy efficiency engineer and/or manager and a random sampling is sent for third-party review. After installation of the efficiency measure, a Public Service employee conducts a field visit or a telephone verification to ensure that the product is installed correctly and within the parameters provided in the pre-approval application. In addition, an internal engineer reviews the efficiency measure invoices to determine if the project remained within ± 10% of its original scope. If the project did not remain within scope, then the project is re-modeled. For projects with measure savings ≥ 1 GWh or 20,000 Dth, pre- and post-installation metering is performed for a minimum of two weeks to measure and verify savings. For all metered projects, the analysis of the metering data is conducted by one of the Company's internal energy efficiency engineers, and then reviewed by a team of internal engineers and a manager.

  - For Load Management products, Public Service selected a third-party contractor to monitor air conditioning usage for randomly selected customer sites. The data collected were analyzed by another third-party consultant to determine the available load relief provided by the load management program.

- **Comprehensive Product Evaluations** are conducted for individual products to assess their overall effectiveness and to determine what improvements or other changes should be implemented in the future. These evaluations do not verify the savings of a specific performance year and are not applied retrospectively to particular performance year activities. These comprehensive studies are not conducted each year, but instead are staggered over several years in order to comprehensively evaluate most of the portfolio of products. The objectives of the process evaluation include: determining customer satisfaction with the product; identifying the populations that participate in the product and target markets that are potentially receptive, but do not currently participate in the product; identifying areas where the product, processes, or marketing could be improved; quantifying the product's market saturation levels; and suggesting appropriate rebate design. The objectives of the impact evaluation include estimating net product impacts. Net product savings result from taking into account attribution factors, such as free ridership and spillover.

EM&V for pilot products may differ from EM&V for prescriptive or custom products because pilots are designed to test specific program design and marketplace questions. Therefore, additional testing, designed specifically for the pilot, is often required. The 2013 pilot products included: Energy Feedback Pilot, In-Home Smart Device Pilot, Electric Vehicle Charging Station Pilot, and Building Code Support Pilot.

Outline of Requirements

The Commission has provided guidance on the requirements for Public Service's EM&V activities in a number of places, including the Gas Rule (4 Code of Colorado Regulations (C.C.R.) 723-4-4755) and the approved Settlement Agreement for the Company's 2009/2010 DSM Plan (Proceeding No. 08A-366EG).

The Gas Rule contains the following requirements:

4755. Measurement and Verification.

(a) Each utility shall implement a measurement and verification (M&V) program to evaluate the actual performance of its DSM program. The utility shall present its M&V plan as a part of its DSM plan application, pursuant to rule 4753, and shall include the complete M&V evaluation results with its annual DSM report in those years when the M&V is conducted.

(b) As a part of its M&V process, the utility shall, at a minimum, design an M&V plan to evaluate the effectiveness of the actual DSM measures and programs implemented by the utility. The M&V plan shall address: sampling bias; a data gathering process sufficient to yield statistically significant results; and generally accepted methods of data analysis. The M&V plan shall also include an evaluation of free ridership, spillover, and the net-to-gross ratio. The M&V evaluation shall be implemented at least once per DSM plan period. Subsequent DSM plan applications shall reflect the results of all completed M&V evaluations.

(c) The M&V evaluation shall, at a minimum, include the following:

(I) An assessment of whether the DSM programs have been implemented as set forth in its Commission approved DSM plan;

(II) A measurement of the actual energy savings for each DSM program, in dekatherms per dollar expended and in total dollars, and a comparison to the corresponding utility projections in the approved DSM plan;

(III) To the extent feasible, an assessment of the period of time that each DSM measure actually remains in service, and a comparison to the corresponding utility projections in the approved DSM plan;

(IV) A summary of the actual benefit/cost ratio for each DSM program within the approved DSM plan;

(V) An assessment of the extent to which education and market transformation efforts are achieving the desired results; and

(VI) Recommendations for how the utility can improve the market penetration and cost effectiveness of individual DSM programs.

In compliance with these requirements, Public Service has applied the following concepts to its EM&V Plan:

- The ongoing M&V Plan will be conducted annually for all products. Comprehensive evaluations will be conducted on a staggered schedule over several years.
- The ongoing M&V Plan results will be reported with each annual DSM Status Report.
- For products that use a sampling methodology for M&V, the Plan will address sampling bias and all samples will be designed to yield statistically significant results.
- For products that are selected for a comprehensive evaluation, an evaluation of free ridership, spillover, and the net-to-gross ratio will be included as a study objective.
- Subsequent DSM Plan applications shall reflect the results of ongoing M&V, results of completed comprehensive evaluations, and results of any other DSM studies that are reviewed.
- The annual M&V evaluation report will include an assessment of whether the DSM products have been implemented as set forth in the Commission-approved Plan.

What M&V Occurred in 2013?

Public Service uses a variety of providers to conduct its measurement and verification activities. In 2013, measurement and verification for the majority of direct-impact prescriptive products was conducted by a verification contractor (Nexant). For some products, such as ENERGY STAR New Homes, Home Performance with ENERGY STAR, and New Construction, the third-party product implementer verified all of the installations to ensure that reported gross savings were accurate. Custom projects are either verified through engineering reviews of savings or through pre- and post-metering, depending on the size of the project. The following paragraphs provide the M&V activities and results for each of the DSM products offered by the Company in 2013. All M&V activities followed the processes outlined in the M&V Plan filed with the 2012/13 DSM Plan, unless noted below. With its best efforts, the Company achieved portfolio realization rates of 99.7% for electric demand, 99.8% for electric energy, and 100.2% for natural gas energy. Where sampling was used in the M&V process for prescriptive measures, the achieved precision and confidence level is provided.

Within the Settlement Agreement to Public Service's 2012/2013 DSM Plan (Proceeding No. 11A-631EG), parties agreed that the Company would conduct comprehensive product evaluations on the Compressed Air Efficiency, Low-Income Energy Savings Kits, and Segment Efficiency products in 2013 (p. 19 of the Plan). However, in the Revised 2012/2013 DSM Plan submitted in February 2012, Public Service switched the 2012 Home Performance with ENERGY STAR (HPwES) evaluation with the 2013 Low-Income Energy Savings Kit evaluation due to changes to the HPwES product that would impact future product design and make the findings of a retrospective evaluation less applicable (p. 253-254 of the Revised Plan). Therefore, in 2013, the Company evaluated HPwES, rather than Energy Savings Kits. Public Service intends to address any recommended changes coming from these comprehensive evaluations through 60-Day Notices corresponding to the evaluation recommendations and Company responses.

Business Products

Compressed Air Efficiency

For the Compressed Air Efficiency Product, M&V were performed on a continuous basis throughout the program year. As applications were received, all critical customer information, equipment eligibility, and proper rebate amounts were reviewed, validated, and corrected if inaccurate. The Company's internal Rebate Operations group audited 100% of the rebate applications to ensure that the information was reasonable and correctly entered into the tracking database.

Public Service completed 47 prescriptive Compressed Air Efficiency projects in 2013. Of these projects, Nexant performed 23 field inspections of installed energy efficient equipment at randomly-selected participant locations to verify key savings factors. For variable frequency drive compressors of less than 50 HP, the contractor verified the horsepower, hours of operation, make and model, and equipment quantity. For no-air-loss drain valves, the contractor verified the number of valves that replaced electronic timed drains, or the number of new valves installed. The contractor re-calculated the demand and energy savings using the verified factors and the deemed savings formulas and compared the calculation to the reported gross savings. The final demand and energy

realization rates for the 2013 Compressed Air Efficiency prescriptive measures were 100.3% ± 0.5% and 100.5% ± 0.85%, respectively, around the targeted 90% confidence level.

Public Service completed nine custom Compressed Air Efficiency projects and nine studies in 2013. For all custom projects, the M&V process was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) was first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. For the one project that exceeded savings of 0.5 GWh, the application was given a third review by the internal engineering team lead. Upon completion of the project, internal staff reviewed the invoices to verify that the project scope had not changed. There were three projects for which the scope had changed by more than ± 10%. In addition, all of the projects were field- or phone-verified to confirm installation.

Computer Efficiency

Computer Efficiency was measured and verified in a multi-step process. First, Public Service confirmed that all computers reported by the third-party implementer, Ecova, were shipped to Public Service zip codes. Then the third-party M&V provider, Nexant, conducted phone surveys on a statistically significant random sampling of participants to verify that the number of computers on the invoice matched the number of computers received, that the model numbers of the computers shipped matched the invoice, as well as to determine if any computers were returned. In 2013, the Computer Efficiency Product provided 53,153 upstream manufacturer incentives with a final installation rate of 100%.

In addition, the product provided 440 virtual desktop infrastructure rebates to seven participants. The M&V provider conducted field inspections of six projects to determine whether the measures were properly installed and had the potential to generate savings. The final demand and energy realization rates for the 2013 Computer Efficiency prescriptive measures were 100.0% ± 0.0% and 100.0% ± 0.0%, respectively, around the targeted 90% confidence level.

Cooling Efficiency

For the Cooling Efficiency Product, measurement and verification were performed on a continuous basis throughout the program year. As applications were received, all critical customer information, equipment eligibility, and proper rebates amounts were reviewed, validated, and corrected if inaccurate. The internal Rebate Operations group audited 100% of the rebates applications to ensure that the information was reasonable and correctly entered into the tracking database.

Public Service completed 213 prescriptive Cooling Efficiency projects in 2013. Of these projects, Nexant performed 37 field inspections of installed energy efficient equipment at randomly-selected participant locations to verify key savings factors, including: product name; model number, equipment capacity, market segment, and climate zone. If the project included variable air valves, they were counted and confirmed to be new. The contractor re-calculated the demand and energy savings using the verified factors and the deemed savings formulas and compared the calculation to the reported gross savings. The final demand and energy savings realization rates for the 2013 Cooling Efficiency prescriptive measures were 99.1% ± 1.5% and 99.8% ± 0.5%, respectively, around the 90% targeted confidence level.

Public Service completed ten custom Cooling Efficiency projects in 2013. For all custom projects, the M&V process was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) was first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. Upon completion of the project, internal staff reviewed the invoices to verify that the project scope had not changed. There were no projects where the scope changed by more than ± 10%. There were no projects that exceeded savings of 1.0 GWh this year. In addition, all custom projects were phone or field-verified by internal Account Managers.

Custom Efficiency

Public Service completed 47 electric, 8 gas, and 3 combination electric/gas Custom Efficiency projects in 2013. For these projects, the M&V process was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) was first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. This year, none of the projects exceeded savings of 0.5 GWh or 10,000 Dth. If a project had exceeded savings of 1.0 GWh or 20,000 Dth, the application would have been given a final review by the engineering group manager. Upon completion of each project, internal staff reviewed the invoices to verify that the project scope had not changed. If there had been any projects for which the scope had changed by more than ± 10%, these projects would have been re-modeled to determine the final savings. Finally, three projects were field-verified, and all others were phone verified, by internal Account Managers.

Data Center Efficiency

The Data Center Efficiency Product completed two projects and four studies in 2013. The M&V process was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) were reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. For the project with savings exceeding 0.5 GWh, the application was given a third review by the internal engineering team lead. If any projects had exceeded savings of 1.0 GWh, the applications would have been given a final review by the engineering group manager and the projects themselves would have been pre- and post-metered to verify savings. The Company would have reviewed all metering data and/or bill histories to determine the final savings for each project. Upon completion of each project, internal staff reviewed the invoices to verify that the project scope had not changed. There were no projects for which the scope had changed by more than ± 10%. Finally, one of the projects was phone-verified, and the other was field-verified by internal Account Managers.

Energy Management Systems

Public Service completed 44 electric and 14 gas EMS projects in 2013. The M&V process for this product was built into the project approval process. When the customer applied for project pre-

approval, the application (all technical assumptions and savings estimates) was first reviewed by a third-party energy efficiency firm. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Projects received a second review by an internal energy efficiency engineer. For the one project that exceeded savings of 0.5 GWh, the application was given a third review by the internal engineering team lead. Any project that exceeded savings of 1.0 GWh would have been given a final review by the engineering group manager and the project itself was pre- and post-metered to verify savings. The Company would then review all metering data and/or bill histories to determine the final savings for the project. Upon completion of each project, internal staff reviewed the invoices to verify that the project scope had not changed. There were eight projects for which the scope had changed by more than ± 10%. This project was re-modeled to determine the final savings. Finally, all of the projects were phone-verified by internal Account Managers.

Heating Efficiency

For the Heating Efficiency Product, measurement and verification were performed on a continuous basis throughout the program year. As applications were received, all critical customer information, equipment eligibility, and proper rebates amounts were reviewed, validated, and corrected if inaccurate. The internal Rebate Operations group audited 100% of the rebates applications to ensure that the information was reasonable and correctly entered into the tracking database.

Public Service completed 127 prescriptive measures in 2013. For the prescriptive projects, Nexant performed 33 field inspections of installed energy efficient equipment at randomly-selected participant locations to verify key savings factors including: the equipment type and size (condensing, non-condensing, MBTUH), model number, thermal/combustion efficiency (minimum of 85% for non-condensing or 92% for condensing), and operating hours per year. The contractor re-calculated the demand and energy savings using the verified factors and the deemed savings formulas and compared the calculation to the reported gross savings. The final energy realization rate for the 2013 Heating Efficiency prescriptive measures was 97.3% ± 3.9% around the 90% targeted confidence level.

Public Service did not perform any custom Heating Efficiency projects in 2013. In general, the M&V process for custom projects is built into the project approval process. When the customer applies for project pre-approval, the application (all technical assumptions and savings estimates) is first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback are calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it would be given a second review by an internal engineer. If a project exceeds savings of 20,000 Dth, the application would be given a final review by the engineering group manager. Upon completion of a project, internal staff review the invoices to verify that the project scope has not changed. In addition, custom projects are either phone or field-verified by an internal Account Manager.

Interruptible Service Option Credit

ISOC customers are metered during their interruptions. The Company has nearly instantaneous feedback during these times to measure customer response. Therefore, traditional, post-event M&V is unnecessary for this product.

Lighting Efficiency

For the Lighting Efficiency Product, measurement and verification were performed on a continuous basis throughout the year. As applications were received, all critical customer information, equipment eligibility, and proper rebates amounts were reviewed, validated, and corrected if inaccurate. The internal Rebate Operations group audited 100% of the rebates applications to ensure that the information was reasonable and correctly entered into the tracking database.

Public Service completed 2,295 prescriptive Lighting Efficiency projects in 2013. For prescriptive projects (Retrofit and New Construction), Nexant performed 43 field inspections of installed energy efficient equipment at randomly-selected participant locations to verify key savings factors including: watts of bulbs/ballast installed, segment, type of lights, and number of bulbs/fixtures. The contractor re-calculated the demand and energy savings using the verified factors and the deemed savings formulas and compared the calculation to the reported gross savings. The final demand and energy savings realization rates for the 2013 Lighting Efficiency prescriptive measures were 99.4% ± 0.6% and 99.4% ± 0.6%, respectively, around the targeted 90% confidence level.

Public Service completed 415 custom Lighting Efficiency projects in 2013. The M&V process for these lighting measures was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) was first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. For the five projects that exceeded savings of 0.5 GWh, the application was given a third review by the internal engineering team lead. For the project that exceeded savings of 1.0 GWh, the application was given a final review by the engineering group manager and Nexant performed pre- and post-metering to verify savings. There were 17 projects for which the scope had changed by more than ± 10%. These projects were re-modeled to determine the final savings. In addition, all projects were either field- or phone-verified by internal Account Managers.

Motor and Drive Efficiency

For the Motor and Drive Efficiency Product, measurement and verification were performed on a continuous basis throughout the year. As applications were received, all critical customer information, equipment eligibility, and proper rebates amounts were reviewed, validated, and corrected if inaccurate. The internal Rebate Operations group audited 100% of the rebates applications to ensure that the information was reasonable and correctly entered into the tracking database.

Public Service completed 586 prescriptive Motor and Drive Efficiency projects in 2013. From amongst these projects, Nexant randomly selected 41 participants to receive field inspections of installed energy efficient equipment to verify key savings factors including: size of the motor, customer segment, actual motor efficiency, application of the motor, and the number of motors installed. The contractor re-calculated the demand and energy savings using the verified factors and the deemed savings formulas and compared the calculation to the reported gross savings. The final demand and energy savings realization rates for the 2013 Motor and Drive Efficiency prescriptive measures were 99.9% ± 0.1% and 99.9% ± 0.1%, respectively, around the targeted 90% confidence level.

Public Service did not perform any custom Motor and Drive Efficiency projects in 2013. In general, the M&V process for custom projects is built into the project approval process. When the customer applies for project pre-approval, the application (all technical assumptions and savings estimates) is first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback are calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it would be given a second review by an internal engineer. If projects exceed savings of 0.5 GWh, the applications would be given a third review by the internal engineering team lead. No projects exceeded savings of 1.0 GWh. There were no projects for which the scope had changed by more than ± 10%. In addition, all projects phone verified by internal Account Managers.

New Construction

Public Service's New Construction Product includes two components: prescriptive Energy Efficient Buildings and custom Energy Design Assistance. Measurement and verification are performed on all New Construction projects, whether prescriptive or custom. The Company completed 50 projects (30 electric and 20 natural gas) under the Energy Efficient Buildings component in 2013. M&V for these projects was performed by Nexant. Public Service completed 53 electric projects and 30 gas projects under Energy Design Assistance. Three consulting groups, The Weidt Group, Group 14, and Architectural Engineering Corporation, conducted verification on these projects. All adopted measures received a visual verification. This information was used in our savings reports and for rebate payment. Since all project savings are calculated based on independent verification, this product has a realization rate of 100%.

Process Efficiency

Public Service completed 27 prescriptive electric Process Efficiency projects in 2013, one in Cooling, 14 in Lighting and 12 in Motors and Drives. The Company applied the realization rates determined for the prescriptive end-use DSM products (Lighting Efficiency and Motor and Drive Efficiency) to calculate final demand and energy savings for the prescriptive component of the Process Efficiency Product.

Public Service completed 12 custom Process Efficiency projects in 2013, eight in Custom Lighting and four in Custom Custom. The M&V process for these measures was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) was first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. For the two projects that exceeded savings of 0.5 GWh, the application was given a third review by the internal engineering team lead. For the two projects that exceeded savings of 1.0 GWh, the applications were given a final review by the engineering group manager and the project itself was pre- and post-metered to verify savings. There was one project for which the scope had changed by more than ± 10%. This project was re-modeled to determine the final savings. In addition, nine projects were field-verified and three were phone-verified by internal Account Managers.

Recommissioning

Public Service completed 29 electric and 9 natural gas studies and 27 electric and 5 gas Recommissioning projects in 2013. The measurement and verification of these projects was

relatively simple because each implemented measure resulted from a previous Recommissioning study completed by an independent party. The customer hired an engineering firm to conduct a study of the building to determine energy savings for each measure; an internal engineer then reviewed and verified 100% of projects for savings calculation accuracy. In turn, each study was thoroughly reviewed and approved by a qualified Public Service engineer. If a project had savings greater than or equal to one GWh or 20,000 Dth per year, pre- and post-metering would be required unless it would be too costly or physically impossible. One project met this threshold in 2013.

Segment Efficiency

Public Service completed five prescriptive projects in 2013, three in Lighting and two in Motors & Drives. The Company used the realization rates determined for the end-use DSM products (Lighting Efficiency and Motor and Drive Efficiency) to calculate final demand and energy savings for this prescriptive project.

Public Service completed one custom Segment Efficiency project in 2013. For all custom projects, the M&V process was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) was first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. If a project had exceeded savings of 20,000 Dth, the application would have been given a final review by the engineering group manager. There were no projects that exceeded savings of 20,000 Dth this year. Upon completion of the project, internal staff reviewed the invoices to verify that the project scope had not changed. There were no projects where the scope changed by more than ± 10%. In addition, the custom project was phone-verified by an internal Account Manager to confirm installation of the rebated product.

Self-Directed Custom Efficiency

Customers completed two Self-Directed projects in 2013. In order to participate in the Self-Direct Custom Efficiency Product, customers were required to submit a detailed project application, which included their proposed monitoring plan used to document demand and energy savings. Public Service may request monitoring on any project, regardless of size. All measurement and verification was required to be performed in accordance with the International Performance Measurement and Verification Protocol (IPMVP) guidelines.

Upon approval of the monitoring plan, the customer implemented the project. After project completion, a project completion report was submitted that includes raw metering results and engineering calculations to demonstrate actual energy and demand savings based on pre- and post-monitoring results. All projects were reviewed by the internal energy efficiency engineers and/or managers, depending on their size. The rebate amount was based on these results.

Small Business Lighting

Public Service completed 864 prescriptive projects in the Small Business Lighting Product in 2013. Measurement and verification were performed on a continuous basis throughout the year. As applications were received, all critical customer information, equipment eligibility, and proper rebates amounts were reviewed, validated, and corrected if inaccurate. The internal Rebate

Operations group audited 100% of the rebates applications to ensure that the information was reasonable and correctly entered into the tracking database.

Additional onsite project verification was performed. Nexant randomly selected samples of customers who received a rebate for on-going M&V. Nexant then performed 42 field inspections of installed energy efficient equipment, and verified the key savings factors that were required in the formula. The savings factors that pertain to this product are: watts of bulbs/ballast, segment, type of lights, and number of bulbs/fixtures. The contractor re-calculated the demand and energy savings using the verified factors and the deemed savings formula and compared them to the reported gross savings. The final demand and energy savings realization rates for the 2013 Small Business Lighting prescriptive measures were 99.6% ± 2.5% and 98.6% ± 1.4%, respectively, around a targeted confidence level of 90%.

Public Service completed 111 custom Small Business Lighting projects in 2013. The M&V process for these lighting measures was built into the project approval process. When the customer applied for project pre-approval, the application (all technical assumptions and savings estimates) was first reviewed by an internal energy efficiency engineer. Within the initial engineering analysis, the expected project savings and payback were calculated using technical assumptions that specifically fit the measure and application. Depending on the size of the project, it was given a second review by an internal engineer. For projects that exceed savings of 0.5 GWh, the application would be given a third review by the internal engineering team lead. If any projects had exceeded savings of 1.0 GWh, the application would have been given a final review by the engineering group manager and Nexant would have performed pre- and post-metering to verify savings. There were 73 projects for which the scope had changed by more than ± 10%. These projects were re-modeled to determine the final savings. In addition, all projects were either field- or phone-verified by internal Account Managers.

Standard Offer

Public Service completed ten electric and four gas Standard Offer projects in 2013. Measurement and verification of this product is the responsibility of the participants. Each participant was required to provide a measurement and verification plan (M&V plan) in their technical energy audit. The M&V plan must meet sound engineering practices and industry standard references such as the International Performance Measurement & Verification Protocol. The M&V plan must include annual measurement for a minimum of three years after installation. The ESCO or a third-party (depending which was utilized by the customer) implemented the M&V plan, and used the collected data to determine the actual conservation for the implemented measures. The Company's internal energy efficiency engineers reviewed all metering data and paid additional rebates for savings above the expected levels. Conversely, the customer must refund a portion of the rebate if savings are not as high as expected.

Residential Products

ENERGY STAR New Homes

Public Service's ENERGY STAR New Homes Product was administered by a third-party implementer, Residential Science Resources, Inc. (RSR). All homes rebated through this product were subject to verification by a qualified Home Energy Rating Service (HERS) Rater and their associated Residential Energy Services Network (RESNET) Provider. In most cases, the HERS Rater completed three site visits to each home during the construction phase. There are approximately 1,500 points of data collected and submitted for each home, including the duct blaster test results and the final HERS rating. Upon completion, RSR reviewed each home and its HERS rating to confirm the energy savings calculations. Energy saving impacts for each home rebated were calculated based on the actual construction as compared to the reference (baseline) home for that particular area. As a result, the realization rate for this product is 100%. In 2013, 1,977 electric and 2,883 gas homes successfully completed the program requirements.

Evaporative Cooling Rebate

The Evaporative Cooling Rebate Product provides rebates to customers who purchase efficient evaporative cooling units. In 2013, Public Service rebated 4,288 qualifying evaporative cooling units. This product was measured and verified in a two-step process. As rebates were received, critical customer information, equipment eligibility and proper rebate amounts were reviewed, validated, and corrected if inaccurate. The Rebate Operations group also audited the rebate applications to ensure that the information from the form was entered correctly into the tracking database.

In addition, a third-party verification contractor (Nexant) conducted field M&V on 43 customers who received rebates. The contractor made appointments with the sample customers to perform field inspections and to verify the installed/rebated equipment. The final demand and energy savings realization rates for the Evaporative Cooling Rebates Product in 2013 were 100.0% ± 0.0% and 100.0% ± 0.0%, respectively, around the targeted confidence level of 90%.

Heating System Rebate

For the Heating System Rebates Product, all rebate applications were audited with a two-step process. As rebates were received, critical customer information, equipment eligibility and proper rebate amounts were reviewed, validated and corrected if inaccurate. In the second step, Rebate Operations audited the rebate applications to ensure that the information from the form was entered correctly into the tracking database.

Public Service rebated 4,191 units in 2013. A third-party verification contractor (Nexant) conducted field M&V, randomly selected 34 participants for measurement and verification. The contractor made appointments with the sample customers to perform field inspections and to verify the installed/rebated equipment. The final energy savings realization rate for the Heating System Rebates Product in 2013 was 100.1% ± 0.1% around the 90% targeted confidence level.

High Efficiency Air Conditioning

The High Efficiency Air Conditioning Product provides rebates to customers who purchase high-efficiency equipment, properly install high efficiency air-conditioning equipment, or trade-in their old, inefficient equipment and purchase of high-efficiency equipment. Because air conditioners can

only be field tested when the ambient outdoor temperature is above 70°F (or 55°F with a Field Diagnostic Services Inc. tool), this product maintains a slightly different M&V calendar than Public Service's other DSM products. Specifically, air conditioners that are installed after October 1 of each year will not be inspected until the following spring, and thus, the M&V calendar year for this product runs from October 1 to September 30 of each year.

The three product components have different M&V processes. M&V for the new equipment purchase and quality installation were considered together and performed by Group 14 Engineering. The M&V process was designed to verify that the installed equipment matched what was rebated and that the equipment was installed according to quality installation standards, as described by the Air Conditioning Contractors of America. The M&V involved an ongoing random sampling of rebated projects, following the standard prescriptive product guidelines. To verify a quality installation, the Verification Contractor confirmed that a Manual J calculation was performed and that the participant's refrigeration charge, airflow, and duct leakage were within acceptable ranges. Public Service rebated a total of 2,536 new equipment purchases and 2,752 quality installations in 2013. The final demand and energy savings realization rates for the New Equipment component of the product in 2013 were 100.0% ± 0.0% and 100.0% ± 0.0%, respectively, around the targeted confidence level of 90%. The final demand and energy savings realization rates for the Quality Installation component of the product in 2013 were 77.2% and 77.2%, respectively, around the targeted confidence level of 90%.

M&V for the Trade-In component of the High Efficiency Air Conditioning Product was performed by Public Service since the original equipment removal was conducted by independent HVAC contractors. For each of the 1,990 retirements rebated, the contractor was required to report to Public Service the type and age of equipment being removed. Public Service then spot-checked the provided paperwork to confirm that the removed equipment met product requirements. The final demand and energy savings realization rates for the Trade-In component of the product in 2013 were 100.0% ± 0.0% and 100.0% ± 0.0%, respectively, around the targeted confidence level of 90%.

Home Lighting & Recycling

Nexant performed Public Service's Home Lighting & Recycling Product measurement and verification. The verification process consisted of cross-checking Public Service's tracking databases with a sample of monthly or weekly invoices and invoice details from various manufacturers submitted to retailers. These invoices contained product buy-down dollar amounts and counts for each item SKU. No customer contact was made for the measurement and verification of this product. There were 2,967,340 units sold to 606,234 participants and recycled 24,099 bulbs in 2013. Nexant examined and verified 44 invoice line detail items out of the total 165,579 records contained within the Company's program tracking database. The 44 line items were taken from a sample of 53 out of the total 184 monthly manufacturer invoices and associated invoice details. This effort uncovered no discrepancies between Xcel Energy's database and the invoice data.

Home Performance with ENERGY STAR®

Public Service's third-party product implementer, Populus, Inc., performed verification of home improvements, including a blower door test to verify the natural air changes per hour, a Combustion Appliance Zone test, and inspections of all work performed. There were 498 electric and 554 gas homes completed in 2013. Due to the extensive testing performed on each home, this product is assumed to have a realization rate of 100%.

Insulation Rebate

Public Service paid 1,001 electric rebates and 2,322 gas rebates through the Insulation Rebates Product in 2013. All rebate applications were audited with a two-step process. On the front-end, as rebate applications were received, all critical customer information, equipment eligibility and proper rebate amounts were reviewed, validated, and corrected if inaccurate. The second step took place prior to the rebate being issued where Rebate Operations audits 100% of the rebate applications to ensure that the information from the form was entered correctly into the tracking database.

The Company's third-party verification contractor, Nexant, performed additional M&V for the Insulation Rebates Product. A phone survey was given to a random sample of 43 participants wherein it was confirmed what type of insulation was installed in the home (attic insulation, wall insulation and air sealing) and whether the customer had central air conditioning (for electric savings). The final demand and energy realization rates for the 2013 Insulation Rebates Product were 96.1% ± 11.3% for electric demand, 96.1% ± 11.3% for electric energy, and 103.0% ± 6.1% for gas, around the targeted 90% confidence level.

Pool Pumps

The Pool Pumps product, administered by a third-party implementer, Ecova, provides a point-of-purchase rebate to residential electric customers and a trade incentive to partners who sell qualifying energy efficient variable speed swimming pool pumps. In 2013, the Company rebated 63 qualifying pool pumps. To verify these results, the Company's third-party verification contractor, Nexant, performed phone surveys at year-end. The survey was given to 12 randomly selected participants to confirm that the participant was an Xcel Energy customer and that the equipment was installed. The final demand and energy realization rates for the 2013 Pool Pumps product in 2013 were 91.7% ± 15.0% for electric demand and 91.7% ± 15.0% for electric energy savings, around the targeted 90% confidence level. The installation rate was 91.7%.

Refrigerator Recycling

The Refrigerator Recycling Product provides a rebate to customers who retire their old, inefficient, but operational secondary refrigerators. In 2013, the Company recycled 7,502 refrigerators. To verify these results, Nexant performed phone surveys at year-end. The survey was given to 49 randomly selected participants and confirmed that the old refrigerator was operational and removed from the home as reported. The final realization rates for the 2013 Refrigerator Recycling Product were 100.0% ± 0.0% for both demand and energy savings.

School Education Kits

The School Education Kits Product provides curriculum and educational materials to teachers and school children to teach them more about energy efficiency. In 2013, the Product included 30,006 school children. Program administration, measurement, and verification for the School Education Kits Program were conducted by a third-party vendor, Resource Action Programs (RAP). RAP used parental surveys to determine which measures were installed in the home. These surveys were evaluated and summarized by RAP. The 2013 year-end savings for the program were determined using the installation rates by measure determined by RAP, which were 72% for 13W and 64% for 18W CFLs.

Water Heating Rebate

The Water Heating Rebate Product provides rebates to customers who purchase new, energy efficient water heaters. Public Service provided 55 electric and 2,142 gas rebates in 2013. All rebate applications were audited with a two-step process. As rebates were received, critical customer information, equipment eligibility and proper rebate amounts were reviewed, validated and corrected if inaccurate. In the second step, Rebate Operations audited the rebate applications to ensure that the information from the form was entered correctly into the tracking database.

A third-party verification contractor, Nexant, conducted field M&V, randomly selecting samples of customers who received a rebate. The contractor visited 43 randomly selected customers to perform field inspections and to verify the installed/rebated equipment. The final realization rate for the 2013 Water Heating Rebates Product was 100.0% ± 0.0%, around the targeted 90% confidence level.

Saver's Switch

Public Service's load management group selected 100 random customer sites from the Saver's Switch population in Colorado. A third-party, AEC, installed data loggers on these sites to monitor air conditioning usage during control days and non-control days. The data obtained was analyzed by another third-party, KEMA. Based on the results of the smart switches, KEMA established a stable forecast estimate of 1.11 generator kW per smart switch of available load relief. This resulted in a realization rate of 103.7%, when compared to the savings of 1.07 gen kW per switch originally anticipated in the 2012/13 DSM Plan. Note that the measurement and verification performed on Saver's Switch does not include switches deployed in 2013. The sampling is conducted in the spring before any switches are installed and the sample premises are monitored throughout the cooling season.

Energy Efficient Showerheads

Electric and natural gas water heating customers who received a postcard invitation were eligible to receive a free 1.5gpm showerhead through the Energy Efficient Showerheads Product. In 2013, Public Service provided 3,033 showerheads to electric customers and 22,874 showerheads to gas customers. Energy Federation Inc. performed a phone survey of a random sampling of customers who received a free showerhead. Based on the phone survey results, the installation rate was 54%.

Low-Income Products

Energy Savings Kit

The Energy Savings Kits Product delivered 10,875 electric kits and 12,136 gas kits in 2013. This product was implemented by a third-party provider, Energy Federation Inc., who identified income-qualified customers to receive kits. CustomerLink performed a phone survey to those customers who received a kit. Installation rates were found to be 45% for aerators, 52% for CFLs, and 45% for showerheads.

Multi-Family Weatherization

Public Service completed 32 electric and 19 gas Multi-Family Weatherization projects in 2013. The third-party program implementer, Energy Outreach of Colorado (EOC), performed the measurement and verification of the Multi-Family Weatherization Product. Once the energy efficiency improvements were completed, EOC audited each building to confirm that all work was completed correctly. Savings were calculated for each project based on the measures installed. As a result, the realization rate for this program is 100%.

Non-Profit Weatherization

The Non-Profit Weatherization product completed 47 electric and 36 gas projects in 2013. Public Service's third-party program implementer, Energy Outreach of Colorado (EOC), performed the measurement and verification of the Non-Profit Energy Efficiency Product. Once the energy efficiency improvements were completed, EOC audited each building to confirm that all work was completed correctly. Savings were calculated for each project based on the measures installed. As a result, the realization rate for this program is 100%.

Single-Family Weatherization

The Single-Family Weatherization product provided weatherization of 3,211 electric and 2,913 gas homes in 2013. Public Service's third-party product implementers, the Colorado Energy Office and Energy Outreach Colorado, managed the weatherization agencies that performed energy savings measures in each income-qualified single-family home. 100% of homes weatherized were subject to verification from Public Service at any given time. The Company received a signed or electronic form from each customer attesting to the work performed by GEO. Energy savings were calculated on a per-measure, per-home basis. Savings were calculated for each project based on the measures installed. As a result, the realization rate for this program is 100%.

Pilot Products

Market Transformation: Energy Feedback Pilot

The Energy Feedback Pilot offers customers a variety of methods of feedback on their energy consumption in order to quantify how these different forms of feedback impact customers' energy use. In 2013, the Energy Feedback Pilot contacted 99,457 electric/gas combination homes. This program was implemented and the data analyzed by the Company's third-party provider, OPower. In 2013, the realization rate for the Energy Feedback Pilot was 100.0%.

Market Transformation: In-Home Smart Devices Pilot

The In-Home Smart Device Pilot is designed to test how customers respond to various control strategies and energy consumption information delivered to their homes through in-home energy management devices. No savings will be claimed as the result of this pilot in 2013.

Market Transformation: Building Code Support Pilot

The Building Code Support Pilot offers assistance to the local building community and jurisdictions to adopt and/or improve compliance with the International Energy Conservation Code 2009. No savings will be claimed as the result of this pilot in 2013.

Electric Vehicle Charging Station Pilot

The Electric Vehicle Charging Station Pilot studies electric vehicle charging patterns and behaviors, how charging load coincides with system peak, and how these vehicles may impact the distribution system. The pilot included 20 electric vehicles in 2013. No savings will be claimed as the result of this pilot in 2013.

Post-Program Year Activities

All measurement and verification activities for the 2013 performance year were completed in 2013 or early in 2014 and all results are included in this report. Public Service intends to complete all future M&V activities annually prior to filing its M&V Report.

Product Process and Impact Evaluations Performed in 2013

Public Service contracted for evaluators to perform process and/or impact evaluations in 2013 of three products: Compressed Air Efficiency, Home Performance with ENERGY STAR, and Segment Efficiency. The following sections provide an overview of the findings of the evaluations and the evaluators' recommendations.

Compressed Air Efficiency

Tetra Tech Inc. conducted a comprehensive process and impact evaluation of the Compressed Air Efficiency Product, which included interviews of Public Service staff; as well as surveys of program participants, non-participants, trade allies and influential vendors; and a benchmarking study of other utility programs. While recognizing the efforts of Xcel Energy staff to improve the Compressed Air Efficiency Product over the past two years, the Tetra Tech team made a number of suggestions for both process and impact improvements that may be made to the product. The team had the following recommendations:

- Continue ongoing quality assurance efforts, which are in-line with industry standard practice, to verify equipment installation and further assess measure persistence;
- Use a net-to-gross ratio for near future program years of 73% for prescriptive projects and no change to the current stipulated net-to-gross ratio of 87% for study participants. These net-to-gross ratios should be re-evaluated and adjusted as program design or delivery

changes are made. In addition, educate sales staff on the importance of discussing rebate opportunities early on in the customer's decision-making process to help mitigate free-ridership;

- Continue to monitor cost-effective delivery as a stand-alone program versus integrated delivery;
- Continue internal management processes that encourage individual programs working together to achieve portfolio goals. Continue to reevaluate and adjust program goals as needed to account for potential overlap in program offerings and target markets;
- Continue to support current compressed air measures while monitoring and evaluating the addition of new cost-effective compressed air measures;
- Continue to provide rebates for high efficiency compressed air equipment as an important tool to overcome financial barriers;
- Continue to offer rebates at sufficient levels to drive participation while balancing the program's overall cost-effectiveness;
- Investigate potential for additional partners to conduct compressed air studies to determine if there are more cost-effective options or additional marketing opportunities;
- Continue the increased program outreach and education efforts to trade allies. Periodically review and update the participating contractor list on the program website to ensure it is complete and up to date;
- Continue to educate trade allies and encourage their assistance in the application process as a way to facilitate customer participation;
- Continue soliciting feedback from staff on the change in DSM tracking systems from Siebel to Salesforce to address any issues in need of resolution as well as looking for ways to further improve system capabilities for implementation and evaluation purposes. One specific improvement would be to track primary customer contact person for each opportunity within Salesforce, including a contact name and phone number;
- Institute a process for following up on leads in Salesforce that are not yet committed to implementing a project in order to minimize missed opportunities and ensure that all cases have a definitive status with detailed status notes recorded in the tracking system;
- Continue a push-pull marketing strategy with additional emphasis on direct outreach to customers through Xcel Energy Account Managers and BSC representatives;
- Review ideas for increasing customer knowledge of compressed air equipment rebates in conjunction with current marketing efforts and objectives, and potential new outreach partners, possibly utilizing a focus group with trade ally partners for more specific suggestions and engagement;
- Continue current practices leading to high satisfaction and review communication protocols with customers to maximize satisfaction; and
- Continue supporting trades to maintain high levels of satisfaction.

All of these recommendations are currently being reviewed by Public Service. Any proposed changes to impact assumptions will be publicized through 60-Day Notice prior to implementation.

Home Performance with ENERGY STAR

The Cadmus Group Inc. conducted an impact and process evaluation of the Home Performance with ENERGY STAR (HPwES) product in 2013, which included surveys with customers who

received a rebate for participating in the product; surveys with customers who received an audit and Product materials, but did not ultimately participate in the Product; surveys with participating and non-participating installation contractors; and a benchmarking study of other utility programs. The results of this evaluation revealed program success in many areas, including surpassing energy saving and participation goals, as well as having high satisfaction reported by customers and contractors. The team's recommendations are to:

- Continue to communicate program opportunities through a variety of customer marketing channels, emphasizing money savings and energy cost reduction.
    - Continue to use bill inserts and mailings to communicate program opportunities to customers.
    - b. Continue to emphasize the money savings and energy cost reduction that results from customers' making improvements to their homes;
    - Consider finding ways to help customers understand the payback timelines and how to budget for improvements within the one-year program requirement.
    - Due to recent program changes, consider adding information to both customer-facing and contractor-facing marketing materials that addresses the changes specifically.
- Continue to support contractors by sending program information to all contractors and customers, and by maintaining a registered contractor list.
    - Review the program marketing materials and consider adding more customer-facing materials and advertising that contractors could reference when speaking with customers,
    - Continue to provide print advertisements, brochures, and web advertisements, as these are key tools contractors' use to educate and market high-efficiency equipment.
    - Consider reviewing the contractor-specific program information, specifically the benefits to participation.
    - To increase the number of HVAC measures implemented through the program, consider offering an incentive for HVAC contractors.
    - Consider expanding radio and television advertising.
    - Maintain the list of approved contractors on the program webpage.
- Consider implementing marketing and outreach strategies that build consumer awareness and demand for homes that meet HPwES standards.
- Consider exploring program design options that will help partial participants complete the program and increase savings.
    - Consider simplifying the structure of the requirements and the incentives.
    - Consider continuing to provide an energy advisor for all participating customers, even those who are not part of a community program.
    - Explore customer perceptions of the program and identify opportunities to streamline the program participation process.
    - Consider highlighting the financing opportunities for energy-efficiency projects on the program website.
    - Consider exploring ways to introduce a direct install component to the HPwES Program that would allow for claiming savings for the installation of free, low-cost, energy-saving measures.
- If the DOE/EPA requires HPwES Program changes that would be difficult to accommodate in the Xcel Energy program design, consider evaluating the necessity and

value of being aligned with the DOE/EPA Program, balanced with the value and credibility ENERGY STAR trademark awareness brings to the program.

- Continue offering the current materials and training to new program contractors, and consider expanding the training opportunities to be more accessible and more applicable.
    - Consider options for offering training formats to accommodate contractors in the mountain and western slope regions, such as by offering online webinar re-certification options.
    - Consider subsidizing continuing certification requirement costs or reducing contractor costs through online training or a test-out option.
    - At the beginning of contractor trainings, consider surveying contractors who are new to the HPwES Program.
    - Consider using the success of the door-to-door marketing as a training example that demonstrates how program marketing can be used to acquire new business. Also, consider acknowledging contractors in the future for such acts of program support.
    - Continue offering training topics that emphasize the importance of and successful approaches to conveying program information to customers.
        - Continue to emphasize the importance of communication and that the high standards contractors meet to participate in HPwES sets them apart from competitors, as satisfied customer referrals and word-of-mouth advertising remain the most effective marketing practice.
- Consider examining the high rate of partial participation.
- Cadmus supports the use of 116% NTG for this program. There is evidence of significant spillover from the HPwES Program: 30.0%. As this amount of spillover is not likely to stay constant, this NTG value may be different in future years.

All of these recommendations are currently being reviewed by Public Service. Any proposed changes to impact assumptions will be publicized through 60-Day Notice prior to implementation.

Segment Efficiency Product

Tetra Tech Inc. conducted a comprehensive process and impact evaluation of the Compressed Air Efficiency Product, which included interviews of Public Service staff; as well as surveys of program participants, non-participants, and trade allies; and a benchmarking study of other utility programs. While recognizing several key successes of the Segment Efficiency Product, the Tetra Tech team made a number of suggestions for both process and impact improvements that may be made to the product. The team had the following recommendations:

- Evaluate the future role of the Segment Efficiency program in the Colorado business portfolio and possible addition of similar market segments;
- Continue to evaluate the potential for expanding program eligibility and targeted marketing efforts to other hard-to-reach customer segments, such as the hotel/hospitality sector and small to medium sized commercial real estate customers, to increase participation levels;
- Continue offering detailed energy assessments to help identify comprehensive energy efficiency opportunities while balancing overall program cost-effectiveness;
- Consider alternatives to the fixed $2,500 customer cost for the initial energy assessment to encourage participation and measure implementation. One alternative worth consideration would be to offer a refund for the customer's contribution if they implement a certain

number of opportunities identified by the study or meet a certain energy savings threshold within a specified timeframe;

- If not cost prohibitive, retain the investigative study as an optional program component. Continue to assess customer interest in the investigative study and barriers to participation;
- Continue offering bonus incentives;
- Encourage account managers and BSC staff to inform target customers who historically have not participated in Xcel Energy programs of the benefits of participation and unique opportunities provided by the program. Consider a targeted marketing effort with eligible customers who have not recently participated in any Xcel Energy programs;
- Continue to bundle financial incentives with technical assistance to help customers identify energy savings opportunities and address cost barriers. Consider alternative strategies to help overcome cost barriers for hard-to-reach segments, for example, additional financing support, while balancing overall cost effectiveness considerations;
- Continue soliciting feedback from staff on the change in DSM tracking systems from Siebel to Salesforce to address any issues in need of resolution as well as looking for ways to further improve system capabilities for implementation and evaluation purposes. One specific improvement would be to track the primary customer contact person for each opportunity within Salesforce, including a contact name and phone number;
- Focus commercial real estate marketing and outreach efforts on gaining buy-in from property managers and owners;
- Inform trade allies active in Xcel Energy programs about the Commercial Real Estate program and revitalize efforts to partner with commercial real estate trade organizations to leverage their relationships with customers to help promote the program;
- Continue to leverage Xcel Energy account managers and BSC relationships to promote the program and identify potential candidates;
- Continue the streamlined application process and energy assessment process, with account representatives support as needed;
- Provide additional information to participants on Xcel Energy's rebate requirements when applying for end-use product rebates for improvements identified through program energy assessments. Encourage account managers working with program participants to periodically follow-up with customers on opportunities identified through the energy assessment, possibly aided through Salesforce, to identify plans for implementation and help address any implementation barriers customers face. Also, continue to encourage account managers to assist with rebate applications to limit the chances of rebate applications being denied; and
- Continue ongoing quality assurance efforts, which are in-line with industry standard practice, to verify equipment installation and further assess measure persistence.

All of these recommendations are currently being reviewed by Public Service. Any proposed changes to impact assumptions will be publicized through 60-Day Notice prior to implementation.

M&V Results

The following pages provide Tables 16a and 16b, which describe the installation rates and realization rates used to calculate net, verified savings by program component. The columns of the table are defined in the following bullets:

- **2013 Product** – The DSM product offered by Public Service in 2013.
- **End-Use Measure Type** – Whether the product was prescriptive or custom, or the product components, if the M&V process differed for different projects within a single product.
- **Gross Gen kW** – The gross demand savings at the generator after line losses and coincidence with peak are factored in.
- **Gross Gen kWh** – The gross energy savings at the generator after line losses are removed.
- **Gross Dth** – The gross energy savings.
- **Installation Rate** – The percent of measures that were installed, as opposed to purchased.
- **Demand (kW) Realization Rate** – The ratio of gross electric demand savings measured in the M&V process to the electric demand savings claimed in the rebate application, expressed as a percentage.
- **Energy (kWh) Realization Rate** – The ratio of gross electric energy savings measured in the M&V process to the electric energy savings claimed in the rebate application, expressed as a percentage.
- **Energy (Dth) Realization Rate** – The ratio of gross natural gas energy savings measured in the M&V process to the gas energy savings claimed in the rebate application, expressed as a percentage.
- **Verified Gross Gen kW** – The gross demand savings at the generator after the installation and demand realization rates have been applied.
- **Verified Gross Gen kWh** – The gross energy savings at the generator after the installation and energy realization rates have been applied.
- **Verified Gross Dth** – The gross savings after the installation and gas realization rates have been applied.
- **Electric Demand NTG** – The net-to-gross ratio (percentage) applied to the Verified Gross Gen kW value to arrive at the Verified Net Gen kW value.
- **Electric Energy NTG** – The net-to-gross ratio (percentage) applied to the Verified Gross Gen kWh value to arrive at the Verified Net Gen kWh value.
- **Gas NTG** – The net-to-gross ratio (percentage) applied to the Verified Gross Dth value to arrive at the Verified Net Dth value.
- **Verified Net Gen kW** – The final demand savings at the generator achieved once the installation rate, realization rate, and net-to-gross ratio were applied.
- **Verified Net Gen kWh** – The final energy savings at the generator achieved once the installation rate, realization rate, and net-to-gross ratio were applied.
- **Verified Net Dth** – The final gas savings achieved once the installation rate, realization rate, and net-to-gross ratio were applied.

Table 17a: Business Segment Installation Rates, Realization Rates, and Final Net, Verified Savings by Program Component

2013 Products	End-Use / Measure Type	Gross Gen kW	Gross Gen kWh	Gross Dth	Installation Rate	Demand (kW) Realization Rate	Energy (kWh) Realization Rate	Energy (Dth) Realization Rate	Verified Gross Gen kW	Verified Gross Gen kWh	Verified Gross Dth	Elec Demand NTG	Elec Energy NTG	Gas NTG	Verified Net Gen kW	Verified Net Gen kWh	Verified Net Dth
Business Segment																	
Commercial Refrigeration	Direct Install	16	351,173	585.2	100.0%	100.0%	100.0%	100.0%	16.3	351,173	585	84.0%	97.0%	100.0%	14	340,671	585
	Prescriptive	45	388,388	0.0	100.0%	100.0%	100.0%	100.0%	45.0	388,388	0	99.2%	99.7%	100.0%	45	387,175	0
	Custom	0	0	0.0	100.0%	100.0%	100.0%	100.0%	0.0	0	0	100.0%	100.0%	100.0%	0	0	0
Compressed Air Efficiency	Prescriptive	299	1,115,793	N/A	100.0%	100.3%	100.5%	N/A	299	1,121,371	N/A	87.0%	87.0%	N/A	260	975,593	N/A
	Studies	26	162,062	N/A	100.0%	100.0%	100.0%	N/A	26	162,062	N/A	87.0%	87.0%	N/A	23	140,994	N/A
	Custom	287	2,272,370	N/A	100.0%	100.0%	100.0%	N/A	287	2,272,370	N/A	87.0%	87.0%	N/A	250	1,976,962	N/A
Computer Efficiency	Prescriptive	2,052	15,002,997	N/A	100.0%	100.0%	100.0%	N/A	2,052	15,002,997	N/A	88.0582%	88.0582%	N/A	1,807	13,211,369	N/A
Cooling Efficiency	Prescriptive	1,500	7,802,286	N/A	100.0%	99.1%	99.8%	N/A	1,487	7,786,681	N/A	80.0%	80.0%	N/A	1,189	6,229,345	N/A
	Custom	234	2,106,036	N/A	100.0%	100.0%	100.0%	N/A	234	2,106,036	N/A	87.0%	87.0%	N/A	203	1,832,252	N/A
Custom Efficiency	Custom	258	2,572,011	2,990.9	100.0%	100.0%	100.0%	100.0%	258	2,572,011	2,991	87.0%	87.0%	93.0%	225	2,237,649	2,782
Data Center Efficiency	Study Prescriptive Cooling	84	4,966,843	N/A	100.0%	99.1%	99.8%	100.0%	83.31	4,956,909	0	100.0%	100.0%	N/A	83	4,956,909.1	N/A
	Study Prescriptive Motors	73	331,422	N/A	100.0%	99.9%	99.9%	100.0%	72.75	331,091	0	100.0%	100.0%	N/A	73	331,091.0	N/A
	Non-Study Prescriptive Motors	0	106,856	N/A	100.0%	99.9%	99.9%	100.0%	0.00	106,749	0	65.8%	66.1%	N/A	0	70,577.5	N/A
	Study-Driven Custom	0	948,323	N/A	100.0%	100.0%	100.0%	100.0%	0.00	948,323	N/A	100.0%	100.0%	N/A	0	948,323.0	N/A
	Non-Study Driven Custom	0	0	N/A	100.0%	100.0%	100.0%	100.0%	0.00	0	N/A	87.0%	87.0%	N/A	0	0.0	N/A
Energy Management Systems	Custom	62	8,027,411	7,762.7	100.0%	100.0%	100.0%	100.0%	62	8,027,411	7,763	87.0%	87.0%	93.0%	54	6,983,847	7,219
Heating Efficiency	Prescriptive	N/A	N/A	15,338.6	100.0%	N/A	N/A	97.3%	N/A	N/A	14,924	N/A	N/A	94.4%	N/A	N/A	14,089
Lighting Efficiency	Prescriptive	13,243	58,290,451	N/A	100.0%	99.4%	99.4%	N/A	13,164	57,940,709	N/A	84.0%	84.0%	N/A	11,057	48,670,195	N/A
	Custom	3,624	23,886,109	N/A	100.0%	100.0%	100.0%	N/A	3,624	23,886,109	N/A	96.0%	96.0%	N/A	3,479	22,930,665	N/A
Motor and Drive Efficiency	Prescriptive	5,406	33,923,944	N/A	100.0%	99.9%	99.9%	N/A	5,400	33,890,020	N/A	65.8%	66.1%	N/A	3,553	22,406,558	N/A
	Custom	0	0	N/A	100.0%	100.0%	100.0%	N/A	0	0	N/A	65.0%	65.0%	N/A	0	0	N/A
New Construction	Energy Efficient Buildings	970	2,848,303	14,828.9	100.0%	100.0%	100.0%	100.0%	970	2,848,303	14,829	93.0%	93.0%	97.0%	902	2,649,776	14,384
	Energy Design Assistance	8,342	36,427,680	61,126.0	100.0%	100.0%	100.0%	100.0%	8,342	36,427,680	61,126	90.0%	90.0%	99.0%	7,507	32,784,912	60,515
Process Efficiency	Compressed Air Study	12	117,820	N/A	100.0%	100.0%	100.0%	N/A	12	117,820	N/A	90.0%	90.0%	N/A	11	106,038	N/A
	Prescriptive Cooling	0	306,742	N/A	100.0%	99.1%	99.8%	N/A	0	306,129	N/A	90.0%	90.0%	N/A	0	275,516	N/A
	Prescriptive Lighting	338	2,454,966	N/A	100.0%	99.4%	99.4%	N/A	336	2,440,236	N/A	90.0%	90.0%	N/A	302	2,196,212	N/A
	Prescriptive Motors	1,122	6,632,429	N/A	100.0%	99.9%	99.9%	N/A	1,121	6,625,796	N/A	90.0%	90.0%	N/A	1,009	5,963,217	N/A
	EMS	0	0	N/A	100.0%	100.0%	100.0%	N/A	0	0	N/A	90.0%	90.0%	90.0%	0	0	N/A
	Custom	276	5,832,002	0.0	100.0%	100.0%	100.0%	100.0%	276	5,832,002	0	90.0%	90.0%	N/A	249	5,248,802	N/A
Recommissioning	Custom	248	5,592,270	13,577.0	100.0%	100.0%	100.0%	100.0%	248	5,592,270	13,577	90.0%	90.0%	90.0%	223	5,033,043	12,219
Segment Efficiency	Prescriptive Lighting	72	253,256	N/A	100.0%	99.4%	99.4%	N/A	72	251,736	N/A	97.0%	97.0%	N/A	70	244,184	N/A
	Prescriptive Motors	6	19,016	N/A	100.0%	99.9%	99.9%	N/A	6	18,997	N/A	97.0%	97.0%	N/A	5	18,427	N/A
	Custom - EMS	0	131,768	782.0	100.0%	100.0%	100.0%	100.0%	0	131,768	782	97.0%	97.0%	94.0%	0	127,815	735
Self-Directed Custom Efficiency	Custom	51	340,243	N/A	100.0%	100.0%	100.0%	N/A	51	340,243	N/A	90.6%	90.6%	N/A	46	308,236	N/A
Small Business Lighting	Prescriptive	3,552	13,111,415	N/A	100.0%	99.6%	98.6%	N/A	3,537	12,927,855	N/A	100.0%	100.0%	N/A	3,537	12,927,855	N/A
	Custom	443	4,394,453	N/A	100.0%	100.0%	100.0%	N/A	443	4,394,453	N/A	96.0%	96.0%	N/A	425	4,218,675	N/A
Standard Offer	Custom	2,245	15,493,616	7,305.3	100.0%	100.0%	100.0%	100.0%	2,245	15,493,616	7,305	87.6%	87.6%	93.0%	1,966	13,572,408	6,794
Business Segment Total		**44,885**	**256,210,453**	**124,296.6**	**100.0%**	**99.7%**	**99.8%**	**99.7%**	**44,768**	**255,599,315**	**123,882**	**86.2%**	**86.2%**	**96.3%**	**38,569**	**220,305,292**	**119,322**

Table 17b: Residential Segment and Low-Income Segment Installation Rates, Realization Rates, and Final Net, Verified Savings by Program Component

2013 Products	End-Use / Masure Type	Gross Gen kW	Gross Gen kWh	Gross Dth	Installation Rate	Demand (kW) Realization Rate	Energy (kWh) Realization Rate	Energy (Dth) Realization Rate	Verified Gross Gen kW	Verified Gross Gen kWh	Verified Gross Dth	Elec Demand NTG	Elec Energy NTG	Gas NTG	Verified Net Gen kW	Verified Net Gen kWh	Verified Net Dth
Residential Segment																	
ENERGY STAR New Homes		438	2,173,917	120,420.9	100.0%	100.0%	100.0%	100.0%	438	2,173,917	120,421	92.0%	92.0%	92.12%	403	2,000,003	110,930
Evaporative Cooling Rebate		9,065	5,641,832	N/A	100.0%	100.0%	100.0%	N/A	9,065	5,641,832	N/A	67.9%	67.6%	N/A	6,157	3,815,751	N/A
Heating System Rebate		N/A	N/A	77,223.2	100.0%	N/A	N/A	100.1%	N/A	N/A	77,300	77.0%	77.0%	77.0%	N/A	N/A	59,521
High Efficiency Air Conditioning	New Equip.	3,586	2,916,543	N/A	100.0%	100.0%	100.0%	N/A	3,586	2,916,543	N/A	68.0%	68.0%	N/A	2,439	1,983,249	N/A
	QI	499	319,501	N/A	100.0%	77.2%	77.2%	N/A	385	246,654	N/A	68.0%	68.0%	N/A	262	167,725	N/A
	GSHP	10	17,495	N/A	100.0%	100.0%	100.0%	N/A	10	17,495	N/A	100.0%	100.0%	N/A	10	17,495	N/A
Home Lighting & Recycling	CFLs	17,024	135,243,239	N/A	99.0%	100.0%	100.0%	N/A	16,854	133,890,807	N/A	85.0%	85.0%	N/A	14,326	113,807,186	N/A
	LEDs	527	4,180,205	N/A	99.0%	100.0%	100.0%	N/A	521	4,138,403	N/A	100.0%	100.0%	N/A	521	4,138,403	N/A
Home Performance w/ ENERGY STAR		172	510,607	19,799.9	100.0%	100.0%	100.0%	100.0%	172	510,607	19,800	94.0%	94.0%	94.0%	162	479,970	18,609
Insulation Rebate		345	432,452	50,457.0	100.0%	96.1%	96.1%	103.0%	332	415,586	51,971	89.0%	89.0%	89.0%	295	369,872	46,254
Pool Pumps		49	136,784	N/A	100.0%	91.7%	91.7%	N/A	45	125,431	N/A	80.0%	80.0%	N/A	36	100,345	N/A
Refrigerator Recycling		1,074	9,402,372	N/A	100.0%	100.0%	100.0%	N/A	1,074	9,402,372	N/A	58.4%	58.4%	N/A	627	5,486,834	N/A
School Education Kits		640	6,861,654	N/A	68.000%	100.0%	100.0%	N/A	435	4,665,925	N/A	100.0%	100.0%	N/A	435	4,665,925	N/A
Water Heating Rebate		16	146,575	7,873.5	100.0%	100.0%	100.0%	100.0%	16	146,575	7,874	100.0%	100.0%	90.0%	16	146,575	7,086
Energy Efficient Showerheads		0	660,603	49,843.4	54.0%	100.0%	100.0%	100.0%	0	356,726	26,915	99.0%	99.0%	99.0%	0	353,159	26,646
Energy Efficiency Subtotal		**33,444**	**168,643,779**	**325,617.9**	**98.3%**	**99.6%**	**99.9%**	**100.5%**	**32,933**	**164,648,873**	**304,281**	**78.0%**	**83.5%**	**88.4%**	**25,688**	**137,532,491**	**269,047**
Saver's Switch		12,165	406,333	N/A	100.0%	100.0%	100.0%	N/A	12,165	406,333	N/A	100.0%	100.0%	N/A	12,165	406,333	N/A
Residential Segment Total		**45,609**	**169,050,112**	**325,617.9**	**98.8%**	**99.7%**	**99.9%**	**100.5%**	**45,098**	**165,055,205**	**304,281**	**83.9%**	**83.6%**	**88.4%**	**37,854**	**137,938,824**	**269,047**
Low-Income Segment																	
Energy Savings Kits	Aerator	0	600,894	20,631.2	45.0%	100.0%	100.0%	100.0%	0	270,402	9,284	100.0%	100.0%	100.0%	0	270,402	9,284
	CFL	306	4,441,901	N/A	52.0%	100.0%	100.0%	N/A	159	2,309,789	N/A	100.0%	100.0%	N/A	159	2,309,789	N/A
	Showerhead	0	553,765	24,272.0	45.0%	100.0%	100.0%	100.0%	0	249,194	10,922	100.0%	100.0%	100.0%	0	249,194	10,922
Multi-Family Weatherization		237	1,900,818	10,242.2	100.0%	100.0%	100.0%	100.0%	237	1,900,818	10,242	100.0%	100.0%	100.0%	237	1,900,818	10,242
Non-Profit Weatherization		374	1,158,852	3,599.7	100.0%	100.0%	100.0%	100.0%	374	1,158,852	3,600	100.0%	100.0%	100.0%	374	1,158,852	3,600
Single-Family Weatherization		178	1,619,506	78,043.2	100.0%	100.0%	100.0%	100.0%	178	1,619,506	78,043	100.0%	100.0%	100.0%	178	1,619,506	78,043
Low-Income Segment Total		**1,095**	**10,275,736**	**136,788.3**	**86.6%**	**100.0%**	**100.0%**	**100.0%**	**948**	**7,508,561**	**112,092**	**100.0%**	**100.0%**	**100.0%**	**948**	**7,508,561**	**112,092**
Energy Feedback Pilot		3,670	18,477,003	70,115.0	100.0%	100.0%	100.0%	100.0%	3,670	18,477,003	70,115	100.0%	100.0%	100.0%	3,670	18,477,003	70,115
In-Home Smart Device Pilot		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Building Code Support Pilot		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electric Vehicle Charging Station Pilot		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interruptible Credit Option		6,963	67,850	N/A	100.0%	100.0%	100.0%	100.0%	6,963	67,850	N/A	100.0%	100.0%	100.0%	6,963	67,850	N/A
2013 TOTAL		**95,259**	**454,013,304**	**656,817.8**	**99.2%**	**99.7%**	**99.8%**	**100.2%**	**94,485**	**446,640,084**	**610,370**	**85.8%**	**86.2%**	**92.6%**	**81,041**	**384,229,680**	**570,575**

Cost-Effectiveness

Cost-effectiveness ("cost-benefit") analyses represent the ratio of a product's benefits to its costs. By varying which benefits and costs are included in the calculation, the ratio can show how beneficial a DSM portfolio, program, product, or measure might be from a number of different perspectives (the Participant, Utility, Rate Impact, or Total Resource Cost). In Colorado, the Commission calls for utilities to use the Modified Total Resource Cost (MTRC) test for evaluating the cost-effectiveness of DSM programs. The MTRC test takes into account system and other benefits, utility and participant costs, as well as environmental adders. These analyses are performed in a multi-step process that takes into account, among other factors, the:

- Savings achieved by the program;
- Participant and utility expenditures on the product, by budget category;
- Avoided costs for the product (discussed in more detail in the next section of this report);
- Incremental O&M, and capital spending and savings, of the product; and
- Lifetime, operating hours, coincidence of savings with summer peak, net-to-gross, transmission loss factors, and realization rates for the product.

The cost-benefit analysis is first determined at the measure-level; individual measures are then combined to produce the product-level MTRC, and further the program-level MTRC. All of the products in the portfolio (electric and gas) are then combined to create the portfolio-level cost-benefit analysis, as provided in Tables 18 and 19 below.

The Company is reporting 2013 electric and gas portfolio MTRC test ratio results of 2.30 and 1.73, respectively. These results are shown in Table 18 and Table 19. The portfolio results are based upon electric net economic benefits of $174.5 million and natural gas net economic benefits $24.8 million. The Company has provided the cost-effectiveness results (MTRC test ratios) for electric and gas products in the following tables within this report:[10]

- Business Program: Tables 13a (electric) and 13b (gas)
- Residential Program: Tables 14a (electric) and 14b (gas)
- Low-Income Program: Tables 15a (electric) and 15b (gas)
- Indirect Program: Tables 16a (electric) and 16b (gas)

[10] C.R.S. 40-3.2-104(6)(d) requires that the Company submit an annual report to the Commission that estimates the cost-effectiveness and net economic benefits of DSM programs, among other documentation.

Table 18: 2013 Electric DSM Portfolio Cost-Benefit Analysis (CBA)

DSM PORTFOLIO - ELECTRIC	2013	ELECTRIC	ACTUAL

2013 Net Present Cost Benefit Summary Analysis For All Participants

	Participant Test ($Total)	Utility Test ($Total)	Rate Impact Test ($Total)	Modified TRC Test ($Total)
Benefits				
Avoided Revenue Requirements				
Generation Capacity	N/A	$110,413,934	$110,413,934	$110,413,934
Transmission & Distribution Cap:	N/A	$20,576,811	$20,576,811	$20,576,811
Marginal Energy	N/A	$157,099,957	$157,099,957	$157,099,957
Avoided Emissions (CO2)	N/A	N/A	N/A	$0
Subtotal				$288,090,702
Non-Energy Benefits Adder (10.2%)				$29,392,692
Subtotal	N/A	$288,090,702	$288,090,702	$317,483,394
Other Benefits				
Bill Reduction - Electric	$335,595,605	N/A	N/A	N/A
Participant Rebates and Incentives	$42,897,606	N/A	N/A	$42,897,606
Incremental Capital Savings	$0	N/A	N/A	$0
Incremental O&M Savings	$0	N/A	N/A	$0
Subtotal	$378,493,211	N/A	N/A	$42,897,606
Total Benefits	$378,493,211	$288,090,702	$288,090,702	$360,381,000
Costs				
Utility Project Costs				
Program Planning & Design	N/A	$1,583,532	$1,583,532	$1,583,532
Administration & Program Delivery	N/A	$21,754,032	$21,754,032	$21,754,032
Advertising/Promotion/Customer I	N/A	$6,987,119	$6,987,119	$6,987,119
Participant Rebates and Incentives	N/A	$42,897,606	$42,897,606	$42,897,606
Equipment & Installation	N/A	$28,539	$28,539	$28,539
Measurement and Verification	N/A	$2,080,412	$2,080,412	$2,080,412
Subtotal	N/A	$75,331,240	$75,331,240	$75,331,240
Utility Revenue Reduction				
Revenue Reduction - Electric	N/A	N/A	$283,414,288	N/A
Subtotal	N/A	N/A	$283,414,288	N/A
Participant Costs				
Incremental Capital Costs	$87,074,672	N/A	N/A	$78,992,812
Incremental O&M Costs	$2,375,144	N/A	N/A	$2,068,879
Subtotal	$89,449,816	N/A	N/A	$81,061,691
Total Costs	$89,449,816	$75,331,240	$358,745,528	$156,392,932
Net Benefit (Cost)	$289,043,395	$212,759,461	($70,654,826)	$203,988,068
Benefit/Cost Ratio	4.23	3.82	0.80	2.30

Note: Dollar values represent present value of impacts accumulated over the lifetime of the measures.

Input Summary and Totals

Program Inputs per Customer kW		
Lifetime (Weighted on Generator kWh)	A	12 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	31.35%
Gross Load Factor at Customer	E	17.14%
Net-to-Gross (Energy)	F	86.2%
Net-to-Gross (Demand)	G	85.8%
Transmission Loss Factor (Energy)	H	7.023%
Transmission Loss Factor (Demand)	I	7.474%
Installation/Realization Rate (Energy)	**J**	**98.2%**
Installation/Realization Rate (Demand)	**K**	**99.2%**
MTRC Net Benefit (Cost)	**L**	$725
MTRC Non-Energy Benefit Adder	**M**	$105
Net coincident kW Saved at Generator	**(G x C x K) x D / (1 - I)**	0.2882 kW
Gross Annual kWh Saved at Customer	(B x E x C)	1,501 kWh
Net Annual kWh Saved at Customer	**(F x (B x E x C x J))**	1,270 kWh
Net Annual kWh Saved at Generator	**(F x (B x E x C x J)) / (1 - H)**	1,366 kWh

Program Summary per Participant

Gross kW Saved at Customer	P	0.32 kW
Net coincident kW Saved at Generator	**(G x P x K) x D / (1 - I)**	0.09 kW
Gross Annual kWh Saved at Customer	(B x E x P)	480 kWh
Net Annual kWh Saved at Customer	**(F x (B x E x P x J))**	407 kWh
Net Annual kWh Saved at Generator	**(F x (B x E x P x J)) / (1 - H)**	437 kWh

Program Summary All Participants

Total Participants	Q	878,729
Total Expenditures	R	**$75,331,240**
Gross or Implied kW Saved at Customer	(Q x P)	281,187 kW
Net coincident kW Saved at Generator	**((G x P x K) x D / (1 - I)) x Q**	**81,040 kW**
Gross Annual kWh Saved at Customer	(B x E x P) x Q	422,128,805 kWh
Gross Installed Annual kWh Saved at Customer	**(B x E x P x J) x Q**	414,505,613 kWh
Net Annual kWh Saved at Customer	(F x (B x E x P x J)) x Q	357,245,953 kWh
Net Annual kWh Saved at Generator	**((F x (B x E x P x J)) / (1 - H)) x Q**	**384,229,680 kWh**
TRC Net Benefits with Adder	(Q x P x L)	**$203,988,068**
TRC Net Benefits without Adder	(Q x P x (L - M))	**$174,595,376**
Utility Program Cost per kWh Lifetime		**$0.0165**
Utility Program Cost per kW at Gen		**$930**

Table 19: 2013 Gas DSM Portfolio Cost-Benefit Analysis (CBA)

DSM PORTFOLIO - GAS			2013	GAS		ACTUAL
2013 Net Present Cost Benefit Summary Analysis For All Participants						
	Participant Test ($Total)	Utility Test ($Total)	Rate Impact Test ($Total)	Modified TRC Test ($Total)		
Benefits						
Avoided Revenue Requirements						
Commodity Cost Reduction	N/A	$34,147,435	$34,147,435	$34,147,435		
Variable O&M Savings	N/A	$235,831	$235,831	$235,831		
Demand Savings	N/A	$9,209,586	$9,209,586	$9,209,586		
Subtotal				$43,592,852		
Emissions Non-Energy Benefits Adder (8.6%)				$3,745,479		
Subtotal	N/A	$43,592,852	$43,592,852	$47,338,330		
Other Benefits						
Bill Reduction - Gas	$48,653,038	N/A	N/A	N/A		
Participant Rebates and Incentives	$9,067,822	N/A	N/A	$9,067,822		
Incremental Capital Savings	$0	N/A	N/A	$0		
Incremental O&M Savings	$4,841,103	N/A	N/A	$2,357,815		
Subtotal	$62,561,963	N/A	N/A	$11,425,636		
Total Benefits	$62,561,963	$43,592,852	$43,592,852	$58,763,967		
Costs						
Utility Project Costs						
Program Planning & Design	N/A	$190,157	$190,157	$190,157		
Administration & Program Delivery	N/A	$2,795,488	$2,795,488	$2,795,488		
Advertising/Promotion/Customer	N/A	$430,565	$430,565	$430,565		
Participant Rebates and Incentives	N/A	$9,067,822	$9,067,822	$9,067,822		
Equipment & Installation	N/A	$338	$338	$338		
Measurement and Verification	N/A	$1,158,767	$1,158,767	$1,158,767		
Subtotal	N/A	$13,643,136	$13,643,136	$13,643,136		
Utility Revenue Reduction						
Revenue Reduction - Gas	N/A	N/A	$46,547,790	N/A		
Subtotal	N/A	N/A	$46,547,790	N/A		
Participant Costs						
Incremental Capital Costs	$21,823,669	N/A	N/A	$20,273,600		
Incremental O&M Costs	$0	N/A	N/A	$0		
Subtotal	$21,823,669	N/A	N/A	$20,273,600		
Total Costs	$21,823,669	$13,643,136	$60,190,926	$33,916,736		
Net Benefit (Cost)	$40,738,293	$29,949,716	($16,598,074)	$24,847,230		
Benefit/Cost Ratio	2.87	3.20	0.72	1.73		

Note: Dollar values represent present value of impacts accumulated over the lifetime of the measures.

Input Summary and Totals		
Program Assumptions:		
Lifetime (Weighted on Dth)	A	15.25 years
Net-to-Gross (Weighted on Dth)	B	92.61%
Install Rate (Weighted on Dth)	C	97.0%
Program Totals:		
Participants	D	143,347
Average Net Dth/Yr Saved	E	3.98
Total Dth/Yr Saved	F	**570,575**
Utility Costs per Net Dth/Yr	G	$23.91
Net Benefit (Cost) per Gross Dth/Yr	H	$43.55
Non-Energy Benefits Adder per Gross Dth/Yr	I	$6.56
Annual Dth/$M	($1M / G)	**41,821**
Total Utility Expenditures	(G x F)	**$13,643,136**
Total MTRC Net Benefits with Adder	(F x H)	**$24,847,230**
Total MTRC Net Benefits without Adder	(H - I) x F	**$21,101,752**
Utility Program Cost per Net Dth Lifetime	(G / A)	**$1.57**

Avoided Cost Assumptions

The following avoided costs have been updated and included with the 2013 DSM Status Report as ordered in Paragraph 58 of Decision No. C08-0769 (Proceeding No. 07A-420E). The Order states:

> "…Also, we find that the avoided cost data shall be updated with each annual report so that the degree of change can be assessed and this issue incorporated into the overall review of DSM incentives in 2010. We will thereby consider whether avoided costs should be updated more frequently."

The avoided costs are the Company's estimates as filed in the 2012/2013 DSM Plan, which have also been used in the cost-benefit analysis of 2013 Status Report. These estimates are also compared to the estimates used over a 20-year (2013-2032) time period.

Electric Programs

In order to determine the cost-effectiveness of its electric energy efficiency and load management programs, Public Service must first calculate the avoided generation, transmission, distribution, and marginal energy costs these programs avoid. Below are tables showing the avoided cost assumptions used in this report.

1. **Estimated Annual Avoided Generation Capacity Costs**
   (*Source:* Public Service Resource Planning)

   Capacity costs reflect current generic capacity cost estimates used in the latest Renewable Energy Standard Adjustment (RESA) filings for the two types of avoided electric generation – a gas-fired combustion turbine (CT) and a gas-fire combined-cycle plant (CC).

	CT	CC		CT	CC
Year	**Gen Capacity $/kW-mo**	**Gen Capacity $/kW-mo**	**Year**	**Gen Capacity $/kW-mo**	**Gen Capacity $/kW-mo**
2013	$12.51	$14.33	**2023**	$15.07	$17.04
2014	$12.75	$14.58	**2024**	$15.35	$17.34
2015	$12.99	$14.83	**2025**	$15.64	$17.65
2016	$13.23	$15.09	**2026**	$15.93	$17.96
2017	$13.48	$15.36	**2027**	$16.23	$18.27
2018	$13.74	$15.63	**2028**	$16.53	$18.59
2019	$13.99	$15.90	**2029**	$16.84	$18.92
2020	$14.26	$16.18	**2030**	$17.16	$19.25
2021	$14.52	$16.46	**2031**	$17.48	$19.59
2022	$14.79	$16.75	**2032**	$17.80	$19.93

2. Estimated Annual Avoided Transmission and Distribution Capacity Costs
(*Source:* Public Service Resource Planning)

A review by Resource Planning determined that $30.71/kW-yr is a good estimate of the benefit of Transmission and Distribution capacity for 2013. This value is escalated at the current 2.36% escalation rate based on the Company's corporate policy adopted in May 2011.

Year	$/kW-yr
2013	$30.71
2013+	Escalated at 2.36%

3. **Estimated Annual Avoided Marginal Energy Costs**
(*Source:* Public Service Resource Planning and Quantitative Risk Services)

Avoided marginal energy costs reflect the assumed gas forecast and heat rates used in the latest RESA filings for the two types of avoided electric generation – a gas-fired combustion turbine (CT) and a gas-fire combined-cycle plant (CC).

	CT	CC		CT	CC
Year	Marginal Energy $/MWh	Marginal Energy $/MWh	Year	Marginal Energy $/MWh	Marginal Energy $/MWh
2013	$71.03	$42.28	**2023**	$108.61	$66.20
2014	$75.43	$45.13	**2024**	$112.98	$68.98
2015	$81.09	$48.83	**2025**	$115.79	$70.70
2016	$85.08	$51.39	**2026**	$115.56	$70.33
2017	$86.76	$52.38	**2027**	$116.91	$71.04
2018	$89.93	$54.37	**2028**	$120.27	$73.12
2019	$93.42	$56.57	**2029**	$123.96	$75.41
2020	$96.60	$58.56	**2030**	$127.97	$77.92
2021	$100.00	$60.70	**2031**	$130.95	$79.71
2022	$104.14	$63.34	**2032**	$133.93	$81.51

4. **Estimated Annual Avoided Emissions Costs (includes CO_2)**
(*Source:* Public Service Resource Planning)

In the latest RESA filings, the base-case assumed zero cost for CO_2 emissions. For this reason, this value is set to $0 for all future years.

Gas Programs

In order to determine the cost-effectiveness of its gas programs, Public Service must calculate the avoided commodity cost of gas, avoided capacity costs and any avoided variable O&M costs associated with the gas energy efficiency savings. Below are tables showing the avoided cost assumptions used in this Plan.

1. **Estimated Commodity Cost of Gas**
(*Source:* Public Service Gas Resource Planning)

The following table outlines the current gas price forecast as of April 2011 using a market snapshot for short-term prices and a quantitative average of projections from well-known forecasting services for the long-term forecast prices.

Year	$/Dth	Year	$/Dth
2013	$5.30	**2023**	$8.49
2014	$5.66	**2024**	$8.87
2015	$6.14	**2025**	$9.11
2016	$6.50	**2026**	$9.07
2017	$6.64	**2027**	$9.14
2018	$6.90	**2028**	$9.42
2019	$7.19	**2029**	$9.73
2020	$7.45	**2030**	$10.07
2021	$7.75	**2031**	$10.31
2022	$8.11	**2032**	$10.55

2. **Estimated Avoided Variable O&M Costs**
(*Source:* Public Service Pricing and Planning)

The Company used the following value provided by our Pricing and Planning Department to determine variable O&M costs avoided with a reduction in gas usage.

Year	$/Dth
2013-2032	$0.096

3. **Estimated Annual Avoided Reservation Costs**
(Used to estimate capacity savings – Peak Day Dth savings estimated as 1% of annual Dth savings).
(*Source:* Public Service Gas Resource Planning)

The following annual avoided reservation costs was used to determine the cost of service to transport incremental gas supplies to the metropolitan Denver area. The Company uses the Colorado Interstate Gas (CIG) firm transportation rate to estimate this cost.

Year	$/Dth
2013-2032	$108.40

Avoided Cost Methodology Comparison

The 2013/2013 DSM Plan included a change in methodology to determine the avoided costs used to calculate generation capacity and marginal energy benefits. Decision No. R11-1326 ordered that a comparison be made to determine the effect of this change in methodology. The Settlement Agreement approved in this order, under settlement term 10 pages 17 and 18 states:

> "10. …When filing the annual status report of 2012 results on April 1, 2013, and the 2013 results on April 1, 2014, the Company will include a comparison of the resulting net benefits and TRC tests using the former avoided cost methodology ad the updated methodology approved for this Plan."

Table 20, on the following page, shows the comparison of the resulting net benefits and TRC tests using the former avoided cost methodology (2011 method) and the updated methodology approved for this plan (2012/2013 method).

Table 20: Avoided Cost Methodology Comparison

	Generation Capacity Benefits			Marginal Energy Benefits			MTRC Net Benefits			MTRC Ratio		
2013	2011 Method	2012-2013 Method	Change	2011 Method	2012-2013 Method	Change	2011 Method	2012-2013 Method	Change	2011 Method	2012-2013 Method	Change
Business Program												
Commercial Refrigeration	91,528	91,528	0	212,285	257,019	44,734	120,801	165,535	44,734	1.38	1.52	0.14
Compressed Air Efficiency	1,044,880	978,046	-66,834	1,444,506	1,806,824	362,319	1,535,160	1,830,645	295,485	1.83	1.99	0.16
Computer Efficiency	1,445,787	1,298,872	-146,915	2,065,897	2,724,417	658,520	2,041,911	2,553,516	511,605	1.95	2.18	0.24
Cooling Efficiency	2,531,810	2,389,659	-142,152	6,247,785	6,571,409	323,623	4,740,990	4,922,461	181,472	1.68	1.71	0.03
Custom Efficiency	406,695	406,695	0	1,063,494	1,287,174	223,680	-240,869	-17,189	223,680	0.89	0.99	0.10
Data Center Efficiency	217,318	217,318	0	2,164,419	2,704,998	540,578	1,304,537	1,845,115	540,578	1.68	1.96	0.28
Energy Management Systems	87,105	87,105	0	2,293,195	3,516,086	1,222,891	1,393,655	2,616,545	1,222,891	1.50	1.93	0.44
Heating Efficiency												
Lighting Efficiency	23,695,721	23,695,721	0	31,680,183	36,663,111	4,982,928	42,199,172	47,182,099	4,982,928	2.31	2.46	0.15
Motor & Drive Efficiency	5,734,107	5,734,107	0	9,503,168	11,328,589	1,825,422	11,415,899	13,241,320	1,825,422	2.08	2.25	0.17
New Construction	15,637,335	15,637,335	0	18,614,357	22,379,706	3,765,349	18,292,116	22,057,465	3,765,349	1.68	1.82	0.14
Process Efficiency	3,087,481	2,714,969	-372,512	6,319,534	7,530,290	1,210,755	6,773,355	7,611,598	838,243	2.07	2.20	0.13
Recommissioning	209,509	209,509	0	982,284	1,384,167	401,883	682,596	1,084,479	401,883	1.61	1.97	0.36
Segment Efficiency	132,852	132,852	0	167,066	211,807	44,741	100,872	145,613	44,741	1.37	1.53	0.16
Self-Directed Custom Efficiency	79,542	79,542	0	139,071	168,321	29,250	-120,609	-91,358	29,250	0.72	0.79	0.07
Small Business Lighting	6,419,658	6,419,658	0	7,566,603	8,841,151	1,274,548	8,591,803	9,866,351	1,274,548	1.84	1.96	0.12
Standard Offer	3,161,350	3,161,350	0	5,645,721	6,833,160	1,187,439	3,896,717	5,084,156	1,187,439	1.49	1.64	0.15
Business Program Total	**63,982,678**	**63,254,265**	**-728,412**	**96,109,568**	**114,208,229**	**18,098,660**	**102,728,103**	**120,098,351**	**17,370,248**	**1.91**	**2.06**	**0.15**
Residential Program												
ENERGY STAR New Homes	739,573	739,573	0	1,200,415	1,173,310	-27,105	1,569,468	1,542,363	-27,105	2.55	2.53	-0.03
Evaporative Cooling Rebates	9,772,059	9,772,059	0	1,983,788	1,921,077	-62,711	22,301,070	22,238,359	-62,711	8.54	8.52	-0.02
Heating System Rebates												
High Efficiency Air Conditioning	2,623,952	2,297,656	-326,296	1,024,179	1,044,871	20,692	1,440,938	1,135,334	-305,604	1.29	1.23	-0.06
Home Lighting & Recycling	11,358,052	11,358,052	0	23,394,960	31,445,444	8,050,484	29,748,269	37,798,754	8,050,484	2.91	3.43	0.52
Home Performance with ENERGY STAR	234,621	227,143	-7,478	245,130	244,123	-1,007	232,185	223,700	-8,485	1.53	1.51	-0.02
Insulation Rebate	534,343	470,282	-64,061	317,281	310,677	-6,604	456,489	385,824	-70,665	1.68	1.58	-0.11
Pool Pumps	50,201	44,008	-6,193	37,937	36,738	-1,199	-248,629	-256,022	-7,392	0.29	0.27	-0.02
Refrigerator Recycling	677,179	677,179	0	1,322,918	1,788,437	465,519	1,499,956	1,965,475	465,519	2.21	2.58	0.37
School Education Kits	424,668	424,668	0	978,131	1,359,018	380,887	243,675	624,562	380,887	1.14	1.35	0.21
Showerheads	0	0	0	67,352	84,803	17,451	117,081	134,532	17,451	3.79	4.21	0.42
Water Heater Rebate	23,819	23,819	0	54,007	66,807	12,800	-29,300	-16,500	12,800	0.80	0.89	0.09
Residential Program Energy Efficiency Total	**26,438,467**	**26,034,438**	**-404,028**	**30,626,098**	**39,475,305**	**8,849,207**	**57,331,201**	**65,776,380**	**8,445,178**	**3.78**	**4.20**	**0.41**
Load Management Program - Residential Saver's Switch	19,307,923	19,307,923	0	269,582	204,572	-65,010	20,301,667	20,236,657	-65,010	2.71	2.71	**-0.01**
Residential Program Total	**45,746,389**	**45,342,361**	**-404,028**	**30,895,681**	**39,679,877**	**8,784,196**	**77,632,868**	**86,013,036**	**8,380,168**	**3.39**	**3.65**	**0.26**
Low-Income Program												
Energy Savings Kit	135,777	135,777	0	438,870	580,283	141,414	618,080	759,493	141,414	2.71	3.10	0.39
Multi-Family Weatherization	307,626	307,626	0	754,456	761,195	6,739	547,797	554,536	6,739	1.34	1.35	0.00
Non-Profit Energy Efficiency	637,681	637,681	0	627,220	632,823	5,602	725,138	730,740	5,602	1.45	1.46	0.00
Single-Family Weatherization	170,956	170,956	0	387,604	493,146	105,542	-357,340	-251,798	105,542	0.82	0.87	0.05
Low-Income Program Total	**1,252,041**	**1,252,041**	**0**	**2,208,150**	**2,467,447**	**259,297**	**1,533,674**	**1,792,971**	**259,297**	**1.28**	**1.32**	**0.05**
DSM Product Development												
Energy Feedback Pilot	565,267	565,267	0	670,459	744,404	73,945	924,231	998,176	73,945	2.67	2.80	0.13
DSM Product Development Total	**565,267**	**565,267**	**0**	**670,459**	**744,404**	**73,945**	**924,231**	**998,176**	**73,945**	**2.67**	**2.80**	**0.13**
PORTFOLIO TOTAL	**111,546,375**	**110,413,934**	**-1,132,441**	**129,883,859**	**157,099,957**	**27,216,099**	**177,904,410**	**203,988,068**	**26,083,658**	**2.14**	**2.30**	**0.17**
PORTFOLIO TOTAL % Change			**-1.02%**			**20.95%**			**14.66%**			**7.80%**