



2014 Fourth Quarter Colorado DSM Roundtable Update

February 11, 2015

To comply with the 2009/2010 DSM Plan Stipulation and Settlement Agreement, Proceeding No. 08A-366EG, Decision No. R08-1243, Public Service Company of Colorado ("Public Service" or the "Company") provides the following update regarding product status including energy and demand savings achieved, product expenditures, implementation changes, and measurement and verification (M&V) modifications.

Product Implementation Status

Please refer to the attached table for the preliminary fourth quarter 2014 (cumulative Jan. 1 – Dec. 31, 2014) product energy and demand savings achieved, product expenditures, and CO₂ and SO₂ emissions avoided. In total, Demand-Side Management (DSM) electric products have achieved savings of 394.8 GWh and gas savings of 606,787 Dth in 2014. This represents approximately 102% of the 2014 electric DSM plan's energy savings target of 386 GWh and 97% of the gas target of 623,543 Dth.

The 2014 Commission-approved goal for the Company's DSM products is blended for calendar year given that the 2013 DSM Plan continued into 2014 through April 30. The 2013-2014 blend resulted in an electric savings goal of 375 GWh and natural gas savings goal of 558,465 Dth.¹ The Company achieved approximately 105% of the blended electric goal, and 109% of the blended gas goal in 2014.

The following section provides product status activities for the fourth quarter of 2014 in the Business, Residential, Low-Income, and Indirect Products, as well as other related activities.

Business Program

- **Commercial Refrigeration Efficiency** – In its first full calendar year as a DSM product offering, the product achieved 60% of its filed kWh target and 21% of its filed Dth target. The product realized nearly 2 GWh of electric savings during Q4-2014, and continues to build a strong project pipeline for the 2015 calendar year. Product expenditures were in line with savings.
- **Compressed Air Efficiency** – The product achieved over 0.8 GWh of electric savings in the fourth quarter of 2014. The strong pipeline of projects factored into the product's overall achievement of over 3 GWh of electric savings, exceeding targets for the 2014 calendar year.

Computer Efficiency – The Computer Efficiency product had a very strong year. The overall electric savings achievement was 178% of the product target. The success of the product can be attributed to the strong relationships that have been developed with PC manufacturers who participate in upstream component of the product. The Company provides incentives to PC manufacturers for selling energy-efficient power supplies to business customers in Xcel Energy's Colorado service territory. There have also been a few participants in the downstream program, which provides prescriptive rebates to customers for installing Virtual Desktop Infrastructure and

¹ Based on Recommended Decision No. R14-0389 which accepted the effect of the interim extension of the Company's 2013 DSM Plan on the energy savings goals and budgets during calendar year 2014, as described within the September 19, 2013 *Joint Statement of Clarification Regarding the Interim Extension of the Company's 2013 Electric and Natural Gas DSM Plan, Pending Consideration of the Company's Proposed 2014 DSM Plan* ("Joint Statement").

PC Power Management software. The Company worked to propel participation in these downstream prescriptive rebates in 2014.

- **Cooling Efficiency** – The product achieved 1.9 GWh of energy savings in the fourth quarter of 2014. The cooling bonus offered during the fourth quarter proved to be a success, yet the product did not meet its 2014 target; but will have a strong pipeline for 2015.
- **Custom Efficiency** – The product achieved 1.4 GWh of energy savings in the fourth quarter of 2014. However, the product did not achieve its year-end electric target, largely due to one large project that had been expected to close in 2014, but will not close until first quarter 2015. The products significantly exceeded its gas target for the year. The pipeline of projects is very strong for 2015.
- **Data Center Efficiency** – The product closed the year at 171% of its year-end energy savings target, achieving 12.6 GWh. The strong pipeline of projects and the influx of Electrically Commutated Fans and Flat-Plate Heat Exchangers, led to the success of the product. The Company is continuing outreach to design firms, and operations and facility teams, to provide a strong pipeline for 2015.
- **Energy Management Systems (EMS)** – In the fourth quarter, the product closed over 1.1 GWh of savings. The product achieved 8.3 GWh in 2014, exceeding targets. Product expenditures were in line with savings. A process evaluation was completed in 2014 with some of the findings and recommendations being integrated into the 2015/16 DSM Plan.
- **Heating Efficiency** – The product achieved 70% of its year-end natural gas savings target. As we entered the heating season, the Company continued to educate customers about the benefits of heating efficiency upgrades and best practices for selecting qualified contractors. Relevant information, via a school case study, was communicated to customers to help them better understand boiler replacement benefits. In addition, the semi-annual Heating Efficiency Board meeting was well attended and the content was well received.
- **Lighting Efficiency** – The product closed the year at 95% of the year-end energy savings target, achieving 71 GWh. The product launched a 30% rebate bonus on September 1st to assist in closing the known projects in the program pipeline which resulted in an additional 15 GWh of savings in 2014. The bonus rebate was offered through Dec 12, 2014 for all qualifying lighting projects, including prescriptive retrofit and new construction, custom lighting, and Small Business Lighting.
- **Motor & Drive Efficiency** – The product achieved 14.4 GWh of electric savings by the end of 2014, at 85% of the target. Product expenditures were 75% of budget. Achievement from small customers grew by 24% over the prior year, and small customers' proportion of the total achievement was twice that of the prior year. Fourth quarter marketing efforts focused on small businesses and office buildings.
- **New Construction** – The product achieved over 34 GWh of energy savings, exceeding electric and gas targets for 2014. The product continues to succeed due to pipeline building in previous years, a stronger economy, and opening the Energy Design Assistance offering to additional qualified energy consultants. The product helps building owners and developers prioritize energy efficiency by educating and marketing to architects, contractors, small and large businesses, and other interested stakeholders. The Company continues to work on building a solid pipeline of projects for future years.
- **Process Efficiency** – The product finished 2014 strong; achieving 117% of its year-end energy savings target. The product's success can be attributed to current participants moving into the

long-term planning phase of their implementation cycle and completing their priority projects that require higher capital costs and result in higher energy savings.

- **Recommissioning** – The product achieved 77% of its filed kWh target and 48% of its filed Dth target in 2014. Small Building Tune-Up was launched late, under the 2014 DSM Plan in May, leading to a lag in expected electric savings. With over one dozen Recommissioning studies and projects currently in progress, the Company continues to build a robust project pipeline for 2015. Electric expenditures were in line with savings. Natural gas Recommissioning study participation was far greater than anticipated for 2014, yet projects recommended based on study results did not materialize in 2014, leaving an imbalance between natural gas expenditures and savings.
- **Segment Efficiency** – Segment Efficiency continued to offer on-site assessments through the third-party implementer in Q4. The product waived the \$2,500 assessment fee through December 31, 2014 which generated 15 new assessments. The Company identified some errors with reported achievements in previous quarters and has updated the data to reflect those corrections, leaving the year-end achievement at 3% of the electric target and 0% of the natural gas target. The product is being discontinued, not having been included in the proposed 2015/16 DSM Plan.
- **Self-Directed Custom Efficiency** – The product closed short of its year-end electric savings target due to several large customers delaying project completions until 2015. The product is largely customer driven and achievement is dependent on both the participant's capital expenditure cycles and measurement and verification schedules.
- **Small Business Lighting** – The product closed in Q4 at 43% of the year-end target, closing nearly 23% of achievements in the last quarter. Those achievements are believed to be largely the result of a 30% rebate bonus that was introduced on September 1, 2014 to incentivize customers to close projects before the end of the year. To qualify for the bonus, projects needed to be installed and submitted to Xcel Energy by December 12, 2014.
- **Standard Offer** – As previously noted, the product was discontinued in 2013, is in a maintenance phase with final measurement and verification (M&V) of energy savings completed in 2014.

Residential Program

- **ENERGY STAR® New Homes (ESNH)** – The product was fully subscribed as of September 18, with 3,295 homes. Cumulative savings exceeded expectations as well, at 129% of the electric target and 102% of the natural gas target. The Company posted a 60-Day Notice on December 1 to implement changes designed to decrease the likelihood the product budget would be depleted prior to the end of the year. The changes proposed in the Notice were undertaken to ensure responsiveness to stakeholder concerns regarding a year-round ESNH offering, while maintaining product cost-effectiveness. Notice comments from stakeholders were received late December and resulted in the Company making further product adjustments, as explained in the Reponse to Comments. The Notice, including modifications adopted as result of stakeholder comments, was implemented January 29, 2015.
- **Evaporative Cooling Rebates** – This year wrapped up with a 30% customer rebate bonus (August 1 – November 30) which resulted in a noticeable lift at the end of the season. However, despite increased marketing efforts, year-end savings only hit 76% of the target. Several tactics continued such as mass awareness through sponsorships and retailer trainings and an end-of-year recognition retailer event, which did yield higher Western Slope participation.
- **Heating System Rebates** – The product exceeded its 2014 natural gas savings target while under-spending the natural gas budget. Over 3,200 residential customers took advantage of

high-efficiency furnace or boiler rebates, driving achievement of 114% of the natural gas savings target. To reduce overall product costs and encourage adoption of higher efficiency equipment, the Company phased out rebates of lower Annual Fuel Utilization Efficiency (AFUE) rated furnaces and began requiring registered HVAC contractors to acquire NATE Gas Heating technician certification – per a settlement with 2014 DSM Plan stakeholders. Effective May 1, the Company added Electronically Commutated Motor (ECM) rebates, which offer significant electric savings compared to traditional furnace blower motors. In part due to mid-year introduction, the product did not meet its electric participation or savings targets for 2014. The Company concluded bonus residential Heating System Rebates to encourage 2013 flood victims—who qualified for Individual FEMA Assistance—to re-build with energy-efficient equipment. Since launching in Q4-2013, 233 residential homeowners – mainly in Boulder County – received bonus rebates designed to cover 100% of the incremental cost of installing an energy-efficient furnace or boiler over a standard efficiency unit.

- **High Efficiency Air Conditioning** – The product exceeded the 2014 energy savings target by 123%. Relationships with participating A/C contractors remain strong, with 141 contractors participating during the year. The product did exceed the budget due to additional customer rebates and trade partner incentives which led to the increased energy savings.
- **Home Lighting & Recycling** – The product surpassed its year-end energy savings target significantly, selling 4.3 million energy efficient bulbs. That was approximately 1.2 million bulbs above the forecast. CFLs continue to make up the majority of the sales, accounting for 86% of the total product mix. Although LED bulbs only accounted for 14% of the product mix, the participation of that measure has increased nearly seven-fold since 2013. Many customers are choosing to purchase LED flood lights over CFLs. In addition, some manufacturers have discontinued production of CFL flood lights because LED products perform much better and the price differential is minimal.
- **Home Performance with ENERGY STAR® (HPwES)** – The product ended the year with 374,182 kWh and 15,218 Dth, achieving 127% and 180%, respectively, over targeted achievements. The overall success can be attributed to deeper retrofits per home both in electric savings and natural gas savings. Additionally, a strong pipeline of projects continues.
- **Insulation Rebate** – The product has completed year-end short of both the electric and natural gas targets. The Company implemented a promotional rebate of \$500 that started on Dec 1 and will continue through March 31, 2015 for the heating season to increase overall participation and begin 2015 with a strong pipeline. In addition to the increased rebate, the product is bundling messaging with the Heating Efficiency product to target customers through email and direct mail efforts.
- **Refrigerator Recycling** – The product exceeded its year-end electric target and recycled over 7,689 units, for 4.7 GWh of energy savings. Success was due to consistent marketing and promotions, which included an increase in rebate, Broncos ticket give-a-ways, and a tablet sweepstakes.
- **School Education Kits** – The product exceeded its 2014 electric savings and natural gas savings targets with the distribution of 38,691 kits. The kits were updated in 2014 to include an LED bulb, a high-efficiency showerhead, and two low-flow aerators (bathroom and kitchen). The product achieved 104% of the electric savings target and 110% of the natural gas savings target. The success was driven by continued focus on installation of the provided measures. The product was able to exceed targets while remaining under budget.
- **Showerheads** – The Company launched its 2014 campaign in June. By year-end, the product had achieved more than double its natural gas savings target. The third-party implementer's

experience in sourcing energy-efficient products for consumers, offering online ordering systems, and ensuring competitive pricing has supported the product's strong achievements.

- **Water Heating Rebate** – The product's electric achievement was almost double its year-end savings target, at 148,757 kWh. Natural gas savings for the product also exceeded the year-end target with 6,439 Dth. Education for electric heat pump retailers as well as awareness tactics continued with in-store branded collateral and coordination with manufacturers to train retail associates. Additionally, targeted emails were sent to educate customers on the generous electric rebate with a specific “engager” strategy, which specifically sent emails to those who expressed interest in water heater rebates in the past.
- **Saver's Switch®** – The Company finished 2014 with slightly more than 10,000 new switches deployed at customer premises. Throughout the year, the recruiting environment was challenging. The Company also witnessed a high rate of customers signing up for the program but not having a switch installed due to either changing their minds, having ineligible equipment, or having A/Cs that were not up to code.
- **Pool Pumps** – The product closed December 31 following the 90-Day Notice posted in Q3 (implemented October 22). Year-end pool pump sales were 106 units, only 8% of the target. A final marketing communication was mailed to targeted customers in October, informing them that the program would not be available in 2015 and encouraging them to participate while the rebate was still available. Participating partners were also notified of the product closing in writing, and during face-to-face visits by the third-party implementer.

Low-Income Program

- **Energy Savings Kits** – The product did not meet the participation or energy savings targets for 2014. The list of income-qualified customers was smaller than originally anticipated. Kits were distributed to 5,429 electric customers and 7,787 natural gas customers. The majority of these customers are combo customers (electric and gas). While the electric and natural gas savings were below target, installation rates of the provided measures increased in 2014. The product was under budget for both electric and natural gas.
- **Multi-Family Weatherization** – In 2014, Energy Outreach Colorado (EOC) completed 31 low-income multi-family projects containing electric measures and 14 projects containing natural gas measures. The product exceeded electric and natural gas savings targets, increasing expenditures above budget by a similar level. EOC partnered with Mile High Youth Corps and local contractors to install thousands of energy-efficient lamps and low-water-flow fixtures in several Colorado Coalition for the Homeless multifamily facilities, contributing to both electricity and natural gas product savings.
- **Non-Profit Energy Efficiency** – In 2014, EOC completed 33 low-income non-profit projects containing electric measures and 26 projects containing natural gas measures. Although the product exceeded its filed participant target in 2014, the product fell short of its electric and natural gas savings targets due to lower average savings per facility. EOC partnered with local contractors to retrofit and upgrade equipment and processes for Colorado non-profit organizations, including Volunteers of America, Goodwill, Planned Parenthood, Salvation Army, and several other shelters and crisis centers, contributing to the products 2014 energy savings.
- **Single-Family Weatherization** – The Colorado Energy Office (CEO) and Energy Outreach Colorado (EOC) are continuing to work together to administer the product, identify eligible customers, and ensure that new equipment meets energy efficiency standards to qualify for an incentive. During Q4, the implementers focused on identifying and completing natural gas and

electric projects. At year-end, while the energy savings targets were just shy of being met at 83% for electric and 87% for natural gas.

Indirect Program

- **Business Energy Analysis** – The product 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. The program had a successful 2014, with 165 electric participants and 126 gas participants in 2014. The program realized a nearly 100% increase in participation from 2013. More importantly, the program identified nearly 9.5 GWh and over 10,000 Dth of energy conservation opportunities (ECOs). Expenditures were in line with participation.
- **Community Energy Efficiency Planning Pilot** – The pilot has successfully concluded at the end of 2014. The overall program, which involved both the planning and implementation of energy efficiency strategies, was deemed a success by both the Company and the participating cities (Salida, Grand Junction, Lafayette and Aurora). The implementation of DSM strategies will continue beyond the pilot and is a testament to the communities' commitments to leverage the momentum created through the program. Residential, business and public sector strategies have been implemented in the communities and the Company continues to anticipate a lift in participation in DSM products such as Small Business Lighting, Commercial Cooling, Heating Efficiency, Evaporative Cooling and Home Lighting and Recycling. A report detailing the pilot findings is forthcoming.
- **Consumer Education Business** – In the fourth quarter of 2014, the Business Education program ended the year with 2,333 participants, 461 program leads, and provided outreach through 39 event/outreach days. Participation and outreach through key community and trade association events continue to create a meaningful conversation with customers. In addition, the program has been supported through energy efficiency messaging via the Energy Solutions newsletter, as well as a mass marketing print, online advertising, and social media campaign. The combination of these initiatives continues to support DSM goals.
- **Consumer Education Residential** – In the fourth quarter of 2014, Consumer Education achieved 118% of the year-end participation target (68,000 participants). Participation and outreach through key community events continues to create a meaningful conversation with customers. By year-end, the Company provided outreach through 148 community-based event/outreach days. In addition, the program has been supported through conservation messaging in residential newsletters and web based channels. The combination of these initiatives continues to support DSM goals.
- **Energy Efficiency Financing** – The Company continues to work with established alliances to continue outreach, marketing, and education about financing options to remove the up-front capital barrier for upgrading to energy-efficient equipment. This includes outreach to commercial and residential customers with projects that have not yet been completed and working to integrate financing education into study based programs to provide participating customers with financing information in their assessment reports.
- **Residential Home Energy Audit** – The product ended with over 2,348 electric and 2,641 natural gas participants. The Home Energy Audit program launched an Energy Advising component in the program in 2014, with its purpose to support the DSM portfolio and drive conversions from audit to retrofit. The Energy Advising team, led by a third-party implementer, has exceeded its target goal for enrollment and conversions, with over 52% of those enrolled having participated in a program. The participation has led to over 76,000 kWh and 19,000 therms of energy savings in 2014, through various programs such as Home Performance with ENERGY STAR, Insulation,

and Evaporative Cooling. Advising has also led to complementary program sign-ups such as Savers Switch, and has received great feedback from customers on the service it provides.

- **DSM Planning & Administration** – During the fourth quarter of 2014, the Company posted several 60-Day Notices and began dialogue with intervening parties within the 2015/2016 DSM Plan Proceeding, and responded to several Discovery requests.
- **Program Evaluations** – Two process-only evaluations were completed in 2014: Multi-Family Weatherization (Low-Income) and Energy Management Systems (Business). Research included internal staff interviews, customer and trade ally surveys, and discussions with peer utilities with similar programs. Final reports for these evaluations will be posted on the Company's DSM website. Additionally, the first phase of a multi-year evaluation for the Energy Efficiency Financing offering was completed. The focus of the first year of the study was on process issues, most notably lender and trade partner marketing; the impact portion of the evaluation is scheduled for 2016.
- **Measurement & Verification** – The Company's third-party verification contractor, Nexant, has completed random field inspections for prescriptive products. The resulting data will be utilized for the 2014 DSM Annual Status Report.
- **DSM Market Research** – Xcel Energy continues to utilize memberships and subscription services to maximize our ability to reach targeted customer segments and increase Company awareness of best practices. Of note, ad tracking research helps ensure effective energy efficiency messages that are reaching customers. Additionally, the 2014 Business Attitudes, Awareness, and Usage (AAU) study was completed. This study focuses on DSM program AAU with both participating and non-participating customers.
- **DSM Product Development** – During the fourth quarter of 2014, the Company finalized inputs for new products and measures for the 2015/2016 DSM Plan and 60-Day Notices.

The following products were included in the 2015/16 DSM Plan during Q4:

- Midstream LEDs – Current product model is downstream; evaluating for move to upstream (distributor level).
- Energy Management Information Systems – Create an offering for customers greater than 500kW to drive DSM impact with energy usage data analytics.
- Western Cooling Control Device – Retrofit control device for older A/C units to continue fan operation after condensing units shuts off, recovering wasted space conditioning energy.
- Process Efficiency (PE) for Medium-Sized Businesses (MB) – Develop a cost-effective approach for delivering the Process Efficiency program to smaller customers.
- LED Area Lighting – New outdoor area lighting measures such as parking lot lights and customer-owned streetlights for the Lighting Efficiency product.
- Direct Install for Small Business Lighting – Create an offering to engage small- and medium-sized business customers by offering direct install measures.
- Upstream Strategy and DOE RTU Challenge – Evaluate an upstream approach to the HVAC market including incentives to offer units that meet the DOE RTU Challenge.
- Home Energy Squad – Product offers installation services and discounted equipment costs to customers. The Company seeks to expand the market for Home Energy Squad based on a successful track record implementing the product in other jurisdictions. The Home Energy Squad product installs a number of moderate-impact, low-cost measures for combination gas and electric, and electric-only, customers.

A 60 Day Notice was posted in Q4 describing the evaluation of Ground Source Heat Pumps (GSHPs).

- **Energy Feedback Pilot** – Electricity savings in Q4-2014 continued an upward trend for the participants currently receiving paper and electronic Home Energy Reports. A refill of approximately 10,500 customers was added in Q3 to offset natural attrition that occurred over the year and the first savings measurement was done for this group in December. This new group is showing an average of 0.76% electricity savings and 1.2% natural gas savings so far. The pilot's electric savings reached 96% of the filed target and 65% of the natural gas target.

The Online Feedback measure was implemented during Q2-2014. Three email messages and one on-bill message have been released, promoting the My Energy tools. Due to the level of current log-ins to the My Energy portal, savings cannot be measured at this time as the treatment and control groups are too small. However, the third-party evaluator will evaluate savings with an alternative methodology called "time of adoption." Any identified savings may be included in the 2014 Status Report.

- **Business Energy Feedback Pilot** – This pilot was launched in Q2 and four reports were delivered to 10,000 small business customers in 2014. The first savings measurement was completed in November for electricity savings of only 28% of the year-end target. No measurement of natural gas savings was made in 2014. As the pilot started in July, the relatively low gas usage during the summer and fall caused too much variation in the treatment vs. control analysis to yield a reliable savings measurement at this time.
- **In-Home Smart Device Pilot** – The final report was posted to the Company's website in Q1: <http://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/CO-DSM/CO-2014-IHSD-Pilot-Evaluation.pdf>.
- **Electric Vehicle Charging Station Pilot** – The pilot was completed at the end of 2014 and the daily interval data has been analyzed to determine customer load shapes and system peak load impact. A pilot participant satisfaction survey was implemented along with a general survey of electric vehicle owners. The results of these surveys will be included in the report, which is expected to be complete by the start of Q2-2015.
- **Multifamily Building Pilot** – The Company is in the process of developing a request for information (RFI) to be followed by a request for proposal (RFP) for the Multifamily Buildings Pilot implementation support services. The Company anticipates releasing the RFI in February 2015, followed by release of a competitive RFP in late Q1-2015, in preparation for launch of customer-facing activity in Q2-2015.
- **Smart Thermostats Pilot** – The Company is in the process of negotiating contracts with multiple smart thermostat manufacturers and putting in place operational processes to support the pilot and its participants. The Company is also drafting a Statement of Work for a demand response provider and will be requesting proposals from participating smart thermostat manufacturers, in conjunction with contract negotiations, in Q1-2015. Separately, the Company anticipates an RFP or Request for Quote (RFQ) for the M&V provider to be released in March 2015. The Company anticipates launch of customer-facing pilot activity during Q1-2015 or early Q2-2015.