



## 2014 Third Quarter Colorado DSM Roundtable Update

November 5, 2014

To comply with the 2012/2013 DSM Plan Stipulation and Settlement Agreement, Docket No. 11A-631EG, Decision No. R11-1326, 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 third quarter 2014 (cumulative Jan 1 – September 30, 2014) product energy and demand savings achieved, product expenditures, and CO<sub>2</sub> and SO<sub>2</sub> emissions avoided. In total, Demand-Side Management (DSM) electric products have achieved savings of 247.5 GWh and gas savings of 327,487 Dth by September 30, 2014. This represents approximately 64% of the 2014 electric DSM plan's energy savings target of 386 GWh and 53% of the gas target of 623,543 Dth. The 2014 third quarter results are fairly on-target with expectations, but lower than electric savings achieved in Q3 of 2013.

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.<sup>1</sup> The Company has achieved approximately 66% of the blended electric goal, and 59% of the blended gas goal by September 30, 2014.

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

### Business Program

- **Commercial Refrigeration Efficiency** – The product is continuing its success into Q3-2014, realizing over 3.5 GWh of savings to date. Marketing efforts continue to focus on education of both the trade and customers. The product continues to build the project pipeline.
- **Compressed Air Efficiency** – The product has nearly reached its year-end target as of Q3, at 96% of electric energy savings. The third quarter was particularly strong for completed custom compressed air projects, which supported these product achievements.
- **Computer Efficiency** – The Computer Efficiency product has surpassed the filed goal; achieving 155% of its year-end target as of the third quarter of 2014. It is expected that achievement will continue to rise through the end of 2014. The upstream program provides incentives to PC manufacturers for selling energy efficient power supplies to business customers in Xcel Energy's Colorado electric 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 PC Power Management software.

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<sup>1</sup> 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").

- **Cooling Efficiency** – The product achieved 0.631 GWh of energy savings in the third quarter of 2014. The product has a strong pipeline of cooling projects for the year. A cooling bonus of up to 20% is now available through December 15.
- **Custom Efficiency** – The product achieved .379 GWh energy savings in the third quarter of 2014. The pipeline of projects is very strong for the year and the product is expected to achieve its goal.
- **Data Center Efficiency** – The Company continued to outreach to local design and engineering firms to discuss the Data Center product and rebates to help build pipeline for future years. In the third quarter the product has reached 125% of goal, achieving over 9.2 GWh in savings. Through year end, the product management team will be hosting additional trainings and also attend the AFCOM Symposium to present on available product rebates.
- **Energy Management Systems (EMS)** – In the third quarter, the product has reached 97% of the filed goal, achieving over 7.1 GWh in savings. With a few monitored projects likely to be completed by year-end, the Company anticipates that the product will reach the year-end target. Additionally, a success story was developed and published on the 1670 Broadway EMS project. The Company has seen an increase in projects in the pipeline as compared to the previous year.
- **Heating Efficiency** – The product achieved 9,745 Dth of natural gas savings through the third quarter of 2014. Several communications efforts were implemented this quarter such as trade communications to help customers gear up for heating season and a presentation to Account Managers who support large managed accounts. These efforts center on continuing to educate customers about the benefits of heating efficiency upgrades and best practices for selecting qualified contractors.
- **Lighting Efficiency** – The product closed third quarter at 47 percent of the year-end target. The product is underperforming this year due to a lack of LED adoption in the marketplace and customers holding off on implementing projects. Out of the total rebate dollars spent, 47 percent have been rebated for LED technology, indicating that fluorescent and sensors are still make up a majority of the rebates. The product launched a 30 percent rebate bonus to assist in closing the known outstanding projects in the pipeline which total 20 Net Gen. GWh. The bonus rebate is available September 1 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 2.9 GWh of energy savings during the quarter. Year-to-date, the achievement of 12.0 GWh is 71% of its year-end target. Cost-effectiveness remained positive, as indicated by a year-to-date spend that is only 60% of budget. In the fourth quarter, the Company will wrap-up a media campaign that focuses on office building ventilation, and will consider offering a winter bonus for new opportunities.
- **New Construction** – The product achieved over 7 GWh of energy savings in the third quarter. With several projects moved into the fourth quarter, the product anticipates exceeding energy savings 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 seven 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 exceeded its filed 2014 target in the third quarter and achieved 114% of the year-end energy savings target. This achievement is reflective of the product's long sales cycle with current customers completing previous identified projects.

Although several small projects are still forecasted to close by year-end, marketing efforts have shifted from closing identified projects to encouraging new customers to participate in the product.

- **Recommissioning** – The product is continuing its success into Q3-2014, realizing over 2.5 GWh of energy savings year-to-date. Marketing efforts continue to focus on education of both trade partners and customers. With over a dozen recommissioning studies currently in progress, and many large projects nearing the implementation stage, the product continues to build a robust project pipeline for the remainder of 2014. The Small Building Tune-Up element of the product began implementation on May 1 and is now available to customers; efforts continue to focus on education of both internal and external stakeholders.
- **Segment Efficiency** – Segment Efficiency continues to offer on-site assessments. The Company continues to work in partnership with third-party implementers. The product is waiving the \$2,500 assessment fee until December 31, 2014. Performance continues to be well below forecasted achievements.
- **Self-Directed Custom Efficiency** – The product is anticipated to fall slightly short of its year-end energy savings target due to projects being delayed until next year. Previous marketing efforts designed to increase the future pipeline have resulted in several new projects coming into the queue.
- **Small Business Lighting** – The product is struggling, similarly to Lighting Efficiency, at 16% of the year-end target at the end of Q3. The majority of the savings are achieved through high-bay fluorescent optimization options for reducing the number of lamps in a fixture and through the custom lighting projects. The Company has not seen the market adopt LEDs as readily as hoped. A 30% bonus was introduced on September 1, 2014 to provide an added incentive for business customers to install new high-efficiency lighting systems this year.
- **Standard Offer** – As previously noted, the product was discontinued in 2013, is in a maintenance phase with the measurement and verification (M&V) of energy savings continuing through 2014. A small amount of energy savings is anticipated to result from a few projects still undergoing required M&V.

### **Residential Program**

- **ENERGY STAR® New Homes (ESNH)** – The product was fully subscribed as of September 18, 2014 and enrollments ceased at that time. All participants were notified of this action. Approximately 400 homes were submitted for the September period and the third-party implementer is reviewing those to determine if all information is complete (based on initial review, all of these homes are likely to qualify for a rebate), which will bring total year-end participation to 3,295 homes. Year-end gas savings are forecasted at 99,000 Dth or 104% of goal. Changes to the product design were included in the 2015/2016 DSM Plan to support planning for a year-round product offering and improve overall product cost-effectiveness.
- **Evaporative Cooling Rebates** – The cool summer presented a challenge for gaining participation, with customers initiating installs at rates below historical levels, despite increased marketing over years past. The prime cooling months of the third quarter did help achieve 2.6 GWh, or 68% of the year-end electric savings target. Many marketing tactics continued such as retailer trainings, radio advertising, contractor emails, residential bill inserts, print advertising, interactive, retail store events and co-branded manufacturer outdoor billboards. The Western Slope was also aggressively targeted to yield higher kWh achievement through contractor and retail store training and events. A Broncos sponsorship was leveraged to recognize high contractor performance and engaged residential mass media consumers. Tactics included radio remote ticket sweepstake events at various retail locations, emails to season ticket holders, print

advertising, on site stadium activation events, and video monitor advertising. The program launched a 30% bonus rebate on August 1 (until November 30, 2014) to further incentivize customers before the heating season. A mid-summer telemarketing campaign was also initiated to educate customers on the benefits of evaporative cooling technology and promote the bonus directly.

- **Heating System Rebates** – Through the third quarter of 2014, the product delivered 33,800 Net Dth savings—88% of the 2014 year-end natural gas target. Electronically Commutated Motors (ECMs) for furnace fans were added as an electric measure in the product as of May 1, 2014, and over 800 ECM units were rebated by the end of the quarter, representing 33% of the annual energy savings goal. The deadline for trade partners and customers to turn in 2013 paperwork was July 31, 2014, and that deadline drove a sense of urgency for customers that yielded associated energy savings.
- **High Efficiency Air Conditioning** – The product has achieved 104% of its year-end energy savings target through the third quarter. The Company filed a 60-Day Notice to add rebates for the Western Cooling Control device to the product, as of August 29, 2014. M&V inspections for the 2014 program year began during the third quarter.
- **Home Lighting & Recycling** – The product has achieved its year-end energy savings target, but will continue to offer incentives on CFLs and LEDs through the end of the year. PSCO is promoting the product through television, radio and online advertising. The advertising will focus on a combination of CFLs and LEDs (beginning in 2015, LEDs will be weighted more heavily in the advertising mix). LEDs currently make up 12% of the product mix. The mix of LED A-line versus specialty bulbs is very different than that of CFLs. The LED mix is 53% A-line and 47% specialty. The CFL mix is 88% A-line and 12% specialty. This is an indication that LED products are cannibalizing CFL specialty products. Because LED products are much better quality, customers appear to be making the change to LEDs rather than trying CFL specialty products.
- **Home Performance with ENERGY STAR® (HPwES)** – Through the third quarter, the product continues to have a strong pipeline of electric savings with over 0.25 Net Gen. GWh, and has achieved its year-end natural gas savings target with 13,116 Net Dth. As part of the 2013 HPwES comprehensive product evaluation, the Company evaluated increasing electric savings through partnering with HVAC trade partners. The Company recently invited our HPwES and Home Energy Auditors, as well as HVAC trade partners to a combined training, with a guest speaker that focused on a “whole house” approach.
- **Insulation Rebate** – The product has completed the third quarter with 12,868 Net Dth and 105,969 Net kWh in energy savings. Contingency plans to increase participation and awareness of the program with non-participating contractors are being planned for later in the year.
- **Refrigerator Recycling** – At the end of Q3, the Company had recycled over 4,633 units, for 2.9 GWh of energy savings, or 70% of the filed year-end target. Additional marketing efforts are planned for fall and include email blasts, social media, targeted mailers and print ads.
- **School Education Kits** – The Company launched the second wave of kit distribution to teachers and students during the third quarter, with 14,742 kits being sent. The remaining kits will be distributed during the fourth quarter, with final installation rates available in December.
- **Showerheads** – The Company launched its 2014 campaign in June. The product, which has added kitchen and bath aerators, is hoping to reach 24,165 Dth and 579,393 kWh of energy savings by year-end.
- **Water Heating Rebate** – The product has achieved 159% of its year-end electric savings target by Q3 and achieved a savings of 121,366 kWh. Natural gas savings for the product has also

exceeded the year-end target in Q3 at 136%, with 5,181 Dth. Electric heat pump education and awareness tactics have continued with in-store branded collateral and coordination with manufacturers to train retail associates. Additionally, targeted emails have been sent to educate customers on the generous electric rebate.

- **Saver's Switch®** – As of the third quarter, approximately 8,000 new Saver's Switches have been deployed at customer premises. The Company is experiencing high volumes of sign-up cancellations (customer changing their minds, having ineligible equipment, etc). Currently, the Company has about 3,000 signup requests being processed. Additional marketing activities are being planned for the fourth quarter.
- **Pool Pumps** – Sales through Q3 included 74 pumps, however, overall sales are far below the forecast and what is required to sustain a cost-effective product offering. After internal review and work with the third-party implementer, the Company made the decision to post a 90-day Notice with the intent to close the product on December 31, 2014. The product closing plan is being executed in Q4.

### **Low-Income Program**

- **Energy Savings Kits** – The Company sent the first offer for the 2014 plan-year during the third quarter, to 24,500 eligible customers. The first offer received 5,630 responses from customers, a 23% response rate. A second offer will be sent to eligible customers during Q4 to generate additional participation.
- **Multi-Family Weatherization** – Public Service continues to partner with Energy Outreach Colorado (EOC) to help fund equipment retrofits and process improvements for electric and natural gas energy efficiency measures in low-income, multi-family buildings. Four multi-family opportunities were logged, and by the end of the third quarter of 2014, the product had achieved 13% of its electric and 9% of its natural gas savings goals. EOC has identified, and the Company has analyzed, twelve multi-family projects so far in 2014, with more proposals yet to be evaluated in order to strive towards achieving year-end energy savings targets.
- **Non-Profit Energy Efficiency** – Through the end of the third quarter of 2014, EOC had identified, and the Company analyzed, over 20 non-profit energy efficiency projects. Five projects with energy savings were committed, and the program's electric and gas DSM pipeline continues to be filled with additional non-profit facility opportunities, many of which will close and contribute to year-end 2014 savings goals.
- **Single-Family Weatherization** – The Colorado Energy Office (CEO) and 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 Q3, efforts were focused on community outreach and partnerships with local non-profits and organizations that serve this sector. At the end of this quarter, the Company has provided over \$1 million in gas and electric rebates.

### **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 product is continuing its success into Q3-2014, with 138 participants (which is more participation than in all of 2013). Marketing efforts continue to focus on customer education. The product

continues to build a robust project pipeline for the remainder of 2014, largely as the result of March/April email campaigns, June/July bill insert campaigns, and September/October direct mail campaigns. For the first time in the product's history, the Company is actively tracking identified energy conservation opportunities (ECOs) to encourage implementation and participation in the Company's other DSM products; in 2014, the product has identified nearly 8.5 GWh of potential ECOs.

- **Community Energy Efficiency Planning Pilot** – The pilot has successfully concluded its support for implementation of energy efficiency strategies with the cities of Salida, Grand Junction, and Lafayette; however, a couple of communities continue to implement strategies beyond the direct Company support timeframe as a testament to their commitments to energy efficiency and the pilot. Both residential and business strategies have been implemented and the Company anticipates seeing a lift in participation in DSM products such as Small Business Lighting, Commercial Cooling, Heating Efficiency, and Home Lighting & Recycling. Energy planning workshops with Aurora are complete and the three subcommittees which worked on the energy plan have transitioned to implement strategies that include and support residential, business and public sector institutions (such as City of Aurora buildings, Aurora Public Schools, and Aurora Mental Health).
- **Consumer Education Business** – In the third quarter of 2014, the Business Education program delivered 2,357 interactions and provided outreach through six 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 the participation goal.
- **Consumer Education Residential** – In the third quarter of 2014, Consumer Education achieved 111% of the participation targets (75,693 participants). Participation and outreach through key community events continues to create a meaningful conversation with customers. To date, the Company has provided outreach through 123 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 participation 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 continues to be successful with over 1,928 electric and 1,731 natural gas participants. The Company launched an energy advising component on April 1, and since has collected over 368 participants, of the 500 targeted goal. Additionally, of those participants, over 35 percent have engaged in another program, which has led to over 30,000 Net Gen. kWh and 8,000 Dth of energy savings.
- **DSM Planning & Administration** – During the third quarter of 2014, the Company posted several 60-Day Notices and continued development of the 2015/2016 DSM Plan and accompanying testimony.
- **Program Evaluations** – Two process-only evaluations are wrapping up for 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 are expected by year end. A multi-year evaluation of the Energy Efficiency Financing offering is also currently under way. The focus of this study in the first year is on process issues, most notably lender and trade partner marketing; the impact portion of the evaluation is currently scheduled for 2016.

- **Measurement & Verification** – The Company’s third-party verification contractor, Nexant, has been conducting random field inspections for prescriptive products. Results so far are good with no major deviations from reported savings.
- **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, advertising tracking research helps ensure effective energy efficiency messages are reaching customers. Additionally, the 2014 Business Attitudes, Awareness, and Usage (AAU) study is currently underway and slated to be completed by year end. This study focuses on DSM program AAU with both participating and nonparticipating customers.
- **DSM Product Development** – During the third quarter of 2014, the Company continued development and analysis of new products and measures for the 2015/2016 DSM Plan, and for 60-Day Notices.

The following products were in the Development step (Stage 4) of the product development process during Q3:

- 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.

The following products were evaluated during Q3, but failed cost effectiveness tests:

- Residential Custom Efficiency – Provide a cost-effective path for evaluating emerging technologies similar to the approach used in the Custom Efficiency (Business) product.
  - Ground Source Heat Pumps (GSHPs) – Evaluate whether adding a separate high-efficiency GSHP product would be cost-effective.
- **Energy Feedback Pilot** – Electricity savings in Q3-2014 continued an upward trend for the 89,872 participants currently receiving paper and electronic Home Energy Reports. Natural gas savings were at similar levels to past years, as expected during the summer season. The latest year-end forecast predicts achievement near filed energy savings targets for electric, but lower

than filed targets for natural gas. Efforts to mitigate this include a door hanger promotion in September as well as a refill of 10,500 participants.

The Online Feedback measure was implemented during Q2-2014. Two email messages and one bill Onsert have been released, promoting the My Energy tools. Due to the late start, the measure may not contribute to year-end achievements. Efforts will be made by year-end to measure savings from the Treatment Group.

- **Business Energy Feedback Pilot** – This pilot was launched in Q2 and three reports have been delivered to 10,000 small business customers in Q3. Efforts will be made by year-end to measure savings from the Treatment Group.
- **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>. No further pilot expenditures or updates are anticipated for the remainder of 2014.
- **Electric Vehicle Charging Station Pilot** – The pilot continues with daily usage data still being recorded for Phase 1 and 2 participants. Daily interval data will be analyzed by Q4 to determine customer load shapes and system peak load impact. Third quarter activities focused on holding summer control events. The effort to contract with OnStar for Phase 3 was disbanded due to the inability to include language in the agreement that would protect the Company from issues with OnStar's system.
- **Multifamily Building Pilot** – This pilot was launched in early September, after no comments were received on the 60-Day Notice. The Company has begun implementation efforts including drafting the RFP for implementation services and establishing internal accounting for the pilot. The Company expects to release the RFP and have an implementer selected by the end of Q4.
- **Smart Thermostats Pilot** – This pilot was launched in early September, after no comments were received on the 60-Day Notice. The Company has begun implementation efforts including contract negotiations with potential manufacturer partners and service providers, drafting the RFP for demand response services, and establishing internal accounting for the pilot. The Company expects to have qualifying products and partnering manufacturers selected, and the RFP for demand response released by the end of Q4.