



## 2013 Third Quarter Colorado DSM Roundtable Update November 13, 2013

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 2013 (through September 30, 2013) 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 277.8 GWh and gas savings of 295,679 Dth by September 30, 2013. This represents approximately 78% of the 2013 electric DSM plan's energy savings target of 356 GWh and 69% of the gas goal of 428,310 Dth. The Commission adopted the 2013 goals for our DSM products in Decision No. R11-1326 issued in Docket No. 11A-631EG

The following section provides product status activities for the third quarter 2013 in the Business, Residential, Low-Income, and Planning & Research Products, as well as other related activities.

### **Business Program**

- **Commercial Refrigeration Efficiency** – The Company launched a new Commercial Refrigeration Efficiency Product via 60-Day Notice, effective July 18, 2013. Initial marketing efforts have included trade partner education and customer outreach. The product has not seen any savings committed yet, but is forecasted to contribute 2 GWh to the portfolio by year-end.
- **Compressed Air Efficiency** – Year-to-date, the Compressed Air Efficiency product has achieved 2.2 GWh, or 55% of the year-end goal. That achievement is nearly double the achievement of the product during the same period in 2012. In the third quarter five studies were completed and eighteen more are either approved or in-process. The Company is continuing efforts to keep trade partners interested in the Denver metro market. A comprehensive evaluation of the program is also underway, and preliminary findings have been positive.
- **Computer Efficiency** – The Computer Efficiency product achieved 8.893 GWh of energy savings in the third quarter of 2013. The product is forecasted to have a solid year, despite turmoil in the personal computer industry. The tablet computer has not gained significant traction in the commercial and industrial marketplace and, thus, is not significantly affecting PC sales to commercial customers, leading to the continued success of these upstream measures. One manufacturer that participates in the upstream program has started selling the first Platinum level products. This will be the first Platinum level incentive that the Company has received since introducing it into the market a year-and-a-half ago. Another manufacturer that participates in the program is likely to follow this trend in the coming months.
- **Cooling Efficiency** – The program achieved an additional 1.530 GWh of net electric energy savings in the third quarter. The pipeline remains strong for the year and the program is expected to meet the year-end goal. Direct Evaporative Pre-Cooling continues to generate a great deal of interest among trade partners. Nearly 10,000 tons of DEPACC projects have been identified and are expected to close in 2014.

- **Custom Efficiency** – The program achieved .386 GWh of net electric energy savings and 690 Dth in gas savings in the third quarter. Several projects are in the final stages of review.
- **Data Center Efficiency** – The program has achieved 6.2 GWh of energy savings, all of which was part of multi-year sales cycles. Within the third quarter, the Company completed a multi-quarter effort to encourage three large data centers to participate in studies. Those studies will be completed in the fourth quarter.
- **Energy Management Systems (EMS)** – The product has achieved 5.2 GWh, or 55% of its year-end electric goal. Customers have postponed several approved projects until 2014. The market is continuing a shift toward smaller projects; with 30 of 43 projects resulting in less than 0.1 GWh of qualifying impacts. Therefore, the Company is projecting only a 6.4 GWh (68%) achievement of the year-end electric goal. The Company has continued customer site visits and education of trade partners; and has also invested effort in two multiple-GWh projects expected to close in 2015.

The gas portion of the program has exceeded the year-end goal and has achieved 3,940 Dth. Within the third quarter, the Company closed the first gas-only project of the year. Year-end achievement is anticipated to result in 4,600 Dth, or 155% of the goal.

- **Heating Efficiency** – The Heating Efficiency product had 103 participants in the third quarter of 2013 and achieved gas savings of 10,625 Dth, representing 34% of the product's year-end goal. The product is anticipated to finish below the year-end goal, though an increase in participation is anticipated in fourth quarter. A Heating Advisory Board session is being planned for fourth quarter; and technical education for contractors continues.
- **Lighting Efficiency** – Lighting Efficiency finished the third quarter at 98% of the year-end kWh goal. The early year savings are attributed to the lapse of the 2012 T12 retrofit application deadline mid-second quarter (May 1, 2013), in which all 2012 projects had to be submitted for rebate. After May 1, the product has continued to see a steady increase in customer rebates for LED products. The Company is researching and evaluating a midstream LED screw-in incentive and LED troffer rebates. The Company is broaching the idea with Colorado stakeholders and manufactures, and analyzing existing utility C&I midstream lamp programs.
- **Motor & Drive Efficiency** – To date, the product has achieved nearly 26 GWh of customer savings, which yielded 17.8 GWh in Net Gen savings. The Company anticipates that the program will finish the year at 87% of its goal. The small EC Motors within refrigeration continue to yield approximately 5% of the program's impacts. The Company is continuing a media campaign which is designed to increase awareness about VFDs within HVAC systems. Several participants have mentioned the radio and print ads, and the campaign has had a measurable effect on the market awareness of "HVAC rebates," overcoming the barrier of not having any programs with "HVAC" in their title.
- **New Construction** – Commercial New Construction has over 50 new project starts, creating a solid project pipeline for future years. With seven additional vendors qualified to provide energy modeling services for the Energy Design Assistance Program, the Company anticipates an increase in projects to further build a solid pipeline. The program continues to help building owners and developers prioritize energy efficiency by educating and marketing to architects, contractors, small and large businesses, and other interested stakeholders.
- **Process Efficiency** – The Company continues to see good progress as customers participate throughout the three phases of the program. Achievement remains on track, with the product being forecasted to reach the year-end goal.

- **Recommissioning** – The Recommissioning product has achieved 60% of its year-end kWh goal and has fully met its 2013 year-end gas savings goal. The product is not forecasted to meet its filed kWh goal due to several customers pushing their project completion dates into 2014. Pipeline growth remains strong due to continued study submissions from all target market segments, in particular commercial buildings and hospitals.
- **Segment Efficiency** – The Segment Efficiency product is being delivered in coordination with the study provider, Nexant. The product is not likely to reach the year-end energy savings goal, but the Company is working with Nexant to build a solid pipeline for 2014. (Net Dth, Net Gen kW, and Net Gen kWh savings show a decrease from Q2 to Q3 due to a problem in the reporting program, resulting from a database switch over. The Q3 data is correct.)
- **Self-Directed Custom Efficiency** – All of the large projects that had been anticipated for reaching the 8.9 GWh year-end energy savings goal are not expected to close in 2013. One project was lost due to measurement and verification issues, while others have simply had delays and will be tracked for completion in 2014.
- **Small Business Lighting** – The product has achieved its 2013 year-end goal and is forecasted to achieve an additional 14% energy savings over the year-end goal. The product continues to see marked increase in participation in LED measures. Program management continues to support product development efforts, evaluating potential new prescriptive LED measures. Pipeline building efforts are expected to remain strong through the remaining months of 2013 by continuing education and marketing efforts targeted to both our customers and trade partners.
- **Standard Offer** – Electric performance remains strong with another two projects rebated and over 2.6 GWh in energy savings achieved in the third quarter. With the December 31, 2013 product closure deadline approaching there is a sense of urgency for all involved to close-out the remaining project opportunities—most of the projects being committed have been in the pipeline for over 12 months.

Gas achievement for the product has already exceeded the year-end goal by 75% in the third quarter; and is expected to rise to over 300% by year-end.

The Company has not seeing any negative impacts from the closure of the product; customers and trade partners are utilizing the Company's other energy efficiency products as predicted.

### **Residential Program**

- **ENERGY STAR® New Homes** – The ENERGY STAR® New Homes product will remain open for the remainder of 2013 program year. The product closed early in 2012 and was anticipated to experience another early close-out in 2013, around mid-October. However, after sharpening the product's year-end forecast and looking across the DSM gas portfolio, the Company was able to identify funds that likely would not be utilized elsewhere that are now being made available for this product. Participants (homebuilders and energy raters) were notified of this news in mid-October which received a lot of positive feedback. At the end of the third quarter, 1,711 homes had completed product requirements. With the additional funding, the Company expects that over 2,700 homes will qualify for a rebate by year-end.
- **Evaporative Cooling Rebates** – The Evaporative Cooling product has seen continued success through the combination of consumer retail advertising complimented by eye-catching point-of-purchase marketing collateral at big box retailer locations. Radio advertising also continued through the third quarter. At the end of the third quarter, the Company had received approximately 3,955 applications, providing 2,862,116 net generator kWh, 70% of the year-end goal. The Company does not anticipate reaching the year-end goal given that the cooling season ended in the third quarter, which typically leads to a steep drop-off in customer purchases. A

30% bonus rebate promotion for customers, and double incentive for contractors, launched late in the third quarter and will continue into the fourth quarter with the aim of creating end of season awareness and increasing participation.

- **Heating System Rebates** – Through the third quarter of 2013, the program registered over 2,700 participants to deliver over 39,000 net Dth gas savings—74% of the year-end goal—on just 44% of the 2013 budget. Savings are being driven primarily by continued high-efficiency (94% and above AFUE) furnace installations. Activity spiked slightly in July as contractors and customers assembled paperwork for 2012 projects.
- **High-Efficiency Air-Conditioning** – The High Efficiency Air Conditioning (HEAC) Product participation goal for 2013 has been met. The kWh and kW goals are more than 80% achieved, and are likely to be realized by year-end. M&V inspections are finished and final engineering review is pending. Thirty-two of 68 units tested passed all four QI (Quality Installation) inspection categories, which is one-third higher than last year.
- **Home Lighting & Recycling** – The Home Lighting and Recycling product had a very successful third quarter and has reached 95% of the year-end goal. The product has sold over 2 million CFLs and 70,000 LEDs thus far this year. The number of LEDs on the market has increased dramatically and prices of the LED bulbs are declining. Customers can now purchase LED bulbs for less than \$10. The product is expected to surpass the goal significantly by year end.
- **Home Performance with ENERGY STAR®** – The Home Performance with ENERGY STAR® product launched changes initiated through a 60-Day Notice on June 25, which included revisions to the air sealing and insulation, to align with the Company's other related products. Webinars were conducted to train trade partners, in coordination with Populus. Year-to-date, the program has received over 459 applications resulting in 403,865 kWh and 13,583 Dth of energy savings.
- **Insulation Rebate** – As of the end of the third quarter, the Insulation rebate program has received over 2,120 applications which account for 313,796 kWh and 38,830 Dth of energy savings, reaching 78% of the year-end electric goal and 48% of the year-end gas goal.
- **Refrigerator Recycling** – The Refrigerator Recycling program continues to be a popular and successful program with the additions of freezers and primary refrigerators. As of the end of September, Appliance Recycling Centers of America (ARCA) had recycled over 5,828 units with anticipated energy savings of 4,224,518 kWh. During the third quarter, an ENERGY STAR® Refrigerator Giveaway was implemented. 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—this is a 76% increase in the average number of orders placed per week during the promotional period.
- **School Education Kits** – The product had limited activity during the third quarter because the participation goal was met during the second quarter. The Company is now awaiting the completed installation rates from the third-party provider (Resource Action Programs), which will be supplied during the fourth quarter.
- **Showerheads** – The Company launched its 2013 showerhead efficiency campaign in May; 300,000 natural gas and combination (natural gas and electric) customers received an offer for a free energy-efficient massage showerhead. The program's primary focus for this year is to increase customer installation rates; marketing produced a step-by-step installation video that was emailed to customers that requested a showerhead from this year's campaign. At the end of the third quarter the program had 19,435 participants, and achieved 20,144 Dth and 256,687 Gen kWh, factoring in the estimated 50% install rate. The Company is now forecasting to achieve energy savings of 24,797 Dth and 316,240 Gen kWh.

- **Water Heating Rebate** – Participation in the program has continued to be slow, but steady, and has improved over 2012 (for both natural gas and electric programs). At the end of the third quarter, the program achieved 5,583 Net Dth of energy savings, which is 46% of the year-end goal, through 1,666 participants. The Company does not anticipate being able to meet the year-end gas goal, despite continued customer education and awareness through “big box” retail channels. The program has achieved 124,631 Net Generator kWh of energy savings, which is 24% of the year-end goal, through 48 participants and is continues to see a growth trend from last year, however, the Company does not anticipate being able to meet the year-end electric goal either.
- **Saver’s Switch®** – An intensive marketing effort is under way. To date, the Company has received approximately 14,000 sign-ups and has deployed about 9,000 devices on customer premises. To date, program expenditures stand at approximately \$4.0 million. A substantial portion of the program budget remains unspent, but more than \$6.0 million will be paid out in October in the form of participant credits.
- **Pool Pumps** – The residential Pool Pumps product has struggled to gain market participation since the program’s launch in late April. At the end of the third quarter, 16 pump applications had been approved for rebate. A vendor promotion, called the Summer Rebate Challenge, was put into play in July. The offer included free Rockies tickets and generated a lot of interest among program partners (pool pump distributors, retailers and installers). The Summer Rebate Challenge promotion concluded September 6 with the announcement of a winner, The Pool Man Inc. A second direct mail campaign was implemented in September and was designed to coincide with seasonal pool closing activities. This campaign included a limited customer bonus offer of \$200 which, when added to the standard \$100 point-of-purchase rebate, provided participants with a \$300 total incentive. The campaign generated a significant increase in the number of participants and applications are expected to continue to come in during the fourth quarter. The Company is not seeing a desired uptick in participation, and as a result, the year-end forecast is anticipated to be 100 participants. Ecova initiated a mid-year program review with the objective of identifying what is working for the product, and what can be improved, for the 2014 program year.

### **Low-Income Program**

- **Energy Savings Kits** – The Company continued to work with the third-party vendor, EFI, to distribute kits to participating low-income customers. A final mailing campaign was developed for launch during the fourth quarter. The first round of measurement & verification was conducted to determine installation rates—early results show 47% of CFLs, 43% of showerheads, and 38% of aerators were installed. Efforts to increase installation rates were developed and will continue into the fourth quarter.
- **Multi-Family Weatherization** – Public Service continues to partner with Energy Outreach Colorado (EOC) to help fund equipment retrofits and process improvements for natural gas and electric energy efficiency measures in low-income, multi-family buildings. Two multi-family opportunities were logged in the third quarter of 2013 (one electric-only and one combination electric/gas opportunity). At the end of the third quarter, EOC identified, and the Company analyzed twenty multi-family projects. Several new projects have been identified with Denver Housing Authority, and the savings are expected to fill 2013 pipeline, especially for natural gas savings.
- **Non-Profit Energy Efficiency** – Through the third quarter of 2013, EOC identified, and the Company analyzed, 39 non-profit energy efficiency projects. At the end of the third quarter, eighteen 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 2013 savings goals.

- **Single-Family Weatherization** – The Company continues to work with the Colorado Energy Office (CEO), who manages the statewide weatherization program. The Company receives a list of customers served and projects completed on a monthly basis from CEO. In an effort to ensure that the program will reach the 2013 goals, the Company has been working closely with, and providing educational support to, the contracted weatherization agencies.

### Indirect Program

- **Business Energy Analysis** – This indirect-impact product utilizes online and onsite tools to identify energy efficient solutions for business customers by providing them with solutions for reducing energy and costs through DSM programs. Participation in the third quarter has been slow – totaling 68 participants. In an effort to increase the number of Onsite Energy Assessments, a revised energy report was offered to business customers in the third quarter. The report, developed in partnership with Nexant, offers customers a comprehensive look at a facility's energy use and identifies energy conservation opportunities and payback periods. The new energy report was well received by both Account Management and BSC. A marketing effort is planned for the first quarter of 2014 to target both trade partners and customers.
- **Consumer Education Business** – Business Consumer Education is an indirect-impact program that focuses primarily on creating awareness of energy efficiency within business through information and resources to help them manage their energy use. In the third quarter of 2013, the Business Education program delivered 3,215 interactions against a total interaction goal of 1,978 (or, 162% of the 2013 year-end goal). 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** – Consumer Education is an indirect-impact program that focuses primarily on creating awareness of energy conservation while providing residential customers with information and resources on what they can do in their daily lives to reduce their energy usage. In the third quarter of 2013, the Consumer Education program delivered a participation goal of 78% (53,188 participants). Participation and outreach through key community events continues to create a meaningful conversation with customers. To date, the Company has provided outreach through 84 community-based event/outreach days. In addition, the program has been supported through conservation messaging in residential newsletters, as well as a mass marketing radio, print, and web campaign. The combination of these initiatives continues to support the participation goal.
- **Residential Home Energy Audit** – During the third quarter, the Company's software provider, Snugg Home, conducted a webinar training on new tool capabilities and improved performance, per recommendations from trade partners. The product continues to be a popular first step for consumers, with 94% to goal in achievement year-to-date. The product was also supported by conservation messaging through a residential consumer newsletter and advertising efforts.
- **Energy Efficiency Financing** – This indirect-impact program launched in 2013 and is intended to increase customer participation in the Company's direct impact energy efficiency products. The financing option was developed as a result of the 2012/13 Biennial DSM Plan Settlement. The Company currently has three residential allies and two commercial allies. For each product, the Company is actively marketing the loan products to targeted DSM segments using contractor trainings, direct marketing, event promotion, and posting pertinent information online.
- **DSM Planning & Administration** – During the third quarter of 2013, the Company held two settlement meetings with parties in the 2014 DSM Plan docket; and responded to approximately

ten Discovery requests related to the filing. In addition, the Company responded to approximately 20 Discovery requests related to the Strategic Issues filing. No 60- or 90-Day Notices were posted during the quarter.

- **DSM Market Research** – There are three program evaluations in 2013: Residential Home Performance, Business Compressed Air, and Business Segment Efficiency. All 2013 evaluations are underway and are targeted for completion by the end of 2013. Business Segment Efficiency is a process-only evaluation due to the small number of participants, for which deriving a net-to-gross is unreliable. The Compressed Air evaluation includes both process and impact reviews. All business data collection is complete and draft reports are expected by the end of November. Residential Home Performance is currently fielding interviews with both program participants and customers that have completed an energy audit but have not progressed further with the program. The Home Performance draft report is expected in December.
- **DSM Product Development** – During the third quarter of 2013, the Company continued Stage 1 and 2 product development processes, identifying new products for launch under the 2015/16 Biennial DSM Plan and via potential 60-Day Notices in 2014.

The following products are in Stage 3 (Concept Evaluation) of the product development process:

- Residential Multi-family Pilot – Market research is underway and stakeholder engagement options are being considered.
- LED Troffers – This new lighting measure is in final technical review. The Company anticipates adding this technology to the Lighting Efficiency product via a 60-Day Notice in the near future.
- LED Streetlights (customer-owned) Product – While a limited market in CO; The Company is developing a product offering that provides customer choice for upgrading streetlights.
- **DSM Roundtable Idea Submissions – Q3, 2013**  
The Company received three idea submissions via the Product Development Opportunity Identification Form, available on the Company's Colorado DSM Website, as part of Quarterly DSM Roundtable stakeholder engagement activity. These include:
  - Radon Safe Homes (received August 8, 2013)
    - *Description:* Stakeholder suggested that the Company provide radon mitigation supporting during low-income weatherization implementation.
    - *Evaluation:*
      - Estimated Incremental Cost: \$2,000-\$3,000 per home.
      - Estimated Incremental Savings: No incremental energy savings.
      - Links to Colorado State radon resources have been added to the Company's Website, under "Other Safety" here:  
<http://www.xcelenergy.com/Safety & Education/At Home & Work/Other Safety>.
  - Quarterly Summaries for Customers (received August 8, 2013)
    - *Description:* Stakeholder suggested that the Company provide a report to customers comparing their energy use each a quarter to the same quarter in the previous year.
    - *Evaluation:* The Company believes that this concept is already captured within the Energy Feedback Pilot currently being offered, with a robust M&V component.
  - LED High Bay Fixtures (received Oct 1, 2013 – evaluated early due to comprehensive submission)
    - *Description:* Stakeholder suggested that the Company offer prescriptive rebates for LED high bay fixtures within the Lighting Efficiency and Small Business Lighting products.
    - *Evaluation:*

- This technology has a simple payback of 2.4 years before rebate.
  - This idea has been recommended for full evaluation and potential launch in 2014 via 60-Day Notice.
- **Energy Feedback Pilot** – Energy savings results continue to track well for the 100,000 participants receiving paper and electronic Home Energy Reports (HER). Energy savings generally decreased over the summer across all categories of participants; however the pilot is projected to achieve 120% of year-end electric goal and has already surpassed the year-end gas goal.
- **In-Home Smart Device Pilot** – The pilot ended on September 30, following the close of the control event season, during which 12-14 events were called. Prior to the pilot's conclusion, a customer survey was sent to all participants to gauge their satisfaction with the pilot. The survey received a 55% response rate. A pilot close-out letter was sent to all participants in early October providing the choice to keep using their system at no cost or to have it uninstalled. To date, only 3% of pilot participants have requested that the system be uninstalled. The evaluation of energy savings due to behavior change and demand savings during control events is ongoing, with the final report anticipated by the end of the first quarter in 2014.
- **Electric Vehicle Charging Station Pilot** – The Charging Station Pilot consists of three phases, each testing a unique control technology. *Phase I:* Deploy market-ready electric vehicle charging stations to insure participants are available during the summer control season. Each of the ten planned systems has been installed with 13 charging events initiated this year. *Phase II:* Install load relays on customers' existing EV chargers. Each of the ten planned installations has been completed with five charging events initiated this year. *Phase III:* Work with automotive OEMs to investigate using existing on-board controls in the future. The Company has begun discussions with the General Motors OnStar team to determine if a demonstration project can be designed to test the ability to leverage OnStar's onboard technology for facilitating the use of electric vehicles as Demand Response resources.
- **Building Energy Code Support Pilot** – The Company's Building Energy Code Support Pilot will be concluded at the end of 2013, as planned. HMG, the evaluation contractor for this pilot, completed the pilot evaluation, and it is now available on the Company's Colorado DSM Website: <http://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/CO-DSM/CO-2013-Codes-Pilot-Evaluation.pdf>.
- **Community Energy Efficiency Planning (CEEP) Pilot** – We have successfully begun energy efficiency planning with three committed communities creating the framework, mechanisms, and outreach tactics for helping residents, businesses, and organizations more effectively manage energy use and costs. Through this planning we collaborate for stronger, more competitive communities and the communities' participation illustrates their proactive energy leadership in Colorado. Specifically, in this phase we are working to provide, through workshops, the framework to identify and define several low-cost means/projects to drive additional conservation and enhance their community customer's engagement in DSM programs. The Brendle Group, a third-party provider, leverages their expertise and available energy data and tools, to meet and exceed customer expectations in their planning phase as they collaborate with key community stakeholders. In the third quarter, Brendle has planned several stakeholder workshops with two of the three communities; to help them identify energy conservation opportunities, provide technical support throughout the planning process and to help vet implementation strategies and efficiency projects. We are continuing to work to add on a fourth community, which would round out the participant communities in a positive and beneficial way.
- **Measurement & Verification** – Our third-party verification contractor, Nexant, has been conducting random field inspections for our prescriptive products. Results so far are good with no major deviations from reported savings.