

# 2013 First Quarter Colorado DSM Roundtable Update May 15, 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 modifications.

## **Product Implementation Status**

Please refer to the attached table for the preliminary first quarter 2013 (through March 31, 2013) product energy and demand savings achieved, and product expenditures and CO<sub>2</sub> and SO<sub>2</sub> emissions avoided. In total, DSM electric products have achieved savings of 104.7 GWh and gas savings of 91,046 Dth by March 31, 2012. This represents 30 percent of the 2013 electric DSM plan's energy savings target of 345 GWh and 21 percent 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 first quarter 2013 in the Business, Residential, Low-Income, and Planning & Research Products, as well as other related activities.

## **Business Program**

- Compressed Air Efficiency The program completed 14 projects yielding 0.923 GWh, or 22 percent of its annual goal. The quarter was the best quarter since 2010. We believe the improvement is partially due to our intensive efforts to re-engage trade partners who had exited the market or who had staff turnover. As expected, savings per participant continues to trend lower. Achievement from small business has grown to 90 percent of the 1st quarter results and opportunity pipeline. Among larger opportunities, many have already participated or are currently participating through our more strategic Process Efficiency product.
- Computer Efficiency The computer efficiency product achieved 3.256 GWh of energy savings
  in first quarter of 2013. The product is forecasting to have a solid year in 2013 despite turmoil in
  the personal computer industry. The product is seeing initial successes in the additional
  measures added in 2012 and is continuing to diversify the product offering through our product
  development processes.
- Cooling Efficiency The program achieved 2.850 GWh of net electric energy savings in the first quarter. The pipeline remains strong for the year. The Direct Evaporative Cooling for Air Cooled Condensers (DEPCACC) measure was launched in the first quarter. This measure is marketed by Cypress, Ltd. Cypress is in the process of training the cooling trades in Colorado. This measure is expected to have a strong impact on the program achievements in 2013.
- Custom Efficiency The program achieved 0.240 GWh of net electric energy savings and 1,845
  Dth in gas savings in the first quarter. Several large projects that were not completed in 2012 are
  nearing completion. The pipeline for 2013 is strong and more marketing outreach will be
  conducted to increase participation in new technologies.
- Data Center Efficiency In the first quarter of 2013 three customers with earlier Data Center
  Efficiency studies completed projects yielding 4.275 GWh. The product also completed one study.
  Marketing efforts have included trade partner outreach and continuing our pilot of third party for
  customer project management. The efforts are particularly focused on two large data centers
  that have been reluctant to participate.



- Energy Management Systems (EMS) The EMS product achieved 3.665 GWh of savings from 17 projects. Two of the projects had gas impacts totaling 1,608 Dth. With the average project duration of 11 months, sales cycles continue to be long. During the quarter, we have continued follow-ups with applicants to encourage implementation. We have also conducted several customer site visits, and have been engaged in the continuing education of trade partners.
- Heating Efficiency The Heating Efficiency Product completed 50 projects in the first quarter of 2013 and has achieved 3,399 Dth, representing 11 percent of the products year-end goal. We anticipate finishing the year under goal, but expect an increase in participation. We continue to see participation in the small business sector producing more savings than the larger commercial and industrial customers.
- Lighting Efficiency Lighting Efficiency finished the first quarter 51 percent to filed achievement. The product attributes much of the early year savings to the T12 retrofit application deadline of May 1, 2013, in which all 2012 projects must be submitted for rebate. On February 27, 2013, the product posted a 60-Day Notice to bring back the optimization rebate for T12-T8 with the updated baseline of an inefficient T8. Both the OCC and EOC submitted comments to the posting. The lighting efficiency product also introduced new LED exterior measures for 2013.
- Motor & Drive Efficiency The product achieved a record quarter 14.6 GWh of customer savings, which yielded 10.198 GWh in Net Gen savings. Variable Frequency Drives contributed 93 percent of the achievement. EC Motors in refrigeration has gained momentum, with 770 new units within the quarter. But impacts from traditional motors has fallen sharply because of the increase in standards to NEMA Premium efficiencies, and because motors of greater efficiencies have high costs and limited availability. We are continuing our media campaign to increase awareness about variable frequency drives within HVAC systems.
- New Construction Commercial New Construction is showing a slight improvement in 2013, with over 30 project new starts in the first quarter, as compared to 20 new project starts in 2012 Q1. This will help build project pipeline for the future. Business New Construction has continued its mission to help building owners and developers prioritize energy efficiency through education and marketing to architects, contractors, small and large businesses and other interested stakeholders.
- **Process Efficiency** achievement has been promising with the product posting its best first quarter since it was introduced in 2009. Pipeline is strong and expectations are that the goal (which is approximately 50 percent higher than in 2012) will be achieved.
- Recommissioning The Recommissioning Product completed eight projects in the first quarter
  of 2013 achieving 971,534 kWh and 1,575 Dth, representing 17 percent of the product's electric
  year-end goal and 70 percent of its gas year-end goal. Pipeline growth remains strong due to
  continued study submissions from all segments but particularly from the commercial building
  segment. The product is on track to meet its 2013 goals. 2013 Marketing efforts include trade
  partner and customer focused educational seminars.
- **Segment Efficiency** The Segment Efficiency program is currently working with Nexant as the program study provider and has submitted its first application. Nexant will continue to build a pipeline through communication with our sales team and working closely with the program manager. As part of this process, Nexant is developing and launching additional marketing campaigns and plans to deliver an in-depth market segmentation report in the second quarter.



- Self-Directed Custom Efficiency With a slow start to the year, and very little in the pipeline,
  efforts are now underway to build interest in the product within the large industrial market. It is
  unlikely that this plan will yield much achievement in 2013 but we anticipate it working to
  accelerate the implementation of some projects already identified and build the pipeline with new
  prospects.
- Small Business Lighting The Product achieved 49 percent of its 2013 filed goal in Q1. This
  achievement is attributed to the marketing efforts encouraging customers and trade partners to
  submit their fluorescent T12 fixture removal projects prior to the May 1 deadline. Participation
  levels are expected to remain strong through year-end with the introduction of the newly
  approved lamp optimization rebates being offered beginning early Q2 and supplemented with
  marketing efforts targeting our customers and trade partners.
- Standard Offer A 90-Day Notice was posted March 19 notifying stakeholders of Public Service's intent to close the Standard Offer Product at the end of 2013. Although only one project was completed in the first quarter, this notice has accelerated the completion of several other projects making goal attainable in 2013. Another effect of the notice is that some Standard Offer projects in the pipeline are being shifted into other product offerings; such as Self Directed Custom Efficiency and Recommissioning.

## **Residential Program**

- ENERGY STAR New Homes For the ENERGY STAR New Homes Product, we added a new ENERGY STAR v3 rebate tier. Builders who build their home to the v3 criteria can earn a rebate up to \$1,400. While we have not yet seen any homes built to these criteria, we do expect to see some before the year is over. Over 1,000 homes have enrolled in the program thus far and of these, 199 have completed the program requirements. Our outreach efforts focus on supporting our participating raters and their efforts to educate and meet the needs of their builder clients. We held a rater meeting on April 29 to review program requirements and changes for 2013 but additionally to receive feedback regarding any improvements that could be made. Several good suggestions such as enhancements to HouseRater were offered, and we are now looking at these to determine how they could be implemented.
- Evaporative Cooling Rebates The Evaporative Cooling Product has continued the Point of Purchase marketing and has included radio remotes and QR codes this year in many of our advertising for 2013. As of the end of March, the company had received approximately 171 applications, providing 122,326 net generator kWh, an increase over last year. The Evaporative Cooling season is beginning to ramp up and our retailers in Colorado has already begun to place merchandise out onto the floors. We expect a slower start to the year since our weather has been colder than last spring.
- Heating System Rebates The program registered 1,190 participants and 16,798 net Dth gas savings 31 percent of its 2013 goal on just 18 percent of its 2013 budget spent, driven primarily by continued high-efficiency, 94 percent AFUE furnace installations. So far in 2013, six percent of program participants installed 85 percent AFUE residential boilers.
- High-Efficiency Air-Conditioning The High Efficiency Air Conditioning (HEAC) Product completed a program evaluation at the end of 2012. While the evaluation supported the overall program design and marketing strategy, the Net-To-Gross (NTG) was reduced to 67 percent. This reduction may impact the program's ability to reach the 2013 goal. In preparation for the cooling season extensive training was offered, in partnership with the Energy Efficient Buildings Coalition, to AC contractors. Trainings included high efficiency sales solutions, NATE exam prep and an AC rebates overview. Improving and increasing the number of these trainings has been essential to the programs success.



- Home Lighting & Recycling The Home Lighting and Recycling product launched a new campaign in February with discounted CFLs and LEDs at over 500 retailers. Xcel Energy developed new advertising commercials for television and radio, including a dedicated LED spot for both. Additional promotional components included new signage, internet advertisements and a website interface. Incentives for specialty CFLs were increased up to \$3 each and LED incentives remain at up to \$10 each. Many new LED models have been added to the product, which now includes 44 different models. To ensure quality control, Xcel Energy requires bulbs receiving incentives to be Energy Star certified. As bulbs become Energy Star certified, they are added to the portfolio. Xcel Energy expects to add a 75 watt equivalent LED bulb this year to the portfolio. For Lamp Recycling, 7,795 CFLs have been recycled to date.
- Home Performance with ENERGY STAR The Home Performance with ENERGY STAR program continues to be successful with its 2012 program changes, utilizing several program enhancements that were made last fall. With several of the changes in place, Product Marketing plans to see an increase in customer participation and contractor support. Overall, the program has seen greater participation from various contractor companies this year as the barriers for customers to participate have been reduced. Year-to-date, the program has received over 93 applications which accounts for 85,595 kWh, and 2,590 Dth.
- Insulation Rebate A 60-Day Notice was posted on January 3, 2013 for several changes to the Insulation rebate program product, and the new 2013 changes went into effect on February 7, which incorporated our new requirements and standards. Additionally, Marketing and Trade Channel Managers continued efforts to increase awareness and training in coordination with the EEBC with multiple events including Combustion Appliance Zone (CAZ) training and Insulation and Air Sealing kick-off meeting. Through the end of last year, Marketing also was able to support our trade network with the ability to distribute grants for BPI Certifications, which were given to 40 companies this fall. This will be crucial for our 2013 program year goals.
- Refrigerator Recycling The Refrigerator Recycling program continues to be a success and popular with our customer base. As of the end of March, Appliance Recycling Centers of America (ARCA) have recycled over 1007 units with an anticipated savings of 808,621 kWh.
- School Education Kits As of the end of March, Resource Action Programs (RAP), our third-party provide, had enrolled 24,689 participants and was on target to enroll our goal of 30,000 participants. Completed installation rates and impacts to this program are expected in early fall of 2013.
- **Showerheads** The Company is preparing for its 2013 campaign, which will launch in May. The program is hoping to reach approximately 30,000 natural gas and electric customers, which will equate to energy savings of 22,656 Dth and 583,545 Gen kWh.
- Water-Heating Rebate Participation in the program has been slow but it is improved over 2012 for both natural gas and electric programs. As of the end of March the program achieved 1,902 Net Dth savings, which is 16 percent of goal with 578 participants. The program has achieved 39,517 Net Generator kWh, which is 7 percent to goal with 16 participants.
- Saver's Switch® Marketing activities are under way in promoting the Saver's Switch program in Colorado. To date, no switches have been installed in the state. This is customary for the program as installation requires access to the air conditioner which is a challenge during the winter months.



Pool Pumps - The residential pool pump program is new product for 2013 and represents a paradigm shift in how DSM programs are managed. Ecova, our third-party implementer is responsible for developing and implementing the program including marketing efforts to our customers. Customers receive a \$100 point-of-purchase discount when installing a qualifying variable speed pool pump and retailers will receive a \$100 incentive for properly calibrating the pump. The calibration process contributes the majority of realized energy savings. Ecova hosted a kick-off meeting on March 14 and also developed a detailed launch plan. Many of these prelaunch activities are completed or being finalized in preparation for a targeted launch in late April. Marketing to customers will focus on supporting existing activities already planned by participating pool pump distributors and retailers. Ecova hired a local Field Coordinator to help manage this project. The Coordinator is responsible for bringing program partners onboard and getting them up to speed on program requirements and training them on proper pump calibration techniques. Ecova is building a web portal that will be used by partners to submit applications and other key information relative to each pump sale. The portal will also serve as a vehicle to provide Public Service access to program information needed for tracking and reporting purposes.

## **Low-Income Program**

- Energy Savings Kits In the first quarter Public Service began preparing for the 2013 program year by developing materials that will be sent to qualified customers, offering them a free Energy Savings Kit. The first offer will be sent during the second 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. Although no energy
  savings were logged in the first quarter of 2013, EOC identified, and the Company analyzed two
  new multi-family projects. The program's pipeline includes several projects identified in 2012, and
  advanced to measure implementation stage in 2013.
- Non-Profit Energy Efficiency In the first quarter of 2013, Energy Outreach Colorado identified, and the Company analyzed ten new non-profit energy efficiency projects. Although no energy savings were committed in the first quarter of 2013, the program's pipeline includes projects identified in 2012, and advanced to measure implementation stage in 2013.
- Single-Family Weatherization The Single-Family Weatherization program continues to work with the Colorado Energy Office (CEO), who manages the statewide weatherization program. Xcel Energy receives a list of customers served and projects completed on a monthly basis from the CEO. In an effort to ensure that the program will reach the 2013 goals, we have been working closely with the providing educational support to the contracted weatherization agencies.

## **Indirect Program**

• Business Energy Analysis – Energy Analysis is an indirect-impact product that utilizes online and onsite tools to identify energy efficient solutions to business customers by providing them with actionable items to reduce energy and costs through DSM programs. Participation in Q1 has been slow. In an effort to increase the number of Onsite Energy Assessments, a revised energy report will be offered to business customers in Q2. The report, developed in partnership with Nexant Inc., will offer customers a comprehensive look at a facilities energy use; identify energy conservation opportunities and payback periods.



- Consumer Education Business Business Consumer Education is an indirect-impact program that focuses primarily on creating awareness of energy efficiency to businesses with information and resources to help them manage energy use. In the first quarter of 2013, the Business Education program delivered 582 interactions against a total interaction goal of 1,978 (or, 29 percent of the 2013 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 through the Energy Solutions newsletter as well as a mass marketing print, online advertising and social media to support increased awareness of energy efficiency. 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 quarter one of 2013 the Consumer Education program delivered a participation goal of 45 percent (30,600). Participation and outreach through key community events continue to create a meaningful conversation with customers. To date, Public Service has provided outreach through 31 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 to support increased awareness of energy efficiency. The combination of these initiatives continues to support the participation goal.
- Residential Home Energy Audit During the first quarter of 2013, the Home Energy Audit
  program primarily focused on continued trainings of the Snugg Home software and was made
  mandatory for participation in the program. Additionally, the program enabled a first quarter
  incentive for the ACI (Affordable Comfort Institute) national conference, and the offering was
  available to the top ten identified contractors (both for Home Performance and Home Energy
  Audits) to enable he/she to attend.
- Energy Efficiency Financing Energy Efficiency Financing is an indirect-impact program that launched in 2013. This product is intended to increase customer participation in Xcel Energy's direct impact energy efficiency products and was produced as a result of a settlement of the 2012/2013 PSCo DSM plan. To facilitate this program during the first quarter of 2013, we initiated conversations with existing financial institutions and established alliances to promote and support these independent energy efficiency financing products. At the end of the first quarter of 2013, we had five alliances through signed Memorandum of Understandings. This includes residential unsecured and secured loans and business unsecured loans. For each product, PSCo is actively marketing the loan products to targeted DSM segments using contractor trainings, direct marketing, event promotion, and including pertinent information online.
- **DSM Planning & Administration** During the first quarter of 2013, work primarily focused on planning and research associated with the Strategic Issues filing that is due to be filed on June 14. Additionally, there was considerable work done on compiling the information for the 2012 Annual Status Report that was filed on April 1, 2013.
- DSM Market Research There are three program evaluations in 2013: Residential Home
  Performance, Business Compressed Air, and Business Segment Efficiency. All 2013 evaluations
  were kicked off and are targeted for completion by the end of 2013. Business Segment Efficiency
  will be a process only evaluation due to the small number of participants that makes deriving a
  net-to-gross unreliable. Compressed air custom will be included in the process evaluation, to
  help with understanding the overarching challenges with the program participation and
  opportunities for improvement.



 DSM Product Development – During the first quarter of 2013, the DSM Product Development team continued with development of new products for the 2014 Annual Filing or subsequent 60 Day Notices.

The following products were launched:

- Energy Efficiency Financing
- Residential Swimming Pool Pumps
- o Community Energy Efficiency Planning Pilot

The following products were added through a 60 Day Notice:

Direct-Evaporative Pre-Cooling for Air-Cooled Compressors (DEPACC)

The following products were in Stage 4 (Product Development) of the Product Development Process.

- Turn-Key Services This product is currently being tested in our Minnesota (MN) service territory. We continue to review the MN results to determine whether changes need to be made before we develop it for a 2013 launch in CO
- Prescriptive Refrigerated Case Efficiency
  - Anti-Sweat Heater Controls
  - Zero Energy Glass Doors
- EC motors for new residential natural gas furnaces
- High Efficiency Computer Monitors
- o Business Refrigeration

The following products were in Stage 3 (Concept Evaluation) of the Product Development Process:

- Behavioral Measure for Process Efficiency
- Building Tune-up (RCx Lite)
- Residential Multi-family
- Dew point Demand Controls
- Cycling Dryers
- Mist Eliminators
- o Parking lot LEDs
- LED troffers
- Parking garage LEDs
- LED streetlights (cust. owned)

The following RFP was issued in accordance with the 2012-2013 DSM Plan Stipulation and Settlement Agreement:

- RFP for Innovative Technology
  - Two of the four selected proposals were launched in January 2013; one proposal (DEPACC) was added through a 60 Day Notice. We continue to work with the remaining bidder to finalize technical assumptions and contract terms.



- Energy Feedback Pilot The pilot was successfully expanded to an additional 50,000 participants with the delivery of Home Energy Reports (HER) in January. Savings for the original group of Energy Feedback participants for the first quarter of 2013 are above those for the same period last year. This supports the premise that incremental behavioral savings can be achieved the longer participants are exposed to the program. Savings results for the expansion group will not be available until next quarter as there is "ramp up" time between when the first HERs are delivered and savings can be seen on utility bills.
- In-Home Smart Device Pilot We continue to focus on customer support and our planned outreach activities, particularly as we move towards the control season. The preliminary evaluation report is finalized and available for review. Savings realized by participants occurs in two ways; during events, where they may reduce their energy use in response to notification or behavior change in general that reduced their overall energy consumption. The level of estimated energy savings seen for this pilot thus far is comparable to other programs and technologies that involve providing the customer with information about their energy use. Additional details including; preliminary demand and savings impacts along with key findings and recommendations can be found in the evaluation report.
- Electric Vehicle Charging Station Pilot From our experience in 2012 the pilot was restructured into a three phase approach. Phase I, deploy market ready electric vehicle charging stations to insure participants are available during this summer's control season. Participants have been identified and six of the ten systems have been installed with the remaining to be completed before June 2013. Phase II Install an alternative load control device. A vendor has been identified and an order placed for the first set of equipment. Work continues on refining the potential list of eligible participants (customers with electric vehicles). Phase III Work with automotive OEM's to investigate using existing on-board controls in the future. Researching existing communications and control capabilities to determine which OEMs have the strongest platform to work with.
- Building Energy Code Support Pilot Colorado Code Consulting completed training in each of the participating jurisdictions. Of the six jurisdictions who agreed to participate in the pilot only three still remain. Three jurisdictions did not continue with the program for various reasons; 1) changes in department staffing prevented an acceptable training plan from being implemented, 2) one jurisdiction limited the scope of work to providing building inspectors with certification training, which was not deemed adequate for evaluating the research questions posed in this pilot, and 3) one jurisdiction limited the scope of work to providing assistance in modifying their future building code, again not deemed adequate for evaluating the research questions posed in this pilot. HMG, the evaluation contractor for this pilot, collected post training data and conducted on site evaluation and interviews within each of the remaining three jurisdictions. A preliminary evaluation will be prepared to inform the strategic issues filing.
- Community Energy Efficiency Planning (CEEP) Pilot The pilot was added to the Demand Side Management lineup via 60-day notice (plan modification), effective January 20, 2013. The objective of this pilot is to determine if providing energy planning assistance leads to a lift in DSM participation and related community-level benefits. So far three communities have committed to the pilot, and the Company is seeking a fourth to participate. In the second and third quarter of 2013, communities will assemble advisory groups and Brendle Group, the engineering and consulting firm implementing the CEEP Pilot, will facilitate workshops to help communities identify energy conservation opportunities, provide technical support throughout the planning process and help vet implementation strategies.
- **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.



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