

# 2014 Second Quarter Colorado DSM Roundtable Update August 6, 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 second quarter 2014 (cumulative Jan 1 – June 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 175.7 GWh and gas savings of 243,487 Dth by June 30, 2014. This represents approximately 46% of the 2014 electric DSM plan's energy savings target of 386 GWh and 39% of the gas target of 623,543 Dth. The 2014 second quarter results are fairly on-target with expectations, but slightly lower than electric savings achieved in Q2 of 2014. 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 following section provides product status activities for the second quarter of 2014 in the Business, Residential, Low-Income, and Indirect Products, as well as other related activities.

### **Business Program**

- Commercial Refrigeration Efficiency The Commercial Refrigeration Efficiency product continued to be successful in Q2-2014, realizing nearly 2 GWh of savings. Marketing efforts continue to focus on education of both the trade and customers. The product continues to build the project pipeline for the remainder of 2014.
- Compressed Air Efficiency Year-to-date, the product has achieved 59% of its year-end target.
  The second quarter was particularly strong for compressed air system studies, which have in-turn
  built the pipeline of implementation projects. Under implementation of the 2014 DSM Plan, the
  product introduced three new prescriptive measures.
- Computer Efficiency The Computer Efficiency product achieved 108% of its year-end target as of the second quarter 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. Participation in the upstream program was steady through June. The outlook for the upstream program for the balance of the year looks good as the program is expected to exceed the filed goal. There have also been a few participants in the downstream program; which provides prescriptive rebates to customers for installing Virtual Desktop Infrastructure. Updated rebate application and information sheets on PC Power Management, Thin Client and ENERGY STAR® were created in early 2014 to increase customer awareness of these prescriptive products.

<sup>&</sup>lt;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 0.575 GWh of energy savings in the second quarter of 2014. The product has a very strong pipeline of custom cooling projects for the year. A cooling bonus of up to 20% is now available for projects by September 30.
- Custom Efficiency The product achieved 1.1 GWh energy savings in the second quarter of 2014. The pipeline of projects is very strong for the year and the product is expected to exceed its electric target.
- Data Center Efficiency The product has achieved its year-end target for 2014 during the second quarter, with over 8.5 GWh. During the quarter, the Company has been working towards finalizing three third-party implemented pilot projects with account managed customers, and outreaching to local engineering firms to discuss the Data Center product and rebates, to help build pipeline for future years.
- Energy Management Systems (EMS) In the second quarter, the product has achieved over 2.4 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, the product launched an advertising campaign in the first quarter to drive future participation.
- **Heating Efficiency** The product achieved 8,163 Dth of natural gas savings in the first quarter of 2014 with 76 participants. Several communications efforts were implemented this quarter such as trade communications via email and newsletters have educated both contractors and customers about the benefits of boiler upgrades, pipe insulation and debunking heating myths.
- Lighting Efficiency The product closed second quarter at 28 percent of the year-end target.
  The product is off to a slow start with the 2013 Plan year closing out final T12 rebates by May 1.
  Marketing efforts are underway to engage customers and trade partners through an upcoming Lighting Educational Fair. This event will focus on LED education; new rebate measures awareness, and allows time for networking customers and trades together. The program has a strong project pipeline and anticipates an increase of projects closed and rebated in the third quarter.
- Motor & Drive Efficiency During the quarter, the program achieved 3.1 GWh of energy savings; and year-to-date has delivered 9.1 GWh of energy savings at 53% of the year-end target. The product's media campaign and outreach to mechanical continue to focus on VFDs in office building ventilation. The Company is also researching different types of motors as potential new measures.
- New Construction Second quarter electric savings achievements evidence that the product is
  on track to exceed energy savings targets for 2014 year-end due to successful 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 is on track for a very successful 2014; continuing strong
  performance through the end of Q2 at 78% of the year-end energy savings target. These
  achievements are directly attributed to previous pipeline building efforts targeted to encourage
  current customers to complete identified projects. Additionally, continued marketing efforts are
  resulting from several new customers participating in the product, yielding a robust pipeline.
- Recommissioning The product is continuing its success into Q2-2014, realizing nearly 5,000 kWh of energy savings. 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 our third-party implementers to develop seminars
  and marketing efforts that will increase awareness and educate customers on the product
  offerings, but mid-year performance continues to be well below forecasted achievements.
- **Self-Directed Custom Efficiency** Although the product has not realized any achievement to date, it is anticipated to meet its year-end energy savings target as several large projects are forecasted to close by year-end. Additionally, marketing efforts are in place to increase the future pipeline by targeting internal sales teams, customers, and contractors and educating these groups on both the benefits of the product and the process for participation in the product.
- Small Business Lighting The product continued to achieve energy savings during a transition
  to a new implementer in the first quarter of 2014. Concentrated efforts to identify new lighting
  savings opportunities are underway with the new implementer in place. This includes segmented
  marketing and outreach efforts to small business customers to offer a free lighting assessment,
  reports, and resources. Focused communication to introduce lighting trade partners to the new
  third-party implementer were also initiated earlier 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 into 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 has enrolled 2,575 new homes and 2,156 of those have completed the program requirements and received a rebate. The Company is forecasting an additional \$1.49 million in gas spend (beyond the approved gas budget for the product in the 2014 DSM Plan) will be required in order to fund this increased level of participation. The Company continues to evaluate and rebalance natural gas DSM budget for the entire portfolio in order to identify these additional funds. The Company will keep the Roundtable updated as the product progresses through Q3 to alert stakeholders if an early product close is anticipated. A 60 Day-Notice change was implemented on July 25, clarifying eligibility requirements for homes built in jurisdictions that have adopted IECC 2012 or higher and modifying how incremental capital costs are determined for participating homes.
- Evaporative Cooling Rebates The product is ramping up as it heads into the cooling season and has achieved 897,757 kWh with 1,021 participants through Q2. Many marketing tactics were in final stage of development this quarter and will launch this quarter and remain in place for the rest of the year. An integrated and multi-channeled marketing campaign has been employed, including retailer trainings; media advertising; contractor training, communications, and newsletters; newspapers and other print advertising; radio; interactive; outdoor advertising; and sponsorships.
- Heating System Rebates Through the second quarter of 2014, the product registered over 1,600 participants and over 23,400 Net Dth savings—60% of the 2014 year-end target.
   Electronically Commutated Motors (ECMs) for furnace fans were added as an electric measure in the product during Q2, and 90 ECM units representing 85,000 kWh subsequently participated.
   Also, the product began requiring trade partners have at least one North American Technician

Excellence (NATE) certified technician to register and participate in the product. The deadline for trade partners and customers to turn in 2013 paperwork is July 31, 2014, and that deadline should create a spike in projects committed in Q3 2014.

- **High Efficiency Air Conditioning** The product has achieved 32% of its year-end energy savings target through the second quarter. Cooler weather during the first part of summer could impact customer participation later in 2014. The Company plans to file a 60-Day Notice to add Western Cooling Control to the product in Q3.
- Home Lighting & Recycling The product is performing very well and is expected to exceed the year-end target. CFLs continue to be the main stay of the program, but LEDs are increasing as the prices falls. 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) Year-to-date, the product has achieved its year-end natural gas savings target with over 10,300 Net Dth, and continues to have a strong pipeline for electric savings with over 192,830 Net kWh energy savings. The Company is underway in developing a third-quarter launch of HVAC trade incentives, which was a recommendation from the 2013 comprehensive product evaluation, and also is continuing the Energy Advisory services that compliment the program, through year-end.
- Insulation Rebate The product has completed the second quarter with 10,919 Dth and 83,813 kWh in energy savings. Additional support for contractor certifications and trainings are planned for Q3 and Q4, and specific outreach efforts to non-participating contractors are being coordinated.
- Refrigerator Recycling The product launched a limited time promotion for two Kindle Fire tablets which ended on May 31. The promotion increased participation over the same period last year by 10 percent. Marketing activities will be continuing through Q3 with another promotion to end the year strong. Customer communication mediums will include radio, print, and social media. At the end of Q2, the Company had recycled over 3,301 units, with 2.3 GWh of projected energy savings.
- School Education Kits The Company launched the first wave of kit distribution to teachers and students during the second quarter, following approval of the 2014 DSM Plan. Showerheads, kitchen and bath aerators, and LED bulbs were added to the kits this year. The program sent 15,875 kits during the second quarter. Installation rates from the first wave of kits will be available early in the third quarter. The remaining kits will be sent during the second half of 2014.
- **Showerheads** The Company launched its 2014 campaign in June. The product, which has added kitchen and bath aerators, is hoping to reach approximately 23,500 natural gas and electric customers, which will equate to energy savings of 24,165 Dth and 579,393 kWh.
- Water Heating Rebate For the first time in several years, the product has successfully achieved its annual electric target by Q2 with 30 participants and 86,380 kWh, at 108% of the year-end target. Natural gas savings for the product is also close, only 8% shy of reaching the year-end target in Q2, having achieved 3,496 Dth with 1,058 participants. Electric heat pump education and awareness tactics have been increased with more in-store branded collateral and coordination with manufacturers and retailers in order to reach the target.
- Saver's Switch® As of the second quarter, approximately 900 Saver's Switches have been deployed at customer premises. Marketing activities are progressing relatively well and as of the

end of June, approximately 10,000 customers had signed up for the program. Not all signups materialize into installations as customers have ineligible equipment, change their minds, etc. So quite a few additional signups will be needed to reach the target. Marketing activities will continue in the third quarter of the year.

• Pool Pumps – The Company's third-party implementer has been executing planned marketing tactics for the Pool Pumps product during Q2. These include: two targeted direct mail pieces, an awareness sweepstakes on Facebook that included an engaging video and a pool partner incentive program. The product is entering the mid-point of the sales season but participation remains well below expectations. Pump sales are below 30 at the end of Q2. Additional marketing efforts are planned, such as a Google Adware campaign and the vendor incentive program carries on into September.

#### **Low-Income Program**

- Energy Savings Kits The Company prepared the materials for the 2014 program year during the second quarter. The list of eligible customers was developed after Low Income Energy Assistance Program (LEAP) season ended on April 30. The Company also began to look for additional ways to identify eligible customers for the program. The first offer for a free Energy Savings Kit will be sent early in the third quarter.
- 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. Although no energy savings were logged in the second quarter of 2014, EOC has identified, and the Company has analyzed, six multi-family projects so far in 2014, representing 20% of electric and 31% of yearend savings targets in 2014.
- Non-Profit Energy Efficiency By the end of the second quarter of 2014, EOC had identified, and the Company analyzed, 16 non-profit energy efficiency projects year to date. Although no energy savings have been committed, the product's pipeline represents 40% of electric and 18% of natural gas year-end savings targets in 2014.
- **Single-Family Weatherization** The Colorado Energy Office (CEO) and EOC are working together to administer the product, identify eligible customers, and ensure that new equipment meets energy efficiency standards to qualify for an incentive. By working together, the Company is able to increase its reach to the low-income sector to ensure that eligible customers are being served.

#### **Indirect Program**

• Business Energy Analysis – This 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 continues its successful 2014, with 90 participants in Q2 (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 and June/July bill onsert campaigns targeting thousands of Colorado business customers. 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 over 4 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. 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, Home Energy Audits, and Home Lighting & Recycling. The program continues workshops and subcommittee work on the energy plan drafting phase with the city of Aurora, which includes strategies to support residential, business and public sector institutions (such as city buildings, Aurora Public Schools, and Aurora Mental Health).
- Consumer Education Business In the second quarter of 2014, the Business Education program delivered 2,123 interactions and provided outreach through 12 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 second quarter of 2014, Consumer Education achieved 83% of the participation targets (56,355 participants). Participation and outreach through key community events continues to create a meaningful conversation with customers. To date, the Company has provided outreach through 79 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 1,388 electric and 1,499 natural gas participants. The Company has increased media marketing going into Q3 to increase participation. Launched on April 1, the Company's third-party implementer began the Energy Consulting pilot, including enrolling interested customers to assist in project implementations. Year to date, the Energy Consulting pilot has enrolled 144 accounts with a 22 percent conversion rate. Additionally, the SnuggHome audit will begin beta-testing an advanced financing section with a select group of auditors (that all auditors will ultimately receive training on) in August 2014. The tool is set to help auditors provide financing resources to customers for implementation, and also will show available loans based on the customers region. In addition, the v4 tools will include pool pumps, HVAC load calculations, and more.
- DSM Planning & Administration During the second quarter of 2014, the Company concluded support for the final stages of the Strategic Issues docket (13A-0686EG), supported re-filing the updated 2014 DSM Plan to reflect Settlement Agreement changes, supported posting of several 60-Day Notices, and began development of technical assumptions and written content for the 2015/2016 DSM Plan.
- **Program Evaluations** Two process-only evaluations are underway for 2014: Multi-Family Weatherization (Low-Income) and Energy Management Systems (Business). Research includes internal staff interviews, customer and trade ally surveys, and discussions with peer utilities with similar programs. A two-year evaluation of the Energy Efficiency Financing offering is also currently under way. This two-year study focuses on process issues in 2014, most notably lender and trade partner marketing.

- 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.
- DSM Market Research Xcel Energy utilizes memberships and subscription services to
  maximize our ability to reach targeted customer segments and increase Company awareness of
  best practices. Advertising tracking research is helpful to ensure effective energy efficiency
  messages are reaching customers.
- **DSM Product Development** During the second quarter of 2014, the DSM Product Development team continued with development efforts of new products for the 2015/2016 Biennial DSM Plan and for 60-Day Notices.

The following products are in the Design step (Stage 3) of the product development process:

- Small/Medium Enterprise Direct Install 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.
- o Residential Custom Efficiency Provide a cost-effective path for evaluating emerging technologies similar to the approach used in the Custom Efficiency (Business) product.

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

- Midstream LEDs Current product model is downstream; evaluating for move to upstream (distributor level).
- Multifamily Building Pilot The Company has been actively engaged in pilot development.
- Smart Thermostats Pilot The Company has been actively engaged in pilot development.
- Large Customer Data Program 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.
- Ground Source Heat Pumps (GSHP) Evaluate whether adding a high efficiency GSHP option that uses a standard efficiency GSHP baseline is a cost-effective measure.
- Process Efficiency (PE) for Small and Medium Enterprises (SME) Develop a costeffective approach for delivering the Process Efficiency program to smaller customers
- LED Area Lighting New outdoor area lighting measures such as parking lot lights for the Business Lighting program.
- Energy Feedback Pilot Electricity savings in Q2 2014 trended upwards for the 87,854 participants currently receiving paper and electronic Home Energy Reports. Natural gas savings started its cyclical downward trend since the heating season has passed. The latest year-end forecast predicts achievement lower than filed energy savings targets.

The Online Feedback measure was implemented during Q2-2014, but is not expected to contribute to year-end achievements due to the late start and the predicted inability to be able to measure a statistically significant change between the Treatment and Control Groups.

Contingency planning has begun to address the shortfalls in expected year-end achievement. Currently a refill of approximately 11,000 participants, planned for Q3 will help close the achievement gap.

- Business Energy Feedback Pilot This pilot was launched in Q2. No achievements have been reported as the first reports will be delivered in Q3.
- In-Home Smart Device Pilot Second quarter expenditures paid the final invoices for pilot M&V.
   The final report was posted to the Company's website in Q1:
   http://www.xcelenergy.com/staticfiles/xe/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. Most of the activity in Q2 was focused on developing the Teaming Agreement and Customer Agreement form with OnStar as part of Phase 3 of the Pilot. The Company is still awaiting signature of the Teaming Agreement from OnStar and their approval of the Customer Agreement form before moving any further with Phase 3.