



## 2019 Second Quarter Colorado DSM Roundtable Update

August 14, 2019

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 2019 (cumulative Jan. 1 – Jun. 30, 2019) 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 approximately 276 GWh and gas savings of 307,697 Dth in the 2019 calendar year. This represents approximately 55% of the 2019 electric DSM plan’s energy savings target of 502 GWh and 48% of the gas target of 637,269 Dth.

The following section provides product status activities for the second quarter of 2019 in the Business, Residential, Low-Income, and Demand Response Products, as well as Indirect Products & Services and other related activities.

### Business Program

- **Commercial Refrigeration Efficiency** – The product has exceeded its year-end kWh savings target and is nearing its kW target as well; however, it is not forecasting to meet the gas savings targets. The product hosted a successful event for trade partners in June, which engaged many new trade partners who have not previously engaged with the product. The focus of the third quarter, and the duration of the year, is to ramp up the number of onsite audits, continue to build a gas pipeline, and engage and build relationships with the trade.
- **Compressed Air Efficiency** – The product is not currently on track to meet its 2019 electric savings targets. This is due to a lull in the pipeline. Third quarter efforts will include maintaining and growing relationships with key trade partners, increasing product awareness through email campaigns, and exploring new marketing tactics to bolster future pipeline.
- **Cooling** — The product is currently not on track to meeting its 2019 electric savings targets due partly to a slow start to the cooling season. The product continues to work closely with distributor backlog of midstream applications, and is continuing the effort to reach out to more indoor agricultural facilities and identify new custom measures. The product is currently offering a bonus incentive for installation of Evaporative condenser cooling measures in the hopes of driving additional participation.
- **Custom Efficiency** — No new projects were closed in the second quarter; however the product, in collaboration with several other custom end use products, is assisting account managers to identify, develop, and close new projects in 2019 to drive achievement towards year-end targets.
- **Data Center Efficiency** — The product saw steady participation during the second quarter but is expecting participation to slow during the second half of the year. The Company will host a Data Center Advisory Board meeting during the third quarter. The advisory board meeting will cover product changes that launched with the start of the 2019-2020 DSM Plan and will allow time for open discussion around additional opportunities to encourage energy efficiency in data centers.
- **Energy Management Systems (“EMS”)** — The EMS product closed eight projects in the second quarter. While achievement currently lags last year, the pipeline of projects suggests that

achievement will exceed its full-year electric savings target. EMS gas achievement continued to lag behind its targeted pace, despite offering a completion bonus for applicant with gas or dual-fuel projects.

- **Heating Efficiency** — The product is on track to achieve its gas and electric savings targets. The Company discontinued Boiler Tune-ups and Furnace rebates as of June 30<sup>th</sup>, 2019 as part of implementation of the 2019-2020 DSM plan. The product is currently going through a product evaluation.
- **LED Street Lights** — The product has a strong pipeline for the year and is expected to surpass its electric savings target. The City of Denver is forecasted to participate in 2019. In the third quarter additional project status information will be provided.
- **Lighting Efficiency** — The product is seeing a small decrease in participation through second quarter and tracking short of its 2019 year-end target. July 1, the program transitioned LED Tubes, LED mogul-based lamps, and PL lamps to the LED Instant Rebate product. The product's top performing measures continue to be LED linear fixture replacements. Network lighting controls are yet to gain market adoption in the retrofit market despite the product's training and marketing efforts. June 4, the product team held trade partner training for upcoming 2019-2020 DSM plan changes & network lighting controls.
- **Lighting – Small Business** — The product is on track to exceed electric year-end targets. Direct Installation participation is low thus far with the shift from lighting assessments to comprehensive energy analysis audits; however, the product is taking steps to increase participation. Additional third quarter efforts include driving cost effective measures via market segmentation, trade partner coordination and customer education.
- **Motor & Drive Efficiency** — The product remains on track to achieve its 2019 electric savings targets. The Company plans to post a 60-day notice in the third quarter to update the incremental costs for variable frequency drives and to introduce clear water pumps as a new measure. The product is currently going through an evaluation.
- **Multifamily Buildings** — The product saw steady participation through the second quarter and continues to perform well and is anticipated to meeting yearly targets if projects continue at current pace. An RFP which launched in the first quarter was completed and the new contract was awarded.
- **New Construction** — The product performed very well in the second quarter. All projects that were able to close at mid-year were closed out to ensure timely project cycles for customers. Third quarter efforts will be focused on educating/training trade on changes taking effect with the launch of the 2019-2020 Plan.
- **Process Efficiency** — Nineteen customers completed projects within the second quarter, resulting in savings that are outpacing year-end savings targets for the product. Projects were from a broad range of customers including schools, hospitals, manufacturers, and retail stores. The Company has enhanced the customer engagement process by combining Process Efficiency with the Energy Information Systems offering, to become a single Strategic Energy Management ("SEM") offer for the 2019 Plan year. A material portion of second quarter achievement was solely attributable to the enhanced SEM engagement methods. Process Efficiency enrollees have the option to continue in SEM, and contributed most of the second quarter results, including one large project.
- **Recommissioning** — The product had no new projects in the second quarter. Several new investigator applications were received and approved. Investigator trainings continue to approve new recommissioning providers.

- **Self-Direct** — The product has exceeded its filed electric savings target. Four projects closed in the second quarter with 3 more expected to close by year end. The Company will continue discussions with engineering firms to add projects to the pipeline.

## Residential Product

- **Energy Efficiency Showerheads** — The primary marketing campaigns for this product were delayed to the start of third quarter, but there have been small levels of participation through the company's online store. Early reports from the marketing campaigns show that the product is on track to meet its savings targets.
- **Energy Feedback Residential** — The product is not on track to meet year-end savings targets. The Company is working with third party implementer to determine additional tactics to increase savings. A refill of 130,000 treatment customers was added in January, and the Company is testing digital only reports versus a combination of digital and print reports with this group. Preliminary results are expected in third quarter of 2019. Preliminary savings results for this group show they are in the ramp up stage, typical for first year participants.
- **ENERGY STAR® New Homes ("ESNH")** — The product continues the strong start in 2019 and completed 1,720 homes in the second quarter. Homes compliant with 2015 IECC or higher represented nearly 60 percent of the qualifying homes. The product is forecasted to exceed the gas and electric savings targets.
- **Evaporative Cooling** — Special marketing events at retail stores were well-received with over 4,000 customers attending the 37 special weekend events at home improvement stores. June's unusually cold weather delayed many customers' buying decisions. New instant rebates appear to be helping customers choose this highly cost-effective cooling technology. Four distributors are participating in mid-stream instant rebates for their dealers (our trade partners) in Grand Junction and Denver.
- **High Efficiency Air Conditioning** — Mini-split heat pump ("MSHP") rebate use is 74% higher than the same period in 2018, but is still a small portion (7%) of all AC rebates. Trade partner participation in MSHPs has almost doubled. Rebates for standard efficiency AC units with quality installation (ie13-14 SEER) is used eight times more frequently than the same period of 2018, but is still only 13% of all AC rebates. Overall customer and trade participation is strong.
- **Home Energy Squad** — Participation in the Home Energy Squad product slowed in the second quarter, continuing a trend from previous years. Marketing efforts continued with customer emails and social media campaigns. A cross-promotion effort with the Refrigerator Recycling product was launched, through which customers could choose to trade their \$50 recycling rebate for a free Squad visit. This no-cost marketing tactic has seen early success, with 41 customers choosing the free Squad visit and an additional 180 customers requesting additional information from the Home Energy Squad. Close involvement with Partners in Energy communities continues to be pursued, with multiple partner cities beginning to offer a buy-down of the Squad trip charge for their residents. These new buy-down efforts should drive additional participation in the third quarter. Squad Plus visits continue to be a popular choice for customers. These visits are intended to be a gateway to other energy efficiency products, such as Home Performance with Energy Star.
- **Home Lighting & Recycling** — Home Lighting and Recycling has had significant achievement through second quarter and expects to exceed the product savings targets. Efforts to increase sales included TV, radio, social media, bill inserts, and educational opportunities at community events.

- **Home Performance with ENERGY STAR® (“HPwES”)** — The product is not on track to meet year-end savings targets. A product redesign was kicked off to evaluate potential product changes to promote participation.
- **Insulation & Air Sealing** — The product is on track to meet savings targets for natural gas. The product is not on track to meet electric savings targets. The product will be promoted through email as heating season begins.
- **Refrigerator & Freezer Recycling** — The product continued to have steady participation, with 3,295 refrigerators and freezers recycled through the end of the second quarter. Marketing efforts included a bill insert and customer email campaign. Close involvement with Partners in Energy communities, and cross-marketing with the Home Energy Squad and School Education Kits will help to drive continued participation, while keeping costs low.
- **Residential Heating** — Furnace and EC Motor rebate participation continues to be strong. Furnace rebates are 95% of 2018 so far, and EC Motor rebates are slightly ahead of where they were mid-2018. The product is on target to meet year-end savings targets.
- **School Education Kits** — The product had strong participation through the first half of the year, with 21,160 kits shipped (55% of the total forecast for the year). An additional 3,505 Specialty Kits were shipped in the second quarter (80% of the total for the year). These specialty kits will assess customer preferences for various styles of specialty LED light bulbs, for possible future inclusion in school kits.
- **Thermostat Optimization** — The second quarter saw similar participation levels as Q1 achievement for the product continues to lag slightly lower than projected. It is anticipated that instant rebates for the product will launch in the third quarter for both in store and online retailers and participation is anticipated to increase once these additional channels are added.
- **Water Heating** — The product saw steady participation through the second quarter. The analysis for expanding instant rebates through retailers was completed and will roll out in Q3. Marketing campaigns for heat pump water heaters are also kicking off in Q3 and will include inserts, direct mail and email campaigns.

### Low-Income Product

- **Energy Savings Kits** — The Company sent out the first batch of kits at the end of the second quarter. A direct mail offer was sent to qualifying customers at the end of the quarter, and results will be available early in the third quarter. The Company is also partnering with Energy Outreach Colorado to identify additional qualifying customers, and 100 kits have been distributed thanks to this partnership.
- **Multifamily Weatherization** — The product is on track to meet year end savings targets. Eighteen projects are completed as of the second quarter, and there are over 40 projects in the pipeline. Several large projects were completed in the second quarter, notably a senior housing facility with cost effective lighting retrofits, rebates totaling over \$50,000.
- **Non-Profit** — The product is on track to meet year end savings targets. Twenty projects are completed as of the second quarter and the pipeline remains full with over 30 projects projected to be completed in 2019. Product implementer and partner Energy Outreach Colorado continue to engage the community, working with the non-profits to distribute home lighting to hard-to-reach communities.

- **Single-Family Weatherization (“SFWx”)** — The product is on track to meet energy savings targets. Energy Outreach has begun the installation of smart thermostats in homes; feedback on the new offering is expected in the third quarter.

### Indirect Product

- **Business Education** — Through the second quarter of 2019, the Business Education product achieved approximately 71 percent of the year-end participation target and generated 162 customer leads. Participation and outreach through key community and trade association events continue to create a meaningful conversation with customers. By the end of the second quarter, the Company provided outreach through eight community-based event days. In addition, the product has been supported through energy efficiency messaging via the Energy Solutions newsletter, as well as a mass marketing print campaign. The combination of these initiatives continues to support DSM achievements.
- **Business Energy Analysis** — Through the second quarter of 2019, Energy Analysis received numerous requests from the campaign that was launched in the first quarter. This influx of requests, created a back log of audits that our new vendor was responsible for, and the vendor has hired on additional help to supplement the pipeline of audits. The audit timeline is much closer to goal than the first quarter, and more aligned with our vision of the product. Third quarter efforts will be focused on maintaining a pipeline and creating new opportunities through marketing.
- **Consumer Education** — Through the second quarter of 2019, Consumer Education achieved approximately 55 percent of the year-end participation target and generated 1,722 customer leads and 224 signups. Participation and outreach through key community events continues to create a meaningful opportunity to address energy efficiency with customers. By the end of second quarter, the Company provided outreach through 40 community-based event days. In addition, the product has been supported through conservation messaging in residential newsletters and web-based channels. The combination of these initiatives continues to drive participation in DSM products.
- **Energy Benchmarking** — The Company supports municipalities within its service territory to reach their benchmarking targets. During the second quarter, 495 new participant buildings were added. This brings the total Colorado building count to 3,706.
- **Energy Efficiency Financing** — The Company continues to develop its partnerships with the Colorado Energy Office’s RENU loan product and Elevations Credit Union. Over 90 trade partners have signed up to offer these products to customers across the state. The Company is working to promote awareness by including financing messaging in marketing efforts for all relevant products and trade partner trainings, and by including a Financing section in the Heating, Ventilation, Air Conditioning, and Refrigeration web portal, where customers can easily find which trade partners can offer them the rebate and financing option they want.

The Commercial Financing Product continues to promote its streamlined web portal. In two minutes or less, trade partners can create a customized financing estimate through the National Energy Improvement Fund (NEIF) website which is accessible through the Xcel Energy website. NEIF uses its industry-wide relationships and leading edge lender-partners to provide the best rates and terms to optimize energy efficiency projects. This includes CPACE financing when appropriate.

- **ENERGY STAR® Retail Products Platform Pilot** — The pilot period ended on March 31, 2019. In the second quarter of 2019, several expenditures and support commitments from 2018 cleared, driving spend. The Company has evaluated near and long-term strategies to improve

performance; however, the Company does not see a cost-effective path forward at this time and plans to submit a 90-Day Notice to terminate the pilot.

- **Home Energy Audit** — Participation in the Home Energy Audit product slowed in the second quarter; mild spring weather may have been a contributing factor. The discounted visit in combination with the Home Energy Squad continues to be a popular choice for customers. By promoting these combined visits, the Company hopes to simplify the customer experience, increase participation in the Home Energy Audit product, encourage participation in other DSM products, and eliminate customer confusion regarding the difference between a Squad visit and an Audit.
- **DSM Planning & Administration** — During the second quarter the Company filed one 60 Day Notice and supported program staff with the transition to the 2019-2020 plan product portfolio which was implemented on the July 1, 2019.
- **Product Evaluations** — 2019 product evaluations for Heating Efficiency, Motors and Drive Efficiency, Peak Partner Rewards, Saver's Switch, and Single Family Weatherization are underway. The Company is also proceeding with the follow-up research recommended in the 2018 Lighting Efficiency evaluation in order to receive a recommended net-to-gross for 2020. The lighting baseline study kickoff occurred in Quarter 2 but shortly afterward the project was paused to revise the study scope due to the recently-adopted legislation affecting residential lighting. The study will resume in Quarter 3.
- **Measurement & Verification** — The Company's third-party verification contractor completed random field inspections for prescriptive products for the 2019 M&V year, with no significant variances.
- **Market Research** — The small commercial end use study was completed in May. Target customers for the study were businesses that have demands between 25 and 125 kW. Survey length reduced the previously planned quota of 400 customers to 300 customers to hold the study expense constant. Plans are additionally underway to obtain updates in July from Dun and Bradstreet (D&B) of active business customer categorization data. Expected data fields include current NAICS and SIC 1987 industrial classification codes, facility square footage, business start date, number of employees and sales volume. The D&B data is primarily helpful in identifying energy efficiency and demand response opportunities.
- **Product Development** — Current development efforts include:
  - Research and development into advanced energy communities which are district-scale development projects that have aggressive energy targets and include multiple energy systems (energy efficiency, demand response, advanced grid, renewable energy, storage, and electric vehicles.) The Company is looking into product designs that can help meet the needs of these projects;
  - A pilot that tests the use of residential batteries to provide demand response;
  - A pilot that deploys energy efficiency and demand response into a specific location in the distribution system in order to defer or avoid traditional distribution investments to meet a need for additional distribution capacity;
  - A pilot that manages when electric vehicles charge to reduce their impact on system peak load and provide other possible system benefits; and
  - Direct load control switches with two-way communications that control air conditioners and water heaters.
  - Smart thermostat demand response for small and medium businesses.
  - A residential water heater demand response measure.

- A behavior-based demand response product for residential customers that uses pre and post-event communications and social comparisons to reduce customer consumption during demand response events.

### **Demand Response Product**

- **Critical Peak Pricing Pilot** — The pilot dispatched its first event of 2019 near the end of Q2. There were no changes to the pilot's participation during the second quarter of 2019. The pilot maintained the previous eight participants and potential 4.09 MW of controllable load. Second quarter efforts continued to focus on meetings with potential customers, with a concentrated focus on previous ISOC 1-Hour Notice participants that are no longer eligible for the ISOC product. The Company also continued its work on the RFP launched in 2018 to acquire an implementation service partner to supplement the Company's marketing and administration of the pilot and increase in the pilot's participation.
- **Peak Partner Rewards** — There were no changes to the product's participation during the second quarter, thus ending the quarter with 16 participants although the capacity commitment increased to 14.9 MW due to customer increases in their commitment during the summer months. Second quarter efforts continued to focus on meetings with potential customers. The Company also continued its work on the RFP launched in 2018 to acquire an implementation service partner to supplement the Company's marketing and administration of the product and increase in the product's participation.
- **Residential Demand Response** — The Residential Demand Response portfolio is facing a challenging recruiting environment. As of the second quarter, the product has deployed/enrolled about 2,000 devices. About two thirds of the new devices were Saver's Switches.