



2022 Second Quarter Colorado DSM Roundtable Update

August 10, 2022

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 2022 (cumulative January 1 – June 30, 2022) product energy and demand savings achieved, product expenditures, and CO₂ and SO₂ emissions avoided. In total, Demand-Side Management (“DSM”) electric products have achieved savings of approximately 167.7 GWh and gas savings of 294,233 Dth in the 2022 calendar year. This represents approximately 32 percent of the 2022 electric DSM plan’s energy savings target of 523 GWh and 36 percent of the gas target of 799,708 Dth.

The following section provides product status activities for the second quarter of 2022 in the Business, Residential, Income-Qualified, and Demand Response Products, as well as Indirect Products & Services and other related activities.

Business Program

- **Business Energy Assessments** — The product has seen participation through its indoor & outdoor agriculture assessment, commercial streamlined assessments, and building assessments offerings. The Business Energy Assessments product launched in May with a training that included all vendors, product teams and engineers. The trajectory of the implementation savings will begin after several months, so savings will be hard to predict until implementation begins. The idea is that each assessment will take three weeks to have a report read out and the first implementation measure will occur within six months. Indoor agriculture assessments have seen implementation savings even before the training. Due to many bonuses the company is offering upon implementation there has been more movement under that product. We expect close to six GWh of savings by the end of the year under that product alone.
- **Business HVAC+R Systems** — Continuing efforts to build the project pipeline included gas bonus rebates to support geo-targeting efforts in Summit County and the Denver West Metro area along with trade partner outreach and education; however, supply chain complications continue to have an impact on the HVAC market. Large bonus rebates have been added for electric and gas measures to meet savings goals by the end of the year. All program applications and web pages have been improved to increase usability. Marketing outreach efforts have focused on both commercial customers and trade partners, with new campaigns continuing throughout the year.
- **Compressed Air Efficiency** — The product saw an increase in savings in the second quarter compared to Q1. Supply chain concerns continue to impact the market and pipeline for the product. Bonus rebates are being explored to encourage product participation this year. Increased communication with trade partners is planned for Q3 to ensure that new industry partners are comfortable with the details of the program, including who to contact at the Company and what rebate offerings are available.
- **Custom Efficiency** — The product continues to be off to a slow start after the second quarter, similar to the first quarter. There are working efforts in play to help grow the pipeline. We have assembled the group that will go after aging pre-approved projects that have passed the cost

benefit tests at the time they were submitted. The product can anticipate growth in participation in the third and fourth quarter. There will be more strategic plans in motion to reach targets.

- **Data Center Efficiency** — No projects closed during the second quarter, but the product has a healthy pipeline for the year. The Company hosted an advisory board meeting with trade partners to provide training and networking opportunities and discuss additional ways to engage existing data center customers. In addition, the company met with two trade partners individually to discuss pipeline, industry trends, and supply chain constraints.
- **Energy Management Systems (“EMS”)** — The Company continues to expand outreach to trade partners, with more specific direction about additional control strategies that can provide better value for customers, but high vacancy rate for commercial property has decreased investment in new controls systems, as well as inflation and lack of cost-effective incentives. The product team is exploring ways to increase value for customers as well as increase load shifting opportunities for our customers. The product evaluation by TRC has started interviews with customers and trade partners to document barriers and product attention. Cost effectiveness remains as the top issue for this product, with only about 30% passing for a rebate.
- **LED Street Lights** — The product is on track to achieve its forecasted target of 1.3 GWh.
- **Lighting Efficiency** — The Lighting Efficiency product closed the second quarter at approximately 23 percent to its energy savings targets. The product is still experiencing lower participation and pipeline growth compared to previous years but anticipates that lighting bonus rebates launched in April will start to show more of an impact in Q3 and Q4. The product has worked to market lighting bonus rebates through a variety of channels such as email, direct mail, social media and radio and video advertising. The product will continue to explore ways to market and motivate customers to participate.
The product also posted a 60-day notice to update several components of the product such as updating the incremental capital costs and lifetime for lighting controls as well as add additional measure offerings including high end trim controls rebates and prescriptive rebates for LED grow lighting. These updates should make lighting controls more cost-effective, provide new ways to participate and simplify the rebate process.
- **New Construction** — The product is off to a slow start through the first and second quarter, but the pipeline remains strong and is on target. The bulk of the expected savings are generated from the Energy Design Assistance product. The Business New Construction underwent an Impact Evaluation in 2021 and will implement a new Net-to-Gross Ratio for the product in 2022. The Codes and Standards offering is continuing to influence the market by hosting trainings and providing assistance to jurisdictions that are exploring updating their energy code.
- **Self-Direct** — No new projects were completed in the first or second quarter. Several customers postponed their projects until later in 2022 due to budgetary and staffing concerns.
- **Small Business Solutions** — Small Business Solutions closed out the second quarter with an achievement of about 15% of the electric energy savings target and about 52% achievement of the gas savings target. The small business segment has been deeply impacted by the pandemic and have been hesitant to invest in energy efficiency upgrades. The product has launched a 25% bonus on select LED fixtures and a 50% bonus on LED tubes invoiced between April 15th and November 15th of this year. The product has leveraged Business Walks with local City/Town representatives, promotion at partnership and membership events (Colorado Restaurant Association, IECRM, EEBC, IES, HC3, Energize Denver, and Partners in Energy), and the new partnership with Switch-it-Up to directly increase DI TLED projects throughout the quarter. The product will also take advantage of the TOU (Time of Use) rollout and communications to present customers with an action item of a free assessment and guidance on improving energy efficiency and lowering customer bills. The free assessment will be marketed alongside TOU campaigns in

the small business to both customers and trade partners through a variety of channels such as direct mail, social media, email, and small-business focused events.

- **Strategic Energy Management (“SEM”)** — In the second quarter the product enrolled eight new customers and completed its year-long Cohort (group delivery) for Wastewater treatment plants. A broad mix of customers completed 53 projects. However, the average project size and overall achievement declined sharply from the prior year. Customers are continuing to experience supply chain issues, and a few customers have reversed prior budget decisions due to economic uncertainty. In the next quarter, the Company will continue its Cohort for k-12 schools and will begin a collaborative effort with the Colorado Energy Office for mutual SEM delivery. The Company will use SEM’s customer engagements to directly promote our end-use bonuses, and to look for immediate and deeper operational savings. The next quarter will also include studies and benchmarking for large, metro-area hospitals, almost all of whom are now enrolled.

Residential Program

- **Energy Efficiency Showerheads** — First quarter achievement was driven by free kit and equipment sales from the Xcel Store. A targeted promotional email driving traffic to the Xcel Store for qualified customers for free showerhead kits is scheduled to begin in early August 2022 followed by a postcard promotion in September. The summer promotion is expected to achieve most of the product performance for the year. Spending will increase with the pending promotions but is not expected to exceed per unit costs from 2021.
- **ENERGY STAR® New Homes (“ESNH”)** — In total, 3,124 homes were credited to the product through the second quarter. Beneficial electrification measures stagnated in Q2, with no additional all-electric homes or heat pump water heaters. Homes compliant with 2015 IECC or higher represented 86% of the qualifying homes. Two-thirds of Program homes were less than 20% better than local energy code.
- **Home Energy Insights** — The Company’s third-party implementer launched cohort maintenance efforts in the first quarter that improved the products year-end outlook. Through May the product has achieved about 37% and 53% of its electric and gas targets for the Home Energy Report (“HERs”) component, respectively. Final achieved savings are received from the implementer almost two months in arrears. The majority of HERs electric savings come in the summer season, and the product is projected to be 89% of its filed electric savings target. Gas savings, however, are heavily weighted to the winter months and year-end achievement is expected to be 87% of filed gas savings.. The Company has made additional changes with the implementer to the reports delivered to customers to improve engagement and encourage easier access to digital resources towards positive customer experience and effectively encourage energy savings.
- **Home Energy Squad** — The product continues to recover from the pandemic with increasing in-home visits. However, staffing remains a challenge in meeting desired growth. The implementer continues recruiting efforts and anticipates growing participation throughout the year. While the product continues to provide virtual and in-home visits, we are seeing these types of visits slowing. Marketing continues to drive product participation
- **Home Lighting & Recycling** — The product is on pace to exceed the annual energy savings and spend target. Sales are remaining strong as customers are looking for easy ways to save money. The product is offering bonus discounts on multi-packs of A-line LEDs at select retailers to help customers save energy.

Insulation & Air Sealing — Overall participation was steady throughout the quarter and the product is on track to meet its 2022 targets. The Marshall Fire Bonus was enacted after the natural disaster caused smoke damage to many homes. The Company is granting a 100% rebate bonus on the Insulation & Air Sealing measures installed within 4 affected zip codes. This bonus

is in effect if installation is done within the 2022 calendar year. This bonus is expected to increase participation in the zip codes affected.

- **Multifamily Buildings** — The product saw a decrease in our electric savings but a substantial increase in our gas savings in the 2nd quarter. With staffing and responsibilities now in place, the implementor should be better equipped to refocus efforts for a strong second half. We have increased our communications through various email campaigns as well as in-person trade show participation to both increase the product awareness and drive lead generation with our larger properties. This effort will continue into the third quarter along with an increased focus on our gas savings through our gas only properties.
- **Refrigerator & Freezer Recycling** — The product is seeing lower participation than expected, but we hope that interest increases during the remaining summer months, as summer is typically our busiest season. Contact-free and in-home pickups are available to customers based on preference. The Company has launched a social media campaign and is using cross-promotional tactics to increase awareness and participation.
- **Residential Heating & Cooling** — For the most part, participation in this product is comparable to participation in 2021. Exceptions include significant increases in heat pump measures and enrollments in smart thermostat optimization/Eco+. The product is on track to meet its energy savings target for gas, but may fall short of its energy savings target for electric. This is primarily due to lower than anticipated participation in heat pump measures.
- **School Education Kits** — The spring campaign for this product has met expectations with strong classroom participation. The fall campaign contributes most of the participation and achievement for the year, preliminary registration is robust, and the expectation is to meet filed targets. Students participate in an energy conservation-focused curriculum and install energy-saving devices in their homes, driving savings.
- **Whole Home Efficiency** — (formerly Home Performance with ENERGY STAR®) — Participation was underwhelming in Q2. Collaboration with the product implementer is expected to increase participation from Trade Partners and customers. An ongoing program evaluation is expected to discern perceived issues with program rules/participation. Continual efforts with the program implementer to increase awareness and adoption in Q3 are developing.

Income Qualified Program

- **Energy Savings Kits** — The product is expected to achieve savings targets for both gas and electric. Supply chain issues have continued to impact the product with extended manufacturing timelines due to equipment shortages. Contingency plans are in place with increased marketing campaigns in Q3 and Q4 to offset supply chain delays.
 - **Multifamily Weatherization** — The product is expected to hit the gas savings target but may fall short on the electric savings target. Additional projects will continue to be pursued to assist in achieving the electric target.
 - **Non-Profit** — The product continued to see strong participation in the second quarter with new projects in the pipeline and is expected to achieve electric savings. The product may fall short on gas savings based on historical participation however contingency plans are in place to bring in additional gas savings if needed.
- Single-Family Weatherization (“SFwx”)** — The product is expecting comparable participation and savings as seen in 2021 for the electric target. The product is also expected to meet the gas savings target as a result of contingency plans to bolster savings.

Indirect Program

- **Business Education** — Through the second quarter of 2022, the Business Education product achieved approximately 42% of its year-end participation targets with 812 participants. With in-person events returning in 2022, the company was able to return to its main form of engagement and participation at local events. The company activated at events with the Apartment Association of Metro Denver and the Independent Electrical Contractors Rocky Mountain Chapter. Attending these events and having these one-on-one conversations with business customers is crucial to the company's goal to drive education and engagement with regards to the company's business energy-saving resources.
- **Business Energy Analysis** — Business Energy Analysis product ties into the Business Energy Assessments product. The product is known as Commercial Streamlined Assessments publicly. The product conducts assessments similar to ASHRAE level 1. Research has shown customers interested in increasing electrification and electric vehicle goals. The product is working with the company's EV team to help streamline the EV process for those customers. Increasing bonuses in end-use products are being highlighted to help customers conduct implementation of energy saving opportunities found in the energy assessment. A recent meeting with the vendor in Q2 discussed increase in implementation in Q3 and Q4. The goal is to get close to 500 assessments. The product is currently at 178 assessments. The vendor expressed less interest in the months of June and July due to companies that have employees needing time off but they have interest in discussing implementation in September. CSA is looking into becoming an approved provider for Boulder's Assessment requirements. This should occur during the end of Q3.
- **Consumer Education** — Through the second quarter of 2022, Consumer Education achieved approximately 57% of the year-end participation target generating 15,601 participants. With in-person events returning in 2022, the company was able to return to its main form of engagement and participation – activating events at local events. The first quarter of 2022, the Company participated primarily in home shows as these were some of the main events that returned at the start of quarter. The second quarter ushered in a variety of events targeting residential customers such as the Denver Arts Festival, Boulder Pride, Earth Day events and more. These face-to-face engagement opportunities provide the company with valuable ways to drive energy and money saving educational messaging that support the company's DSM residential programs.
- **Energy Benchmarking** — The Company supports municipalities within its service territory to reach their benchmarking targets. During the second quarter, 574 new buildings were processed. Some of these are repeats as a result of new building owners benchmarking their buildings. The heavier volume in the second quarter is attributed to benchmarking ordinances in Denver, Boulder and Fort Collins with deadlines of June 1. Additionally, building owners are being proactive about benchmarking their buildings ahead of compliance deadlines in December 2022 for the new Colorado statewide benchmarking ordinance. The total Colorado building count is now up to 5,438.
- **Energy Efficiency Financing** — The Company continued work to develop future financing offerings to support residential customers. On the business side, the Company continued to promote financing options to businesses and commercial trade partners via the Xcel Energy website which connects to the National Energy Improvement Fund's (NEIF) portal allowing access to the financing proposal request process.
- **Home Energy Audit** — The product is experiencing solid participation as pandemic-related concerns continue diminishing and homeowners and auditors are more comfortable with in-person visits. The product supplies home energy audit services through an implementor and independent auditors.

- **Partners in Energy** — During second quarter each community working with the Partners in Energy program to implement their energy action plan in 2021 received a dashboard on that showed how the community achievements for 2021 and a summary of activities that drove those achievements. The reports included 2021 community wide energy use, a breakout of DSM program and renewable program participation, as well as data for the historical years that the community participated in Partners in Energy. These dashboards are provided as a tool to deliver metrics for a community to measure progress to goal and serve as an opportunity for each community team to evaluate progress and identify if there are any adjustments they would like to make to their implementation plan based on the progress to date.
- **Market Research** — A product experience tracking study continues to provide high level feedback from primarily residential customers participating in energy efficiency and demand response products. The study's primary focus is ease of participation by respondents and customer satisfaction. New data from Dun and Bradstreet is now available as a refreshed list of all active metered business customers is provided for matching. A Home Use study is ready for data collection in July and reporting in Q3.
- **DSM Evaluation, Measurement & Verification** — Planning for 2022 evaluations was completed and some data collection activities commenced in Q2. The demand response continuous evaluation framework, staff interviews and desktop research work commenced in Q2 as well.
- **DSM Planning & Administration** — During the first quarter the Company prepared its 2021 DSM Status Report verifying over 488 GWh of Electric energy savings and 812,605 Dth of Natural Gas energy savings. The Company also continued development of the Company's 2023 DSM Plan as well as the combined 2022 DSM/BE Strategic Issues filing.
- **Product Development** — Current development efforts include:
 - Codes and Standards;
 - A pilot that manages when electric vehicles charge to reduce their impact on system peak load and provide other possible system benefits;
 - Direct load control switches with two-way communications that control air conditioners and water heaters;
 - 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;
 - A demonstration project that will study how commercial customers can shift load to times with excess renewable generation on our system as indicated by very low system marginal prices;
 - A new gas boiler measure motivated in part to address gas distribution constraints in Summit County;
 - A thermostat-based gas demand management research project motivated in part to address gas distribution constraints in Summit County;
 - Investigating how to serve oil & gas customers more effectively
 - Multi-family demand response.
 - Dual-fuel commercial heat pumps
 - Cold climate heat pumps
 - Integrated lighting and HVAC controls

Demand Response Program

- **Critical Peak Pricing** — The Critical Peak Pricing ("CPP") product dispatched two winter events in February 2022. CPP traditionally dispatches events in the summer but has the option to call winter events. The product added two new participants the second quarter of 2022 and there are currently 36 total participants in the product. Recruiting efforts and meetings with potential customers have continued through the second quarter.

- **EV Critical Peak Pricing** — The EV Critical Peak Pricing (“EV-CPP”) product dispatched no events in second quarter 2022. Customers were sent pre-season communications to prepare for the summer event season.
- **EV Optimization** — The Charging Perks pilot (dynamic optimization) and Optimize Your Charge (static optimization) offering continued enrolling customers in the second quarter of 2022. Optimize Your Charge began enrolling new customers through our vendor WeaveGrid in second quarter of 2022.
- **Geo-targeting Pilot** — In the first quarter the Company continued implementation of a marketing campaign in partnership with AC Rewards to offer a full rebate for smart thermostats that are enrolled in our AC Rewards offering to our target customers. Non-bulk hands-on activities are under discussion with distribution operations team. Discussions are underway to identify options for potential utilization of DSM geo-targeting in other business areas that could need deferment of capital investment including on our natural gas system to help manage gas capacity in Summit County, CO and the West Metro area of Denver, CO. Several promotions are active in those regions, but are unrelated to this electric pilot.
- **Peak Day Partners** — Peak Day Partners is a voluntary product where enrolled participants have the option to respond to price signals from the company. The product finished the second quarter with four participants with a projected potential event contribution of about 22MW. In the first half of the year there were no accepted control event offers.
- **Peak Partner Rewards** — The Peak Partner Rewards (“PPR”) product dispatched two winter events in February 2022. PPR traditionally dispatches events in the summer but has the option to call winter events. The product did add 9 new participants in the first quarter of 2022 and 2 more new customers in the second quarter 2022. The product now has a total of 31 participants. Recruiting efforts and meetings with potential customers have continued through the second quarter.
- **Residential Battery Demand Response Pilot** — The Company has continued enrolling customers in the pilot and has 150 customers enrolled as of second quarter 2022. The Company began charging events in the first quarter 2022 and has now successfully dispatched 64 summer and winter events.
- **Residential Demand Response** — The Saver’s Switch product has installed just over 2,000 switches in the first half of 2022. The majority of these were maintenance replacements of older switches that have outlived their useful life. These switches were originally deployed prior to 2005. The AC Rewards product is still seeing most of its participation through the Bring Your Own Thermostat channel and the product saw just under 3,600 participants in the first half of 2022. The direct install channel has started to see an uptick in enrollments as well. The Smart Water Heater product continues to struggle with supply of control modules. As of the end of the second quarter, one unit has been deployed.
- **Small Commercial Building Controls** — Direct installations have continued in the first half of the year. Enrollments were slower than expected in the beginning of the year but email marketing campaigns did launch in the second quarter and enrollments increased. There have been over 300 enrollments in the first half of 2022.