



## 2023 Second Quarter Colorado DSM Roundtable Update

August 9, 2023

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 2023 (cumulative April 1 – June 30, 2023) 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”) products have achieved electric savings of approximately 215 GWh and gas savings of 340,650 Dth in the second quarter of 2023. This represents approximately 44 percent of the 2023 electric DSM plan’s energy savings target of 486 GWh and 38 percent of the gas target of 898,487 Dth<sup>1</sup>.

The following section provides product status activities for the second quarter of 2023 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 began Q1 of 2023 with a strong pipeline for indoor agriculture assessments and commercial streamlined assessments. The majority of participation is in those two sectors. Building and Targeted Building assessments are beginning to pick up due to Colorado having many building performance ordinance standards relating to assessments. Outdoor Agriculture has implemented marketing to the farming segment of Colorado through direct and in-direct mail. Outdoor Agriculture Assessments should pick up Q3-Q4 with it being peak season for those customers. The bonus this program offers is a 20% implementation bonus capped at 75% of the project cost and \$5,000. The bonus is valid for customers with invoice dates from May 1, 2023 – November 15, 2023. All paperwork must be turned in by December 1, 2023. The bonus is stackable with other end-use product bonuses such as HVACR and Lighting but will be capped at 75% of the project cost. In Q2 we saw a large portion of indoor ag and commercial streamlined customers taking advantage of the pipeline. This has also helped customers decide to implement who are still seeing after effects of covid and inflation in their budget. There is a focus to help gas customers with electrification measures through commercial streamlined. The program completing and RFP by the end of 2023. The pipeline is slowly growing for Building and Targeted Building assessments and helping customers with Energize Denver fines and Boulder Performance ordinance.
- **Business HVAC+R Systems** — Our project pipeline is expanding with the continuation of a large 50% rebate bonus for both prescriptive and custom measures. We are ramping up our marketing efforts through email, direct mail, and bill onsets to reach out to our commercial customers and trade partners. Although we are facing some challenges in the marketplace due to supply chain complications, we remain optimistic about our progress. We are excited to bring

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<sup>1</sup> Savings targets given here reflect the Comprehensive Settlement Agreement regarding the Company’s 2023 DSM & BE Plan, Proceeding No. 22-A0315EG. That Settlement Agreement has not yet been approved by the Colorado PUC at the time of this update; any changes ordered by the Commission will be reflected in future updates.

prescriptive heat pumps measures for space conditioning and water heater to our commercial customers once our 2023 plan begins.

- **Compressed Air Efficiency** — The product saw a decline in savings in the fourth quarter compared to Q3. Supply chain concerns continue to impact the market and pipeline for the product, and ended up pushing some projects into 2023. Planning for a training that will take place in 2023 began in Q4. This training will bring together industry players and educate them on technical aspects of compressed air systems.
- **Custom Efficiency** — Q2 was a slow quarter for the program, as outstanding projects were pushed to later in 2023 due to supply chain and cost pressures. Continued efforts to grow the pipeline for 2023 are in place, including customer and sales team education.
- **Data Center Efficiency** — The Company did not book any savings for this program in Q2. The company continues to meet with trade partners and customers individually to discuss pipeline, industry trends, and supply chain constraints. The pipeline for 2023 remains strong, with most projects expected to close in Q4.
- **Energy Management Systems (“EMS”)** — The Company has made fast progress in working with Xcel Product Development and the TRC evaluators to identify product changes that will bring Controls/EMS and Demand Response together for meaningful transition in the marketplace. Currently the product fails 72% of submitted applications. The TRC Evaluation recommends product changes such as adding prescriptive measures, increased training on demand peak load shifting for Trade Partners, and applying a 50% incremental cost reduction for cost-effective accuracy. Post-pandemic high vacancy rates for commercial property continue to decrease investment in new controls systems. Inflation and lack of cost-effective incentives are the main contributors to low project submittals. The Company has acted on the TRC evaluation by submitting a 60 day notice, which has been approved. The timeline for changes will be September 1, 2023, based on the approval date of the 2023 Plan. The Company expects to see an increase in Controls project activity based on the marketing of these changes occurring in August, 2023.
- **LED Street Lights** — The product is on track to achieve its forecasted target.
- **Lighting Efficiency** — The Lighting Efficiency product achieved approximately 70 percent of its energy savings target of 91 GWhs based on the 2023 settlement agreement. The impact the product was experiencing from cost increases due to supply chain constraints have been resolved for the most part. However, cost impacts due to inflation have increased equipment costs which in turn have impacted customer’s decisions to implement lighting projects outside the grow lighting rebate. The product carried over the 2022 bonuses rebates in 2023 in an effort to bring down upfront equipment costs. Bonus rebates were made available for prescriptive interior fixtures and LED tubes through the midstream LED Instant rebate channels and bonus rebates are also available for LED grow lighting equipment that went prescriptive as of July 1, 2022. Bonus rebates are marketed to customers through a variety of channels including direct mail, email, social media, paid search, radio and video advertising, trade/industry events and presentations. As a result, the product has seen a boost in savings since the launch of the bonuses. Particularly within the prescriptive LED grow lighting segment which has brought in 49.5 GWh of savings through the end of June. The Prescriptive and Custom Lighting rebate offerings were evaluated in 2022 as part of a process and impact evaluation. The evaluation was completed in early first January and the recommendations and strategies within the evaluation are being evaluated for implementation within the product. An evaluation for the instant or mid-stream lighting product is taking place this year.
- **New Construction** — The product ramped up for Q2 achievements and is on target for both electric and gas commodity savings. The forecast and pipeline remains strong with an

expectation for the rest of the calendar year to ramp up. The bulk of the savings were generated from the Energy Design Assistance product. The products have seen project timelines extend farther due to supply chain and budget constraints, however with the large pipeline of projects, the products remained consistent. 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. The offering helped eight communities in Company service territory advance their energy codes throughout the year.

- **Self-Direct** —Fortunately, a few customer projects came to fruition after years of delay. The Company continued to meet with engineering firms and vendors to identify prospective projects and recognizes that most customers gravitate to our holistic, full-service programs.
- **Small Business Solutions** — The product has continued to make progress towards electric and gas savings targets in the second quarter of this year. Ongoing downward economic trends, and generally poor economic health, seem to continue to affect the small business segment as businesses have been more hesitant to invest in energy efficiency upgrades. The product continues to leverage partnerships with local City/Town representatives and presence at segment specific events to increase the ease of product access and program participation. The product is continuing to diversify marketing media and messaging to reach different customer sub-segments with emphasis on the free assessment, guidance on improving energy efficiency, and lowering customer bills. The free assessment, along with bonus rebates, will be marketed to both customers and trade partners through a variety of channels ranging from grassroots business-to-business canvassing and presence at small-business focused events, to direct mail, e-mail, and digital ads.
- **Strategic Energy Management (“SEM”)** — The program completed nearly 20 Gwh in Q2 and is 44% to year end goal. The largest savings came from indoor agriculture customers, and saw substantial savings from hospitals, government facilities, and food/beverage processing. Second quarter activities included proactive revisits of enrollees, as well as recruiting and enrolling new customers into the SEM program. The program has a hefty pipeline for both Q3 and Q4. The program is anticipating coming in near 88% to filed goal. In the next quarter, the company will continue to manage the enrollees’ opportunity registers for deeper savings, grow opportunity registers for new enrollees to build out 2024 pipeline, and focus on concluding the program’s RFP.

### **Residential Program**

- **Energy Efficiency Showerheads** —Several new initiatives are being developed to promote the showerhead program. A significant drop off in email engagement has resulted in less than expected participation for the first half of the year. Additional marketing campaigns utilizing different channels are underway which should drive up participation numbers through year end.
- **ENERGY STAR® New Homes (“ESNH”)** — In total, 2,704 homes were credited to the product in Q1. The Program recorded 14 all-electric homes through Q2, already exceeding last year’s total for all-electric homes. The program paid four heat pump water heater rebates in Q2. Homes compliant with IECC 2015 or more recent energy codes represented 96% of the qualifying homes. Four percent of participating homes were in jurisdictions on 2021 IECC. Approximately 70% of Program homes were less than 20% better than local energy code.

Ten homes have received rebates via the Marshall Fire recovery, nine for IECC 2021 code compliance and one for Energy Star NextGen.

- **Home Energy Insights** —Home Energy Insights is currently lagging behind goals for the year due primarily to a gradual decrease in the population of participants. Plans to introduce a new cohort are moving forward and should be finalized in Q3. . In addition, a new report template has been developed with the goal of improving the overall look of the reports, the call to action, and the layout of the information. The intention of the new design is to make it a more customer centric experience, improve information delivery, and better highlight opportunities for customers to make improvements in their energy consumption.
- **Home Energy Squad** — The program achievement is off to a slow start in reaching desired participation targets. The program has increased staffing levels of qualified technicians to help more customers achieve energy efficiency through the direct install program offering the standard Home Energy Squad visit and the Home Energy Squad Plus visit which includes an energy efficiency audit. The product is driving participation and savings through targeted marketing campaigns and promotes additional programs offered by the Company.
- **Home Lighting & Recycling** — The product has surpassed the 2023 annual energy savings and spend target. The product is offering bonus discounts on select packs of LED A-line and specialty bulbs at select retailers to help customers save energy by upgrading their bulbs in various locations around their home.
- **Insulation & Air Sealing** — Overall participation was steady throughout the quarter and the product is on track to exceed its 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 four affected zip codes. This bonus remains in effect if installation is completed between 1/1/22 and 6/30/23. This bonus is expected to continue to increase participation in the zip codes affected.
- **Multifamily Buildings** — Through the second quarter, the program savings have gradually started to bring the program more current with the forecast.. Participation has been increasing and we look for a greater number of opportunities to close as the initial assessments are completed and direct install completed. . Several events with AAMD have increased outreach and engagement with property management. There are plans for a bill insert in the 3<sup>rd</sup> quarter to further target smaller apartment building owners. Gas savings continue to be hard to reach as the program pushes forward with a strong electric performance.
- **Refrigerator & Freezer Recycling** — A successful email campaign in late March dramatically spiked participation and had a lasting effects that were felt throughout April. Most of the increased participation and savings were reflected in in this quarter. Based on the success of the campaign, we will look into implementing more email communications at strategic points throughout the remainder of the year. I have also integrated propensity modeling into our marketing tactics in order to identify and reach customers that are statistically more likely to participate in the program. In the future, the Company will continue to use cross-promotional tactics, email campaigns, and direct mail to increase awareness and program participation. Contact-free and in-home pickups are still available to customers based on preference.
- **Residential Heating & Cooling** —Participation in this product is up across the board compared to participation in 2022. In particular, heat pump and heat pump water heater participation have increased significantly. Overall, the program's savings are significantly higher than at this same time in 2022, on the gas side and are comparable to this time in 2022 on the electric side.
- **School Education Kits** — Classroom participation is on track for 2023 projections after a strong spring campaign. Savings are expected to meet projections with the majority realized Q4. The product is popular with teachers, students and parents resulting in high participation and installation of energy efficient devices. Students participate in an energy conservation-focused curriculum and receive a kit of energy-saving devices to install in their homes.

- **Whole Home Efficiency** — (formerly Home Performance with ENERGY STAR®) —. Participation was underwhelming through the second quarter. Collaboration with the product implementer is expected to increase participation from Trade Partners and customers. A seminar was held to increase awareness and Trade Partner understanding of the program’s participation opportunities. The program evaluation results were published and actions will be taken to implement various recommendations. Continual efforts with the program implementer to increase awareness and adoption in 2023 are ongoing.

### Income Qualified Program

- **Energy Savings Kits** — Kit distribution is now ongoing and about 1/3 of Energy Savings Kits have been distributed. The Energy Savings Kits will continue to contribute additional savings and educational awareness through an onsert included in each kit. The onsert will feature pertinent information in both English and Spanish around our TOU offerings and other energy efficiency programs. About 2,000 smaller Kits have been ordered to support the Red Truck initiative. In addition, a business reply card is being worked on for the 2<sup>nd</sup> half of the 3<sup>rd</sup> quarter. Savings are on target for 2023.
- **Multifamily Weatherization** — Through the second quarter the product has not yet completed any new projects. The product has a strong pipeline and we look for those to close out in the 3<sup>rd</sup> quarter along with several BE Pilot projects. From an outreach standpoint, there has been an increased focus on customer education through text messaging, and other collateral. This messaging will continue to evolve as TOU and SmartMeter rollouts occur.
- **Non-Profit** — Through the second quarter the product is continues with strong momentum. . Energy Savings Kits distribution has helped support the program engagement and associated savings. There continues to be a strong effort to share educational materials with Non-profit organization on ways to further increase energy efficiency and create greater savings. This is being done onsite by EOC staff or by a staff review of energy bills in order to identify further opportunities. There will be more outreach events planned for the remainder of the year in order to increase customer awareness. The program looks to meet it’s forecasted commitments for both electric and gas.
- **Single-Family Weatherization (“SFwx”)** — Through the second quarter, the product continues with a solid start. From an outreach and education standpoint, the focus has been on promoting LEAP assistance to previous program participants through texting and partnership campaigns. There has also been an increase in program surveys to better understand areas of opportunity and growth. Based on the survey feedback, changes to the offerings will be considered and proposed. TOU and other efficiency offerings will continue to be the focus in the months to come. Foodbank bulb savings have started to reflect in the forecast and the program continues to perform well towards it’s 2023 goals.

### Indirect Program

- **Business Education** — Through the second quarter of 2023, the Business Education product achieved approximately 8% of the year-end target of 1,971 participants. The Company sponsored and staffed one event in Q1 – the Colorado Restaurant and Bar Show, where the team engaged with small to medium-sized business owners and decision-makers about the energy-saving opportunities available to them. The product will be ramping up its engagement opportunities and communications with print and digital tactics targeting business customers in the latter half of the year, along with key engagement and networking opportunities around partnerships with CU Boulder and Denver Broncos sponsorships. Face-to-face event opportunities and print and digital advertising will continue to be important in engaging with our business customers.

- **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. The goal is to get close to 500 assessments. The product hit its forecasted goal for savings but did not meet the forecasted assessment quantity goal. Many projects came in Q4 almost doubling the savings. The Business Energy Assessment bonus applied to Energy Analysis helping the customer implement opportunities found on assessments. The most common equipment customers upgraded were VFDs which were also the highest energy savings found on most reports.
- **Consumer Education** — Through the second quarter of 2023, Consumer Education achieved over half of its year-end target of 27,514 participants. Warmer months brought increased events with more attendees. The Consumer Education product thrives by sponsoring and activating at large local events to be able to engage with customers one-to-one. The intention is to sponsor local community events and gatherings that people love. In Q2, the Company sponsored and activated on-site at 23 events that attracted a large number of attendees. Looking ahead to Q3, the product plans to sponsor more outdoor events such as fairs and festivals that customers love to attend. 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 and resources.
- **Energy Benchmarking** — The Company supports municipalities within its service territory to reach their benchmarking targets. During the second quarter, 694 new buildings were processed. Some of these are repeats as a result of new building owners benchmarking their buildings. Building owners of commercial and multi family properties in CO are required to benchmark any building larger than 50,000 square feet by June 1<sup>st</sup>, 2023. The total Colorado building count is now up to 7,565.
- **Energy Efficiency Financing** —The Company continues to develop a future financing offering to support residential customers which will be included in the next Colorado DSM plan filing. Residential finance offerings are still promoted through the Company website which links customers to options available through the Colorado Clean Energy Fund. On the business side, the Company 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** — Participation is strong and continued growth is expected throughout the year as customers are encouraged to participate in company rebates for larger retrofit projects. The product supplies home energy audit services through an implementor and independent auditors. Customers are encouraged to utilize the advising service offered by the program and designed to help customers navigate company rebate programs.
- **Partners in Energy** —The program compiled and delivered the community performance dashboards for 2022. This shows each community energy usage, premise counts, and program performance for both DSM and Renewables. It incorporates the unique community goals from their energy action plan and serves as a platform for potential discussions on what went well and what may need to be modified to ensure a community's success with their clean energy goals. There continues to be strong interest in the offering with additional communities interested in updated past energy action plans to incorporate beneficial electrification measures as a component of their green energy work.
- **Market Research** — An agreement extension with Dun and Bradstreet is now in place for updating business customer information, specifically industry categorization helpful for identifying DSM opportunities. A residential pulse study has recently fielded and an AAU (Attitudes, Awareness and Usage) study is planned for next quarter. Both residential studies are track

customer behaviors and attitudes involving a variety of topics. Additional research attention in Q1 has focused on the impact of recent high bills and the burden it places on customers seasonally.

- **DSM Evaluation, Measurement & Verification** — Evaluation reports were completed in Q1 with 60-day notices resulting from evaluation recommendations to be filed in the next quarter.
- **DSM Planning & Administration** — During the third quarter the Company continues to work through Discovery and the regulatory process for both the Company's 2023 DSM Plan as well as the combined 2022 DSM/BE Strategic Issues filing.
- **Product Development** — Current development efforts include:
  - 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 thermostat-based gas demand management research project motivated in part to address gas distribution constraints in Summit County;
  - Dual-fuel commercial heat pumps
  - Commercial heat pump water heaters
  - Duct sealing
  - Cold climate heat pumps
  - Redesigning Energy Management Systems
  - Small engine electrification
  - Networked Lighting Controls Demand Management
  - Appliance Standards
  - Community Ground Source Heat Pump

### **Demand Response Program**

- **Critical Peak Pricing** — The Critical Peak Pricing ("CPP") product has not dispatched any events in the first two quarters of 2023. In 2022, it dispatched 2 events in the first quarter, 0 in the second quarter, 8 in the third quarter, and 1 in the fourth quarter for a total of 11 events. CPP traditionally dispatches events in the summer but has the option to call winter events. The product has added 1 new participants in the second quarter of 2023 (2 new customers were added in 2022). The product currently has a total of 36 participants. Customers had the option to attend a pre-season webinar and received a test notification in Q2. Recruiting efforts and meetings with potential customers have continued through the year including education on the programs at the Xcel Energy Expo in April 2023.
- **EV Critical Peak Pricing** — The EV Critical Peak Pricing ("EV-CPP") has not dispatched any events in 2023. EV-CPP traditionally dispatches events in the summer months, but has the option to call events all year round. Customers received pre-season communications and a test notification event in Q2.
- **EV Optimization** — The Charging Perks pilot (dynamic optimization) and Optimize Your Charge (static optimization) offerings continued enrolling customers in second quarter 2023. Charging Perks has been extended through the end of 2023, with an increased goal of 1,000 total customers. Several advancements, computer coding, and automation upgrades were integrated to Charging Perks to increase efficiencies. The pilot program has proven successful as more data arrives to illustrate that the dynamic charging approach is helping with avoided capacity, CO2 emissions savings, and avoided renewable curtailment. As Charging Perks reaches capacity,

some customers will be encouraged to enroll in Optimize Your Charge based on their eligibility. Those customers who are not eligible for Optimize Your Charge, will be placed on a Charging Perks waiting list.

- **Geo-targeting Pilot** — The Company continued to offer a full rebate for smart thermostats that are enrolled in our AC Rewards offering to our target customers. Discussions continue 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 (“PDP”) 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 PDP control events.
- **Peak Partner Rewards** — The Peak Partner Rewards (“PPR”) product dispatched one winter event in January 2023, otherwise no other events have occurred through the end of Q2 2023. PPR traditionally dispatches events in the summer but has the option to call winter events. The last two events were called in the third quarter of 2022, both occurring in September. Overall, the product called a total of 4 events in 2022. The product has added 2 new participants in the second quarter of 2023 (11 new customers were added in 2022). The product currently has a total of 33 participants. Customers had the option to attend a pre-season webinar and received a test notification in Q2. Recruiting efforts and meetings with potential customers have continued through the year including education on the programs at the Xcel Energy Expo in April 2023.
- **Residential Battery Demand Response Pilot** — The Company has signed extension agreements with the pilot vendors (Tesla and SolarEdge) to extend contracts to support the Renewable Battery Connect program that launched on June 20<sup>th</sup> 2023. The main changes from the pilot to full program was the increase in the upfront incentive amount and the requirement for the battery to be 100% charged by solar which enables the battery to qualify as a renewable energy resource and use RESA (Renewable Energy Standard Adjustment) account to pay the incentives. The charging and discharging of batteries in Renewable Battery Connect will continue to test the strategies of the Battery Connect pilot with additional tactics to expand learning opportunities.
- **Residential Demand Response** — The Saver’s Switch product has installed about 6,200 switches in 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 has had over 3,300 new enrollments in the first half of 2023, with the majority coming through the Bring Your Own Thermostat channel. The Smart Water Heater product continues to struggle with supply of control modules. As of halfway through 2023, one unit has been deployed.
- **Small Commercial Building Controls** — Direct installations were slower than anticipated throughout 2022. In preparation for the summer event season, the Company conducted a test notification event for all customers in Q2.