



2023 First Quarter Colorado DSM Roundtable Update

May 10, 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 first quarter 2023 (cumulative January 1 – March 31, 2023) product energy and demand savings achieved, product expenditures, and CO₂ and SO₂ emissions avoided. In total, Demand-Side Management (“DSM”) products have achieved electric savings of approximately 88 GWh and gas savings of 153,725 Dth in the first quarter of 2023. This represents approximately 18 percent of the 2023 electric DSM plan’s energy savings target of 484 GWh and 17 percent of the gas target of 898,487 Dth¹.

The following section provides product status activities for the first 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 will have stronger marketing this year. Outdoor Agriculture Assessments should pick up Q2-Q3 with it being peak season for those customers. The aftermath of Covid can still be seen in the way customers have to budget for energy related savings. Due to this and supply chain still taking longer than usual for equipment BEA is launching the same bonus as 2022 with a longer participation period. The bonus this program provided was a 20% implementation bonus capped at 75% of the project cost and \$5,000. The bonus will be 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.
- **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. The product is currently on pace to meet this year’s electric and gas achievement goals. We are excited to develop heat pump and other beneficial electrification products to be available later in 2023.
- **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

¹ 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.

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** — Q1 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 at the 2023 Expo.
- **Data Center Efficiency** — The Company did not book any savings for this program in Q1. 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 will act on the TRC evaluation immediately when it becomes available March 1. Product changes will be submitted in a 60 day notice in 2023. The timeline for an approved 60 day notice is possibly by September 1, 2023.
- **LED Street Lights** — The product is on track to achieve its forecasted target.

Lighting Efficiency —The Lighting Efficiency product achieved approximately 28 percent of its energy savings target. The product is experiencing impacts from cost increases due to supply chain constraints and inflation that were a direct impact of the pandemic. The increase in equipment costs has impacted customer’s decisions to implement projects outside the grow lighting rebate. The product implemented bonus rebates on April 1 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 since the launch of the bonuses in April. Particularly within the prescriptive LED grow lighting segment which has brought in 16.7 GWh of savings through the end of March.. 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 planned for 2023. .

- **New Construction** — The product started off slow for Q1 achievements but is on target for both electric and gas commodity savings. The forecast and pipeline remains strong with an expectation for Q2 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 customer project came to fruition after multiple 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 started 2023 slower than expected, but still on track to approach electric and gas savings targets. Ongoing downward economic trends and generally poor economic health seem to be considerably affecting 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 social media.
- **Strategic Energy Management (“SEM”)** — The product completed the highest achieving Q1 in program history.. Nearly one hundred projects were completed by a variety of customers. The largest savings came from indoor agriculture customers, and saw substantial savings from hospitals, government facilities, and food/beverage processing. First quarter activities included proactive revisits of enrollees, as well as recruiting and enrolling new customers into the SEM program. 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 the program RFP.

Residential Program

- **Energy Efficiency Showerheads** — The product is off to a slower start while marketing campaigns are in development. Direct mail, email, and social campaigns are being scheduled for the remainder of the year along with inclusion in several local events in Colorado. Numbers are lower than would be ideal, at the end of the quarter, but are expected to increase significantly throughout the end of 2023 as marketing programs begin.
- **ENERGY STAR® New Homes (“ESNH”)** — In total, 1,423 homes were credited to the product in Q1. The Program recorded eight all-electric homes in Q1, nearly matching the total quantity in 2022. No homes received rebates for heat pump water heaters. Homes compliant with 2015 or 2018 IECC or higher represented 91% of the qualifying homes. Four percent of participating homes were in jurisdictions on 2021 IECC. Nearly three quarters of Program homes were less than 20% better than local energy code.

Of note, two homes received rebates via the Marshall Fire recovery, both for IECC 2021 code compliance.

- **Home Energy Insights** —. The product did not post savings for the first quarter of 2023 due to technical issues which have been resolved. The product is admittedly behind for 2023 due to the most part to a declining population in the program due to attrition. The product implementer is currently working on a plan to include a new cohort of participants which will bring the product into alignment with targets.
- **Home Energy Squad** — The program is targeting increased participation by expanding the number of qualified technicians for 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. The product continues to provide virtual and in-home visits, customers are most interested in in-home standard and Squad Plus visits.

- **Home Lighting & Recycling** — The product is on pace to surpass the 2023 annual energy savings and spend target. Our ad campaign was in the market during Q1 2023 to build awareness.
The product is offering bonus discounts on selectpacks 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 first quarter, the product has gotten off to a slow start. 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. An improved landing in page is near completion in order to ease the initial program application. There are also a number of AAMD events planned to increase program awareness and drive further participation.
- **Refrigerator & Freezer Recycling** — A successful email campaign in late March dramatically spiked participation numbers and had a lasting effect for several weeks. However, because of the timing of the email, most of the increased participation and savings will be reflected in Q2. Based on the success of the campaign, we will look into implementing more email communications at strategic points throughout the remainder of the year. We are also working on integrating propensity modeling into our marketing plan in order to reach customers more efficiently. 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 both the electric and gas side.
- **School Education Kits** — Classroom registration is on track for Q1 with the majority of savings realized in Q2 and 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 first quarter. Collaboration with the product implementer is expected to increase participation from Trade Partners and customers. A seminar is being scheduled to increase awareness and Trade Partner understanding of the program's participation opportunities. The program evaluation results are being 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** — Through the first quarter the product has not yet achieved any savings. Kit distribution is now ongoing and savings will be reflected in the next program quarter. 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. The Energy Savings Kits product will also be offered as needed in any customer satisfaction efforts in the coming months.

- **Multifamily Weatherization** — Through the first 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 following months. There has been 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 first quarter the product is off to a strong start. 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.
- **Single-Family Weatherization (“SFwx”)** — Through the first quarter, the product has gotten off to a good start. 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.

Indirect Program

- **Business Education** — Through the first 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 first quarter of 2023, Consumer Education achieved approximately 21% of the year-end target of 27,514 participants. The product is poised to return to a busy year of in-person events following a successful year in 2023. The Consumer Education product thrives by sponsoring and activating at large local events to be able to engage with customers one-to-one. In Q1, the Company participated primarily in home shows, as those events are operated indoors, inside convention centers during the end of Winter. Looking ahead to Q2 and Q3, the product plans to sponsor several busy outdoor events such as Earth Day events, summer festivals 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 and resources.

- **Energy Benchmarking** — The Company supports municipalities within its service territory to reach their benchmarking targets. During the fourth quarter, 842 new buildings were processed. Some of these are repeats as a result of new building owners benchmarking their buildings. The continued heavier volume in the fourth quarter is attributed to extended deadlines on municipal benchmarking ordinances in Denver, Boulder and Fort Collins with their original deadlines being June 1. Additionally, building owners submitted new requests to obtain aggregated whole building data for 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 6,675.
- **Energy Efficiency Financing** —The Company continues to develop future financing offerings to support residential customers. 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 expected to grow 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 with advisers ready to help customers navigate company rebate programs.
- **Partners in Energy** —In March, Partners in Energy held an event for their community network members that emphasized the importance of prioritizing energy-efficiency in their plans to hit their green energy goals. Making sure a building is operating as efficiently as possible supports successful implementation of beneficial electrification measures and reduces the need for renewable energy supplies. The event included communities sharing successful integration of conservation programs as a first step and provided an overview of the tools and resources the program has available to support participants. The program has transitioned to accepting applications quarterly. This quarter Summit County was accepted into the program with an emphasis on developing a plan to support beneficial electrification for the county's facilities.
- **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:
 - 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 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

Demand Response Program

- **Critical Peak Pricing** — The Critical Peak Pricing (“CPP”) product has not dispatched any events in 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 not added new participants for the first quarter of 2023 (2 new customers were added in 2022). The product currently has a total of 35 participants. Recruiting efforts and meetings with potential customers have continued through the start of the year.
- **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.
- **EV Optimization** — The Charging Perks pilot (dynamic optimization) and Optimize Your Charge (static optimization) offerings continued enrolling customers in first quarter 2023. OYC MN enrolled its first commercial customer in first quarter 2023. Charging Perks has been extended through the end of 2023, with an increased goal of 1,000 total customers.
- **Geo-targeting Pilot** — In the fourth quarter the Company continued to offer a full rebate for smart thermostats that are enrolled in our AC Rewards offering to our target customers. 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 year with four participants with a projected potential event contribution of about 22MW. In the fourth quarter there were two control events with accepted offers.
- **Peak Partner Rewards** — The Peak Partner Rewards (“PPR”) product dispatched one winter event in January 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 not added new participants for the first quarter of 2023 (11 new customers were added in 2022). The product currently has a total of 31 participants. Recruiting efforts and meetings with potential customers have continued through the start of the year.
- **Residential Battery Demand Response Pilot** — The Company is working with the pilot vendors to extend contracts as we prepare for the Renewable Battery Connect program launch in Q2 2023.

- **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 had over 1,500 new enrollments in the first quarter of 2022, 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 the end of 2022, one unit has been deployed.
- **Small Commercial Building Controls** — Direct installations were slower than anticipated throughout 2022. The Company will continue to test and analyze marketing tactics as we prepare for the 2023 summer event season.