



2023 Fourth Quarter Colorado DSM Roundtable Update

February 14, 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 fourth quarter 2023 (cumulative October 1, 2023 – December 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 365 GWh and gas savings of 917,014 Dth in the fourth quarter of 2023. This represents approximately 75% of the 2023 electric DSM plan’s energy savings target of 486 GWh and 102% of the gas target of 898,487 Dth.¹

The following section provides product status activities for the fourth 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** — This product began Q4 2023 with a strong pipeline for indoor agriculture and commercial streamlined assessments, which represent the majority of product participation. The program ended Q4 tripling its Q1 expected forecast kWh savings. Indoor agriculture customers have given Public Service great feedback regarding the value of an indoor agriculture specific assessment in grow houses. Building Energy Assessments requests are increasing. Statewide building performance ordinances and standards are increasing the pipelines with many customers required to either obtain a ASHRAE 1 or 2 assessment or reduce a large amount of energy use. The Business Energy Analysis and Assessments product manager is working with different city ordinance programs to help market to these customers and reduce any confusion on lessening energy use. Outdoor Agriculture has implemented direct and in-direct mail marketing to the Colorado farming community. Outdoor Agriculture Assessments have not seen as large of a pipeline increase as we originally expected. Through our communications with these customers we have found that their budgets are tight and therefore energy reduction is not a current focus. There is also currently no building performance ordinance or standard for the Colorado farming community. This program offers 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 HVAC+R and Lighting but will be capped at 75% of the project cost. In Q4, we saw a large portion of indoor agriculture and commercial streamlined customers utilizing the bonus. This has also helped customers experiencing aftereffects of the Covid pandemic and budgetary inflation decide whether to implement. There is a focus to help gas customers with electrification measures through commercial streamlined assessments. The bonus ended in December of 2023 and there are no plans to introduce it again in 2024. The program will completed an RFP by the

¹ Savings targets given here reflect the Comprehensive Settlement Agreement regarding the Company’s 2023 DSM & BE Plan, Proceeding No. 22-A0315EG.

end of 2023 and has added three new vendors to the program. These vendors will be able to help more customers reduce their energy use and comply with building performance ordinances and standards. Beneficial electrification measures will be more heavily analyzed in buildings in 2024..

- **Business HVAC+R Systems** — As expected, the 50% rebate bonus increased product savings participation. Through the 60-day approval process, we met our 2023 DSM BE Plan settlement agreement target and added many prescriptive heat pump measures (e.g., air source, ground source, water source heat pumps and heat pump water heaters) to the portfolio. The measures that lived in the midstream rebate channel remain, but have a guaranteed pass down incentive to our customers. The hope is that these new measures will see increased participation and lead to more beneficial electrification measures along with lower carbon emissions from HVAC equipment sold in Colorado.
- **Compressed Air Efficiency** — This product saw a slight savings increase in Q4. Supply chain concerns continue to impact the market and product pipeline resulting in delayed projects (late 2023).
- **Custom Efficiency** — Due to supply chain and cost pressures, Q4 was a slow quarter for this program with delays impacting outstanding projects. Efforts to grow the pipeline for the future are in place, including customer and sales team education.
- **Data Center Efficiency** — In Q4, this product slowed down and did not gain any additional achievement due to project delays. The Company continues to meet with trade partners and customers individually and in training sessions to discuss pipeline, industry trends, and supply chain constraints.
- **Energy Management Systems (“EMS”)** — The Company has made fast progress in creating marketing material and an application for three prescriptive measures. Other items completed were increased training on demand peak load shifting for Trade Partners, and applying a 50% incremental cost reduction for cost-effective accuracy. Completed successful projects are slowly trickling in since the changes became allowable on September 1, 2023, through the 60-day notice approval process. The Company has 33 projects in the 2023 pipeline but only four have completed. The Company expects to see these and 30% more EMS projects complete in 2024 due to product changes.
- **LED Street Lights** — The product exceeded its filed target.
- **Lighting Efficiency** — The Lighting Efficiency product achieved 100% of its energy savings target. The prescriptive LED grow lighting rebate brought in 93.9 GWhs of savings in 2023. As more customers convert their grow lighting facilities to LED, the customer segment for grow lighting will become saturated and the overall savings for this rebate will decline. The estimated time frame for the decline of this product is end of Q2 2024.

The lighting bonus is attributing to the increase in non-grow light savings. To ensure customers who were making purchasing decisions on equipment upgrades could take advantage of the lighting bonuses, the bonus was extended through September 30, 2024. The invoice dates are now January 1, 2023, through September 30, 2024, and all completed project paperwork must be turned into Xcel Energy by November 30, 2024. This extension will help mitigate the decline of grow lighting savings.

An evaluation for the instant or mid-stream lighting product is currently underway and should be completed by Q2 in 2024, with the results available by Q4 2024.

- **New Construction** — This product ramped up for Q4 achievements and missed the target for electric and gas commodity savings. The savings targets were missed mostly due to projects extending out their completion dates. The bulk of the savings were generated from the Energy Design Assistance product. 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** — In Q4, 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** — This product has continued to make progress towards electric and gas savings targets in Q4. Ongoing downward economic trends, and generally poor economic health continue to affect the small business segment the most, as businesses are hesitant to invest in energy efficiency upgrades. The Company continues to leverage partnerships with local city/town representatives and have a presence at segment specific events to increase the ease of product access and program participation. This product continues to diversify marketing media and messaging to reach different customer sub-segments with an emphasis on the free assessment, energy efficiency improvement guidance, 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 including grassroots business-to-business canvassing and presence at small-business focused events, direct mail, e-mail, and digital ads.
- **Strategic Energy Management (“SEM”)** — This program completed 62.16 GWh in Q4 and achieved 77%% of its year end goal. The largest savings came from indoor agriculture customers, and saw substantial savings from hospitals, government facilities, and food/beverage processing. Activities included proactive revisits of enrollees, as well as recruiting and enrolling new customers into the SEM program, resulting in new customer enrollments in 2023. The program has a hefty pipeline for 2024. In 2024, the Company will continue to manage the enrollees’ opportunity registers for deeper savings, grow opportunity registers for new enrollees to build out future pipeline. 2024 will also see a new focus on Beneficial Electrification and how it impacts the SEM program.

Residential Program

- **Energy Efficiency Showerheads** — The product did not achieve 2023 gas and electric targets. With responses from e-mail campaigns bringing in less than expected participation, tactics shifted to direct mail. The product saw strong participation from the direct mail campaigns in Q3 and Q4 but was not able to close the gap before year end.
- **ENERGY STAR® New Homes (“ESNH”)** — In total, 5,868 homes were credited to the product in 2023, of which 25 were all-electric. This program paid 53 heat pump water heater rebates in Q4, bringing the total to 71 for the year. Homes compliant with the IECC 2015 or more recent energy codes represented 96% of the qualifying homes. Fourteen percent of participating homes were in jurisdictions on IECC 2021. Approximately 70% of Program homes were less than 20% better than local energy code.

For Marshall Fire recovery, 127 homes received rebates in 2023. The Company processed 81 rebates for code compliance, 12 for ENERGY STAR® version 3.2, 16 for Department of Energy Zero Energy Ready Homes version 2, and 18 for ENERGY STAR® NextGen.

- **Home Energy Insights** — Home Energy Insights did not meet 2023 electric and gas targets. Home Energy Insights increased the population size significantly with the addition of a new cohort of eligible customers in 2023. The addition was necessary to offset natural attrition as well as the

retirement of older cohorts. Increasing the number of participating customers will increase the ability for the product to hit targets in future years.

- **Home Energy Squad** — Home Energy Squad increased participation and savings in 2023 compared to 2022 but did not achieve its energy savings targets for 2023. The program provides a unique opportunity for personal interaction with customers in their homes. This opportunity and a desire to reduce lead times and serve more customers led to increasing staffing levels (qualified technicians and auditors) to help more customers achieve energy efficiency through the direct install program and be aware of larger projects that will also save energy. The program started seeing participation increase in Q4. This program offers the standard Home Energy Squad visit with the direct installation of energy efficient measures and the Home Energy Squad Plus visit that includes the measures and an energy efficiency audit. The product drives participation and savings through targeted marketing campaigns and promotes additional programs the Company offers.
- **Home Lighting & Recycling** — This product has surpassed the 2023 annual energy savings and spend target. Effective October 1, 2023, the program reduced the number of stores and locations our discounts are available in to meet the income qualified/disproportionately impacted community standards in the 2023 DSM BE Plan Settlement Agreement.
- **Insulation & Air Sealing** — In Q4, overall participation was steady but the product did not meet its participation and savings goals. The Marshall Fire Bonus which was enacted after the natural disaster caused smoke damage to many homes, ended on June 30, 2023 coinciding with a lowered participation rate in the affected zip codes.
- **Multifamily Buildings** — The product fell short of both electric and gas savings targets. The product was able to stay under budget for both electric and gas respectively. In 2024, there will be a continued effort to increase marketing and communications materials through: onserts, apartment associations, outreach events, emails, tenant leave behinds, and other collateral. A recently completed program evaluation will also inform any revisions to programming in 2024.
- **Refrigerator & Freezer Recycling** — The program did not meet savings or participation targets for 2023. The program was affected by a nationwide disruption in the recycling industry which caused savings and participation numbers to fall short of the targets. Marketing in 2024 will be focused on educating customers about their appliance's energy usage and highlighting how easy it is to participate in the program. Marketing effort this year will include cross-promotional tactics, targeted email campaigns, direct mail, and personalized videos.
- **Residential Heating & Cooling** — The program met targets for 2023 and participation and savings increased compared to 2022, especially for heat pumps, which doubled participation compared to 2022.
- **School Education Kits** — The program ended the year with a strong showing in Q4, meeting savings and participation targets. The product is popular with teachers, students, and parents, resulting in high participation and installation of energy-efficient LED bulbs and water-saving measures. Students participate in an energy conservation-focused curriculum and receive a kit of energy-saving devices to install in their homes. Students complete the curriculum with the Home Energy Worksheet, which includes at-home activities.
- **Whole Home Efficiency (formerly Home Performance with ENERGY STAR®)** — Participation was lower than anticipated through Q4 however, participation and enrollments are increasing over the previous two years. Collaboration with the product implementer is expected to increase participation from Trade Partners and customers. Work concluded on incorporating improvements identified in the program evaluation results.

Income Qualified Program

- **Energy Savings Kits** — Kit distribution completed with all of the Energy Savings Kits having been distributed. The Energy Savings Kits continued to contribute additional savings and educational awareness through an insert included in each kit. The insert featured pertinent information in both English and Spanish around our TOU offerings and other energy efficiency programs. About 650 smaller kits were distributed through the Red Truck initiative. About 1000 smaller bonus kits were also distributed to customers. The program exceeded both electric and gas savings targets.
- **Multifamily Weatherization** — The product finished the year with a strong performance in the fourth quarter. The product fell short of both electric and gas savings targets. The product came in under budget on the electric side, but slightly over on the gas side. Extended lead times for inherently more complicated pilot projects slowed project completions.
- **Non-Profit** — The product performed very well, achieving both electric and savings targets. Energy Savings Kit distribution to several local non-profit organizations helped support the program engagement. There continues to be a strong effort to share educational materials with non-profit organizations 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.

Single-Family Weatherization (“SFWx”) — The product performed very well exceeding both electric and gas savings targets. The product stayed under budget on the electric side but came in slightly above for gas. This increase was primarily due to additional health and safety improvements made in the fourth quarter. A strong Foodbank distribution of over 200,000 LED's and 100,000 showerheads bolstered the product performance and delivered savings for customers statewide.

Indirect Program

- **Business Education** — Through the fourth quarter of 2023, the Business Education product achieved over its year-end target at 140%. The Company sponsors local events and that create opportunities for messaging and face-to-face networking with business owners and decision-makers about the energy-saving opportunities available to them. The product promoted energy saving tips and messaging to customers via creative articles in the Denver Post targeting businesses. The product sponsors Broncos Business Boost, a platform to support local businesses and drive messaging towards the Company's business energy saving programs and resources. Partnerships and key engagement and networking opportunities like face-to-face events and print and digital advertising will continue to be important in engaging with our business customers.
- **Business Energy Analysis** — The Business Energy Analysis product ties into the Business Energy Assessments product. This product is publicly known as Commercial Streamlined Assessments. This product conducts assessments similar to ASHRAE level 1. The product hit its savings goals by the end of the year. The Business Energy Assessment bonus applied to Commercial Streamlined Assessments aided the customer implement opportunities found on assessments and increased the assessment pipeline. All the building performance ordinances and standards around the state have also increased the pipelines with many customers being required to get an ASHRAE 1 or 2 assessment or else reduce a large amount of energy use. The product manager for Business Energy Analysis and Business Energy Assessments is working with the different city ordinance programs to help market to these customers and reduce any confusion on how to reduce energy use. The most common equipment customers upgraded were VFDs which were also the highest energy savings found on most reports. The vendor and program manager attend bimonthly Energize Denver meetings in the effort to streamline the customer experience across companies.

- **Consumer Education** — Through the fourth quarter of 2023, Consumer Education achieved over its target of 27,514 participants at 110%. The program activated at 14 events in quarter four and engaged with customers face-to-face across our service territories from Denver to Pueblo to Grand Junction. The Consumer Education product thrives by sponsoring and activating at large local events engaging with customers on energy saving questions and topics. With the importance of engaging with customers and improving the customer experience, the product exceeded budget but also exceeded participation targets. The intention is to sponsor local community events and gatherings that people love. In Q4, the Company sponsored and activated on-site at 25 events that attracted a large number of attendees. Looking ahead to 2024 the product plans to continue its presence at local events and creating opportunities for engagement with customers. This provides the Company with valuable ways to drive energy and money-saving educational messaging, and giveaways like LED light bulbs, 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. In Q4, 206 new buildings were processed. The benchmarking team completed annual maintenance and clean up of our property queue, removing duplicated entries and other inactive properties from our system. Colorado commercial and multi family property building owners are required to benchmark any building larger than 50,000 square feet by June 1 annually. The total Colorado building count is now up to 7,793.
- **Energy Efficiency Financing** — Residential finance offerings were promoted through the Company website which links customers to options available through the Colorado Clean Energy Fund. On the business side, the Company promoted 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. The Company also promoted the offerings through other DSM collateral as well as trade partner events.
- **Home Energy Audit** — The program increased participation in 2023, surpassing prior years' results. The product supplies home energy audit rebates and audit services through certified auditors. An implementor and a network of independent auditors provide program delivery. Once customers complete the audit, they are encouraged to utilize the advising service designed to help them navigate company rebate programs.
- **Partners in Energy** — This program continued to support communities in their creation and implementation of energy action plans. Multiple outreach events were staffed with bilingual staff, providing interactive activities and giveaways including LED bulbs, lighting kits, night lights, kids activity books and educational cobranded collateral (some of it translated to Spanish). There continues to be strong interest in the offering with additional communities interested in updating past energy action plans to incorporate beneficial electrification measures as a component of their green energy work. Additionally several communities have decided to work together to pursue Beneficial Electrification Plans as a regional effort.
- **Market Research** — A residential pulse study wave has completed during Q4. The residential study tracks customer behaviors and attitudes involving a variety of topics including a rising awareness of smart meters and TOU awareness. Rising customer bills continue to act as a strong drivers for energy decisions compared to environmental concerns. A product experience tracking study continues to monitor satisfaction with the various residential energy efficiency/demand response programs. Planning is underway for the 2024 Residential Home Use Study slated for late spring 2024.
- **DSM Evaluation, Measurement & Verification** — 2023 program evaluations are nearing completion for six products:

- Lighting Efficiency (midstream measures) and Small Business Solutions (direct installation and midstream measures) in the Business Program;
- Home Energy Audits, Home Energy Squad, and Multifamily Buildings in the Residential Program, and;
- Multifamily Weatherization in the Income Qualified Program.

Evaluations are tracking later than past years in response to the later implementation date of the 2023 plan. This delay is intended to help evaluations better consider the effects of known changes in the 2023 plan and/or proposed changes in the 2024-2026 plan in prospective recommendations.

- **DSM Planning & Administration** — During Q4 the Company continued to work on its triennial demand side management and beneficial electrification plan.
- **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 thermostat-based gas demand management research project motivated in part to address gas distribution constraints in Summit County;
 - Cold climate heat pumps;
 - Networked Lighting Controls Demand Management;
 - Appliance Standards; and
 - Community Ground Source Heat Pumps

Demand Response Program

- **Critical Peak Pricing** — The Critical Peak Pricing (“CPP”) product dispatched 6 events in 2023, specifically the months of July, August, and September. CPP traditionally dispatches events in the summer but has the option to call winter events. The product added one new participant in Q4 2023 and one new participant in Q2 2023 (two 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 throughout the year including education on the programs at the Xcel Energy Expo in April 2023 and an in-person Demand Management Summit in Q4 2023.
- **EV Critical Peak Pricing** — The EV Critical Peak Pricing (“EV-CPP”) dispatched six successful summer season events in 2023, specifically in the months of July, August, and September. EV-CPP traditionally dispatches events in the summer months, but has the option to call events all year round. The product currently has a total of 18 participants. With the introduction of the S-EV rate in Q3 2022, EV-CPP was marketed to EV fleet customers exclusively in 2023.
- **EV Optimization** — In Q4 of 2023, the Charging Perks pilot (dynamic optimization) and Optimize Your Charge (static optimization) offerings continued enrolling EV customers. Charging Perks was extended through the end of 2023 and the customer cap of 1,000 was removed. Several IT advancements, computer coding, and automation upgrades were integrated into Charging Perks to enhance enrollment operations and tracking efficiencies. The pilot program has proven successful as more EV data arrives to illustrate that the dynamic charging approach is helping with avoided capacity, CO₂ emissions savings, and avoided renewable curtailment. More EVs are dynamically charging during off-peak hours when renewables are abundant. Optimize Your

Charge annual incentives were processed in Q4 and performance data collection issues were documented in a request for additional assistance with program data automation.

- **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 year with four participants with a projected potential event contribution of about 22MW. There were no PDP control events during Q4.
- **Peak Partner Rewards** — The Peak Partner Rewards (“PPR”) product dispatched one winter event in January 2023, and 3 events in July and August. . PPR traditionally dispatches events in the summer but has the option to call winter events. Overall, the product called a total of four events in 2023. The product has added two new participants in the fourth quarter of 2023 (11 new customers were added in 2022). One customer unenrolled in Q4 due to a change in management of the property. The product currently has a total of 32 participants. Customers had the option to attend a pre-season webinar and received a test notification in Q4. Recruiting efforts and meetings with potential customers have continued throughout the year including education on the programs at the Xcel Energy Expo in April 2023 and an in-person Demand Management Summit in Q4 2023..
- **Residential Battery Demand Response Pilot** — The Company 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, 2023. Renewable Battery Connect represents the next version of this product that was originally filed in the 2022-25 Renewable Energy Plan (Proceeding No. 21A-0625EG) and approved by the Colorado Public Utilities Commission in September 2022. The primary product design changes from the pilot are the increased upfront incentive amount and the requirement for the battery to be 100% charged by an on-site solar system which enables the battery to qualify as a renewable energy resource. The program currently has 70 customers with 91 batteries participating, and 164 applications in process for an additional 238 batteries. The Demand Management team plans to begin scheduling and dispatching energy storage load control events in March 2024.
- **Residential Demand Response** — Through Q4 2023, the Saver’s Switch product installed over 8,100 switches. The majority of these switches were maintenance replacements of older switches that have outlived their useful life. These switches were originally deployed prior to 2006. The AC Rewards product had over 16,000 new enrollments in 2023, with the majority coming through the Bring Your Own Thermostat channel via the recent addition of Google Nest thermostats. The Smart Water Heater product continues to struggle with supply of control modules. As of now, one unit has been deployed.
- **Small Commercial Building Controls** — Direct installations were slower than anticipated throughout 2023. 2023 recruitment efforts and customer education were reviewed in Q4, and more robust customer marketing campaigns are being planned for 2024. Small Commercial Building Controls dispatched three successful summer season events in 2023, specifically in the months of July and August.