



2021 Fourth Quarter Colorado DSM Roundtable Update

February 9, 2021

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.

COVID-19 Market Update

As the impacts of the COVID-19 pandemic continue in our service territory, implementation of the 2021 DSM plan has also been impacted. We have continued many of the contingency tactics launched in 2020 to continue to provide customers with opportunities to save energy and money in these challenging times. Through these adaptations, we continue to be guided by the following principles:

- Changes to our offerings need to be good for customers.
- There are benefits to keeping contractors and vendors in business and healthy through this time, and our products can help.
- Customers want things they can do now, providing them with remote audit and other service options meets a customer need.
- Using resources now to schedule future work or activities can be beneficial to build the pipeline and increase forecasting accuracy. We can change the payment terms or adjust the scopes of services with vendors to allow them to perform the remote or non-contact work now.

Product Implementation Status

Please refer to the attached table for the preliminary fourth quarter 2021 (cumulative January 1 – December 31, 2021) 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 481 GWh and gas savings of 802,609 Dth in the 2021 calendar year. This represents approximately 90 percent of the 2021 electric DSM plan’s energy savings target of 538 GWh and 106 percent of the gas target of 755,934 Dth.

The following section provides product status activities for the fourth quarter of 2021 in the Business, Residential, Low-Income, and Demand Response Products, as well as Indirect Products & Services and other related activities.

Business Program

- **Business Energy Assessments** — Achievement for this product comes from Recommissioning, a legacy offering included in the 2020 DSM Plan, Business Energy Analysis (including on site assessments) and outdoor agriculture. The Recommissioning offering finished the year with two participants bringing in energy savings for Business Energy Assessments. Business Energy Analysis brought in 376 audits that will guide customer to implement energy efficient measures. In-depth engineer assisted studies were available at the end of 2021 as the product continues to launch new offerings to help customers. These studies concentrate on specific systems in a building and can bring in energy savings under the custom product. Currently the Company is working on training third-party suppliers to ensure efficient new offering launches in 2022 to serve customers currently in the product pipeline.
- **Business HVAC+R Systems** — This product reflects the energy savings of four legacy products included in the 2020 DSM Plan – Motors and Drives Efficiency, Cooling Efficiency, Heating Efficiency, and Commercial Refrigeration Efficiency. The product did not meet its electric and gas savings targets. Participation and savings in the fourth quarter has remained consistent with the third quarter for both electric and gas products. Gas bonus rebates are still available to support

geotargeting efforts the Company has underway in Summit County to alleviate a potential natural gas constraint. Supply chain complications have had an impact on the HVAC market; equipment demand has increased, but longer lead times for acquiring equipment have pushed some projects into 2022.

- **Compressed Air Efficiency** — The product did not meet its energy savings targets for 2021. In the fourth quarter, customers have reported facing supply chain issues and it is taking much longer for customers to receive the equipment needed for installation. The product only achieved approximately 25% of its electric savings target due to a lack of participation in 2021. In 2022 contingency plans are being explored included marketing to customers who are eligible for free studies as well as identifying low-cost savings opportunities. Customer outreach conducted in Q4 identified that they did not have the financial ability to purchase efficient air compressors. Customers expressed a lack of interest in purchasing a new compressor in 2021 when it could take several months to receive the equipment due to supply chain delays. An internal team is meeting bi-weekly researching ways to increase customer participation in 2022. More in-person meetings with trade partners have been scheduled to discuss product needs and find ways to close more projects in 2022.
- **Custom Efficiency** — The product did not meet its energy savings targets for 2021. The participation in this product has been consistent throughout the year and came close to meeting the targets. The product team will take a deeper look into the pipeline for 2022 to find ways to increase participation. The team will continue to increase collaboration with trade to improve customer support and help identify solutions.
- **Data Center Efficiency** — The product ended the year by adding significant energy savings during the fourth quarter. The savings include the completion of the first phase of a Data Center New Construction project. Data center customers with existing facilities continue to participate in prescriptive offerings. The Company will continue outreach efforts to data center trade partners to promote awareness of all rebate offerings available to data center customers.
- **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. The product achieved approximately 44% of its electric savings target and 75% of its gas savings target for the year due to difficulty in identifying cost-effective projects to pursue. A survey was conducted to align Trade Partner proposals with deemed energy costs which has increased cost-effectiveness on two projects. The product team is exploring ways to increase product value for customers and to fill additional needs of the customer. An evaluation of the EMS product began on February 4, 2022.
- **LED Street Lights** — The product exceeded its filed target with 3,694 lights converted to LED.
- **Lighting Efficiency** — The Lighting Efficiency product closed the fourth quarter at approximately 70 percent of its energy savings targets despite robust marketing and advertising efforts. The pandemic continued to have impact on the product with increased shipping and equipment costs, manufacturing and shipping delays, and labor shortages leading to longer lead times. Staff turnover also impacted both customers and trade partners. The product launched a 25% LED Instant Rebate bonus on September 1, 2021, to help bring down upfront costs with positive results. The Company also launched an additional sales incentive for participating distributors and associated marketing and advertising campaigns to promote the bonus. These actions resulted in an incremental 4 GWh worth of savings that closed in 2022 through the midstream LED Instant Rebate channel.
- **New Construction** — The product continued strong through the fourth quarter and exceeded savings targets for 2021, with the Energy Design Assistance product generating the bulk of the

savings. With the launch of the 2021-22 DSM Plan, the Codes and Standards offering has ramped up activities and trainings to help serve the building community to be better informed of code compliance. Efforts have been focused on supporting and educating communities that are advancing their energy code. These activities have been a team effort with the residential Energy Star New Homes product and external stakeholders to influence as many jurisdictions as possible. The product implementation contractor has helped ramped up the current services and worked with the evaluation team to address the most important hurdles that jurisdictions are facing.

Self-Direct — No new projects were completed in the fourth quarter with several customers postponing their projects until 2022 due to budgetary and staffing concerns associated with the pandemic.

- **Small Business Solutions** — At the end of the fourth quarter the product had achieved 81% of its electric savings target and only 12% of its gas savings target. The product continued to advertise offerings through bill inserts, emails and partnerships with various cities and conservation groups to promote the free walk-through assessment and direct install opportunities. The Product ended the year strong by installing almost 14,000 LED tubes in December alone. The direct install tube offering was also fully launched providing customers with peak demand under 100kW free LED tubes and installation. The offering led to over 35,000 LED tube installations. The majority of LED tube installations have taken place in and around the Denver metro area, but the product is looking for ways to expand into additional areas within our electric service territory.
- **Strategic Energy Management (SEM)** — With over 120 projects completed, the product finished 2021 strong. The resulting energy savings totaled nearly forty percent of the full-year target, and set a new record for any single quarter. Several of the projects commenced more than two years ago, including one very large project started more than three years ago. The indoor agriculture segment was the largest contributor. Government buildings, food processors and distributors, and wastewater treatment plants also contributed significant savings. In the first quarter of 2022, the Company intends launch its third Cohort, and contact customers who've been inactive during the pandemic.

Residential Program

- **Energy Efficiency Showerheads** — The product has exceeded filed energy saving targets through the fourth quarter for both electric and gas savings. Performance has been driven by a mailer sent out in late 2020 that had a positive response from customers with fulfillment of orders continuing into the first quarter of 2021. A targeted promotional email driving traffic to the online marketplace store and a direct response postcard sent in the fall achieved expected results and added to the early year promotional carryover. The products 2021 efforts have resulting in carryover into 2022 to bolster a planned summer campaign. Spending was higher than anticipated in 2021, but in line with high levels of achievement.
- **ENERGY STAR® New Homes (“ESNH”)** — In total, 7,424 homes were credited to the product through the fourth quarter. The product has had four all-electric homes participate in that dedicated pathway during the year. Homes compliant with 2015 IECC or higher represented 80 percent of the qualifying homes. Due to a significant year-over-year increase savings targets, this product did not achieve its annual energy savings targets, although achievement through the end of the year exceeded that of 2020.
- **Home Energy Insights** — The Company's third-party implementer added a new cohort of customers in the first quarter, significantly increasing participation. These new customers have now received treatment for 9-months. The Company made initial changes to the reports delivered to customers to improve engagement and continues to work with the implementer to optimize the content and structure of Home Energy Reports to provide a positive customer experience and

effectively encourage energy savings. The customer cohorts have been reconfigured with the expectation of additional savings improvements in 2022.

- **Home Energy Squad** — The product continued to increase participation throughout the fourth quarter but ended the year with lower-than-expected results. Continued pandemic related disruptions impacted participation and created scheduling issues throughout the Fall. Implementors are seeing improvements in staffing contributing to the fourth quarter results. The product continues to provide both virtual and in-home visits, however we are seeing virtual visits slowing. Frequent email marketing continues to drive product participation.
- **Home Lighting & Recycling** — The product had a successful year and exceeded the annual energy savings and spend target. Sales remained strong throughout the year as customers were looking for easy ways to save money. The product offered bonus discounts on multi-packs of A-line and specialty LEDs at select retailers to help customers save energy and increase awareness of the benefits of LEDs.
- **Whole Home Efficiency** (formerly Home Performance with ENERGY STAR®) — The product saw lower than expected participation in 2021. The Company chose to remove product association with ENERGY STAR® while maintaining current programmatic processes and requirements and filed to rename the product Whole Home Efficiency. A robust marketing campaign was launched in Q4 to reinvigorate interest in the product and raise customer awareness. A webinar will also be held to further engage with trade partners in an effort to boost participation.
- **Insulation & Air Sealing** — The product did not meet all of its energy saving targets for 2021. The product was under target on Net Gen kWh electric savings, but exceeded target in Net Gen kW and Net Dth. Overall participation was steady throughout the quarter.
- **Multifamily Buildings** — The product committed over 110 new multifamily building projects – just over one quarter of full-year 2021 participation – and about one third of the full-year’s electric and natural gas savings in the fourth quarter. Larger multifamily building projects were concentrated in Denver, Lakewood, Lone Tree and Broomfield in the fourth quarter with electric savings primarily coming from LED lighting direct-installed in multifamily units and LED common area lighting. Although the product missed both its electric and natural gas targets in 2021, participation and savings increased by about 10% compared to the previous year as building owners and property managers are gradually becoming more comfortable with in-person building audits and for energy-saving measures to be installed in residential units and common spaces
- **Refrigerator & Freezer Recycling** — The product fell short of its energy saving and participation targets for the year. Contact-free and in-home pickups were available to customers based on preference. The Company sent a Q4 email to increase awareness and participation. The product has been negatively affected by appliance shortages which have discouraged some customers from recycling.
- **Residential Heating & Cooling** — This product was a new offering in the 2021-22 DSM Plan that combined several legacy product offerings from the 2020 DSM Plan: High Efficiency Air Conditioning, Evaporative Cooling, Residential Heating, Thermostat Optimization, and Water Heating. These continued to be offered as separate products in the first quarter but were offered as part of a combined product once the new plan was launched. For the most part, participation in these products and their measures is comparable to participation 2020. The product met its energy savings target for gas, but fell 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 fall focus for this product resulted in increased participation by over 47,500 students. The students participated in energy conservation focused curriculum and

installed energy saving devices in their homes driving savings. Overall achievements for the product were close to filed targets.

Income Qualified Program

- **Energy Savings Kits** — Despite low engagement associated with email campaigns, the fourth quarter direct mail campaign proved successful and brought in strong savings for year-end. The product achieved the electric and gas saving targets for the year.
- **Multifamily Weatherization** — The product had a strong fourth quarter. The product achieved the gas target for the year as well as 90% of the electric target.
- **Non-Profit** — The product had a strong fourth quarter and closed out many of the projects in the 2021 pipeline. The product exceeded electric and gas targets.
- **Single-Family Weatherization (“SFWx”)** — The product had a strong pipeline of projects heading into the fourth quarter and exceeded the electric target. Demand for the LEDs distributed through area food banks remained high. The product did not meet the gas savings target for the year.

Indirect Program

- **Business Education** — Through the fourth quarter of 2021, the Business Education product achieved approximately 51% of its year-end participation targets with 996 participants. While the fourth quarter saw an increased return of in-person events impacting Consumer Education, Business Education events did not follow suit. The product team continued to investigate and evaluate creative ways to meet target and drive energy-saving messaging to business customers in the remainder of the year and into the next. The number of events targeting business customers will increase in 2022 with the objective of finding creative ways, through different channels, to drive education and engagement in the company’s business energy-saving resources. The company will continue to utilize partners in the market, such as the Denver Broncos, to target business owners and facility managers.
- **Business Energy Analysis** — By the end of 2021, Business Energy Analysis, also known as Commercial Streamlined Assessments conducted 376 audits. The current vendor for Business Energy Analysis had staffing issues causing a long turn-around time for projects. The vendor is conducting marketing research to target certain segments that are looking for base level audits in their business. The Company is planning a marketing campaign to target those segments in Q1 of 2022. There is a big push to double the amount of audits in 2022. Business Energy Analysis will be called Commercial Streamlined Assessments in the public and be a part of the Business Energy Assessments product.
- **Consumer Education** — Through the fourth quarter of 2021, Consumer Education exceeded expectations by achieving 112% percent of the year-end participation target, registering 30,788 total participants. The third quarter ushered in the return of in-person events at a much higher level than the first and second quarters, albeit still at a lower level than previous years. The fourth quarter brought an increased number of on-site activations, including several key holiday events such as the Mile High Turkey Trot, Camp Christmas, Denver Botanical Garden’s Blossoms of Light, Parade of Lights (produced by the Denver Downtown Partnership), among others. Additionally, the Company launched a new partnership with CU Boulder to drive increased messaging and awareness to customers in the Boulder area. The increase in event participation drove greater engagement and energy-saving education opportunities compared to the previous three quarters. The product team is continuing to evaluate and explore other print and digital media opportunities. The need to find creative ways to drive education and engagement to the company’s energy-saving resources remains relevant.

- **Energy Benchmarking** — The Company supports municipalities within its service territory to reach their benchmarking targets. During the fourth quarter, 107 new buildings were processed. Some of these are repeats as a result of new building owners benchmarking their buildings. The total Colorado building count is now up to 4,790.
- **Energy Efficiency Financing** — In the fourth quarter of 2021, the Company shared findings from analysis of bundled residential offerings and how they perform under various financing alternatives to stakeholders. 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, and worked with CLEAResult to integrate commercial financing options into the various facility assessments, studies, and audits they provide.
- **Home Energy Audit** — The product experienced anticipated fall increases in participation, as well as increased staffing, but the continued concerns with the COVID variants impacted overall performance. As COVID-19 restrictions diminished, auditors were able to effectively provide services for customers who were comfortable with an in-home visit.
- **Partners in Energy** — At the end of 2021, Partners in Energy continues to deliver a majority of our community workshops and meetings virtually. Although a few communities are returning to inperson events a majority are still relying heavily on online content and social media. New tools being leveraged to deliver content include brief videos that can be cost effectively produced for our partner communities to use on their websites or social media postings. These can be used to promote energy saving tips, promotions or events, and are being well received to support communities efforts to drive energy savings. Partners in Energy is also leveraging this type of communication to provide overviews of topics covered each month in our "office-hours" webinar series, allowing customers to get an overview of a webinar before deciding if they want to watch the extended recording.
- **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. Updated business data from Dun and Bradstreet was received during Q4, to continually improve targeting EE/DR products. Substantial analysis for the DSM potential study occurred in the fourth quarter.
- **DSM Evaluation, Measurement & Verification** — Most Energy Efficiency product evaluations were completed in the fourth quarter with reported progress at year end. As noted last quarter, the Residential Heating and Cooling evaluation of the cooling end use is tracking to be completed in early 2022 to capture customer data from 2021 participation; data collection for that evaluation was completed in the fourth quarter. Initial review of the Business New Construction non-participant interview data indicated a need to capture additional information from non-participating trade partners which delayed delivery of the Business New Construction draft report past the end of the fourth quarter. The Company's third-party verification contractor completed random field inspections for prescriptive products for the 2021 M&V year with no significant variances.
- **DSM Planning & Administration** — During the fourth quarter the Company continued the the Demand Response and On-bill Financing stakeholder working groups established in the 2021-22 DSM Plan Settlement Agreement in addition to filing three 60-Day Notice modifications to the 2021-22 DSM Plan; including one to launch the Company's Income-Qualified Beneficial Electrification Pilot.
- **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 residential water heater demand response measure;
- A behavior-based demand response product for residential customers that uses pre- and post-event communications and social comparisons to reduce customer consumption during demand response events;
- High Bill Alerts;
- Green Button Connect My Data;
- Indoor agriculture - The Company is planning to launch special assessments for indoor agriculture facilities within the Business Energy Assessments Product;
- 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; and
- Multi-family demand response.
- Infrared drying
- Dual-fuel commercial heat pumps

Demand Response Program

- **Critical Peak Pricing** — The Critical Peak Pricing (CPP) product did not dispatch additional events during the fourth quarter, holding the total number of CPP events at 10 for the year. The product did not add new participants the fourth quarter. Recruiting efforts and meetings with potential customers have continued through the fourth quarter.
- **EV Critical Peak Pricing** — In 2021, the Company promoted EV-CPP to customers participating in the EV Supply Infrastructure Program, including those installing EV charging equipment at multifamily facilities that may serve Income-Qualified Customers. The Company expects the majority of new customers to be participants of the EV Supply Infrastructure Program. During the fourth quarter the EV-CPP product added six new participants.
- **EV Optimization** — The Company launched both the Charging Perks pilot (dynamic optimization) and Optimize Your Charge (static optimization) in 2021. Through a Request for Proposal process, the Company selected WeaveGrid to begin enrolling Tesla vehicle owners in the second quarter of 2021. In the third quarter, the Company also launched enrollment with BMW, Ford, GM & Honda for our Charging Perks pilot. In regard to the Optimize Your Charge (static optimization) offering, the Company began discussions with WeaveGrid in the fourth quarter to expand data collection services across both EV Optimization offerings.
- **Geo-targeting Pilot** — In the fourth 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. Our geo-targeting pilot has generated new opportunities on the gas-side of our business 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. We are actively seeking to connect with builders in the target area to create

communities pre-enrolled in our demand management products, but communication has been slow and challenging.

- **Peak Day Partners** — The Peak Day Partners product was introduced in the fall of 2019. It is a voluntary product where enrolled participants have the option to respond to price signals from the company. The product finished 2021 with three participants. In the summer 2021 there were seven control events.
- **Peak Partner Rewards** — The Peak Partner Rewards (PPR) product did not dispatch additional events during the fourth quarter, resulting in one PPR event for the year. The product did not add new participants in the fourth quarter. Recruiting efforts and meetings with potential customers have continued through the fourth quarter.
- **Residential Battery Demand Response Pilot** — The Company launched the pilot in the first quarter of 2021 and has enrolled over 125 customers so far. The Company successfully dispatched 7 summer demand response events and conducted a midpoint customer survey in the fourth quarter. Also in the fourth quarter, the Company began planning for the next phase of the pilot.
- **Residential Demand Response** — The Saver's Switch product has added about 2,400 new participants in the fourth quarter 2021. The Company has also conducted about 4,200 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. The Product did launch a trickle campaign for the Direct Install option and has seen an uptick in the channel. The Smart Water Heater product struggles with supply of control modules. As of the end of 2021, one unit has been deployed.
- **Small Commercial Building Controls** — Direct installations have continued through the end of 2021, and email marketing campaigns are expected to launch in Q1 2022 to increase enrollments.