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CONFIDENTIAL SETTLEMENT COMMUNICATION UNDER CRE 408

TO: Public Service Company of Colorado ("Public Service" or the "Company")

FROM: Energy Efficiency Business Coalition (EEBC)

DATE: October 17, 2022

SUBJECT: EEBC settlement proposal for 2023 DSM Plan, Proceeding No. 22A-0315EG

The EEBC membership represents manufacturers, distributors, implementers, software businesses, and contractors "on the ground" delivering the Public Service's DSM Plan to the market. EEBC's settlement proposal is built on its members' long-term relationship with Public Service and its deep understanding of the current and future DSM marketplace in Colorado, as well as national trends. EEBC's proposals reach all classes of customers with rebates in areas of the market that deserve the Company's attention.

This memo first outlines critical concepts that should be included in the 2023 DSM Plan that address key areas driving the market today: (1) the new Inflation Reduction Act, (2) economic inflation generally, and (3) the phase out of non-LED light bulbs. Further, the proposals here should be used to address Public Service's announced shortfall in energy savings from the Commission's approved goal for the 2023 Plan. The memo is then organized into Residential, Business, and Demand Response recommendations. **Bullet points in RED** signify member-driven priority proposals to be discussed by EEBC Policy Action Group representatives at the October 21st meeting, and have corresponding detailed attachments in three cases (not including the DR proposal for an RFP).

I. GENERAL ISSUES | Cross-Cutting Among Categories

A. Adopt 2022 bonus incentive levels for year-round application in 2023, in all electric DSM product categories and for all measures which utilized bonus incentives in 2022. Public Service greatly underspent its approved electric DSM budget and missed its savings target in 2021. The Company is likely to have the same result in 2022. With a potential recession looming and higher inflation, higher rebates are needed in 2023 in both residential and business products than in either of the past two years.

Given current inflation in both equipment and labor costs, Public Service's assumptions about measure costs are out-of-date in some cases; *i.e.*, higher rebates are needed commensurate with recent increases in EE project costs. Moreover, "turning on" bonus rebates and "turning off" such rebates at the beginning of the following year is detrimental to DSM contractors and other trade allies who need both consistency in rebates and a more steady stream of work!

- **B.** Inflation Reduction Act (IRA). Educate consumers and trade allies about IRA tax credits and rebates in all cases where there is overlap between Public Service incentives and IRA tax credits and rebates. Public Service outreach and marketing to contractors and ratepayers should include comprehensive information on the IRA tax credits and rebates (as they become available) in ALL marketing materials, web pages, training sessions, etc. where applicable. Doing so should: 1) help customers understand the full scope of the incentives that are available, thereby increasing participation in Public Service's EE programs and 2) motivate trade allies to provide accurate information about the tax credits when they are talking to potential customers.
- C. Drop big box stores from the Residential lighting program in 2023. This proposal is repeated in Section II(F)(2), below. The Biden Administration has issued new federal standards prohibiting the import of light bulbs less than 45 LPW after 1/1/23 and the sale of such lamps at the retail level after 7/1/23. Big box stores only stock (or almost only stock) LED lamps these days, including LED reflector lamps and other specialty lamps, not just standard light bulbs. Eliminating this category, long a lynchpin of the DSM program, will acknowledge that the low hanging fruit is gone. Eliminating this product will also create budget availability and savings needs to incorporate EEBC's settlement proposals.

II. RESIDENTIAL

A. Residential HVAC | HVAC

- 1. Increase promotion, market support and heat pump participation targets considering new IRA tax credits and incentives (expected in 2023).
 - Heat Pump targets will become the centerpiece of the next generation of DSM Plans.
 - EEBC believes that the proposed rebate levels, \$1,500-\$2,000, look reasonable, but the Company should double participation targets for all heat pump measures in 2023.
- 2. Member Company Proposal | "Alternative EER Heat Pump Research Pilot" | HP Action Group Manufacturers, Distributors, and Industry Stakeholders. The Company Should Establish a 2023 Pilot to evaluate elimination of EER requirements for variable capacity heat pumps starting in 2024. Public Service should drop the EER requirement for variable capacity equipment while keeping it in place for single speed equipment, thereby incentivizing adoption of the most efficient equipment available in the marketplace.
 - Variable capacity heat pumps operate more steadily and have a much lower peak power draw than single stage/capacity heat pumps which operate in "on/off" mode. Most state-of-the-art cold climate heat pumps are variable capacity units, and as a result Public Service's minimum EER requirements for heat pump rebates disadvantage the best available technologies by rendering such technologies unavailable for rebates.
 - To prove this concept out, EEBC proposes that Public Service create a pilot project through a research partnership with EEBC's HVAC/heat pump Action Group to develop a business case for an alternative model for variable capacity heat pump rebates in the 2024-25 DSM Plan.
 - Public Service should create a 10-home pilot with variable capacity equipment with modeling objectives aligned with the 40-home Xcel heat pump study or expand the current qualifications to identify homes to be entered into the 40-home Xcel heat pump study. This would include appropriate peak capacity savings values for variable capacity heat pumps.
- 3. Reduce high efficiency furnace and gas water heater incentives and/or require installation of a dual fuel heat pump/gas furnace system to be eligible for a gas furnace rebate.

- Cut rebate levels by at least 50% from those proposed for 2023 for high efficiency gas furnaces, and eliminate the gas water heater incentive.
- This should provide an additional boost for heat pumps and HPWHs, and move toward zeroing-out furnace and gas water heater incentives in future years for non-income-qualified programs.

4. Offer a bonus incentive for homes that install qualifying HVAC equipment along with performing advanced duct sealing meeting a supply-side duct leakage reduction of at least 80%.

• Offer a bonus incentive of approximately 20% for existing homes that perform advanced duct sealing along with an HVAC upgrade.

5. Implement a midstream incentive approach for Heat Pump Water Heaters (HPWHs).

- Engage distributors and contractors to increase HPWH stocking through a midstream approach.
- Increase marketing once the midstream approach is in place.
- Consider a combination of midstream and downstream incentives say \$500 for the consumer and \$500 for the distributor, with the goal being a sufficient level to get water heater distributors to respond.

B. ENERGY STAR Homes | Energy Star Homes

1. Add prescriptive incentives for builders that install ASHPs, mini-split HPs, HPWHs.

• Incentivize builders to install HPs and HPWHs, in addition to incentives designed to get builders to build greater than minimum code.

2. Triple the incentive for all-electric new homes.

- As proposed, incentive levels are just \$500 if the home is 10-15% better than code and \$800 if 15-20% better than code in locations where the base code is 2018 IECC, and just \$300 if the home is 10-15% better than code and \$550 if 15-20% better than code in locations where the base code is 2021 IECC.
- EEBC believes these amounts are insufficient to motivate builders to go allelectric unless they were already planning to do so, as evidenced by very low participation levels to date.

- 3. Require additional basic measures in all new homes qualifying for an incentive, thereby maximizing energy savings.
 - Smart thermostat
 - 1.5 gpm low-flow showerheads
 - Water-efficient faucets, and
 - LED lamps in all lights where bulbs are included in the home as built.

C. HOME ENERGY SQUAD | Home Energy Squad

1. Drop programmable thermostat measure and only install smart thermostats. Also, consider requiring enrollment in the residential DR program in return for a free smart thermostat.

D. INSULATION AND AIR SEALING | Insulation and Air Sealing

- 1. Member Company Proposal | "HVAC Advanced Duct Sealing Stand-Alone Product" | HVAC Action Group
 - Add an incentive for advanced duct sealing. Many homes have air ducts with high leakage which compromises energy efficiency and comfort, and also leads to oversizing of HVAC equipment.
 - Add a sizable incentive, up to 30% of installed cost with a maximum rebate of approximately \$750 for advanced duct sealing where supply-side duct leakage is reduced by at least 80%.
 - Several Colorado utilities including Black Hills Energy and Platte River Power Authority include advanced duct sealing as a measure in HVAC programs.
- 2. Increase participation targets and budget considering new IRA tax credits and rebates that will become available eventually. Current projection is 735 insulation jobs/participants in 2023; move this up to approximately 1,500 participants in light of IRA.
- **3.** Test the neighborhood blitz approach to doing attic insulation and air sealing on a significant scale. Conduct a trial in one Disproportionately Impacted (DI) Community using either an existing contractor or going through an RFP process.
 - Offer standardized insulation and air sealing without an audit as a prerequisite for retrofit work

- Target approximately 250 homes through pre-announcement of retrofit services street by street. The goal being to minimize administration costs through the blitz approach.
- Include a budget of approximately \$600k for the trial. Pay majority but not all of the cost of each insulation and air sealing job.

E. MULTIFAMILY BUILDINGS | Multifamily Buildings

- 1. Expand focus on cold-climate HPs and HPWHs installations in Multi-Family (MF) buildings going through rehab as well as new MF buildings. Multifamily buildings are an excellent target for electrification of space and water heating; *i.e.*, replacing combustion equipment now found in utility spaces.
 - Educate building owners about the opportunity,
 - Include significant cold-climate HP and HPWH incentives in combination with IRA incentives, and
 - Showcase buildings that have installed HPs and HPWHs.

F. HOME LIGHTING | Lighting

- **1. Drop big box stores from the program in 2023.** *See,* Section I above.
- 2. Maintain in store buydowns in dollar stores, grocery stores and the like in DI Communities, at least for one more year. This will help reduce the first cost and increase sales of LED bulbs in these areas.
 - Continue giveaway of LED lamps in the Home Energy Squad, school kits, at food pantries and at promotional events.

G. WHOLE HOME EFFICIENCY | HPWES

- 1. Add a performance incentive approach based on whole house energy savings percentage to align with the incentives for whole house retrofit in the IRA under the Hope for Homes provision.
 - Actively promote the generous IRA incentives along with Public Service rebates, with a focus on low-and moderate-income families (note there are income limits on qualifying for the federal incentives).
 - Increase product budget and participation targets.

III. <u>BUSINESS</u> | <u>Business Construction & Small Biz Solutions</u>

A. BUSINESS HVAC | HVAC

- 1. Increase emphasis on promoting Heat Pumps, heat pump water heaters, and variable refrigerant flow (VRF) equipment.
 - Add incentives for ASHPs, HPWHs and VRF heat pumps.
 - Target replacement of split system and packages ACs with HPs.
 - Market/showcase cost-effective applications of HPs including VRF systems in commercial buildings.

B. BUSINESS LIGHTING | Lighting

- 1. Member Company Proposal | "Lighting Controls in DR Pilot" | Lighting Action Group.
- 2. Greatly increase incentives for lighting controls, especially for network controls. These devices are improving in performance but substantial incentives are needed at this time to get them established in the marketplace and adopted by building owners.
 - Increase incentive levels to approximately 30% of installed cost, which will help to address the issue of higher material and labor costs recently.
 - Include design support of networked lighting controls as there is an added cost for proper system design.
 - Consider implementing a pilot program that combines DR with network lighting controls.
- 3. Double the rebate amounts for exterior LED fixtures and add rebates for exterior lighting controls such as motion sensors. While not coincident with system peak currently, nighttime load should grow with EV and HP penetration.
 - There is still a lot of potential for cost-effective energy savings for businesses from converting to LED exterior lighting.
 - Apply bonus incentive year-round for exterior lighting as well as interior.
- **4. Eliminate minimum wattage requirements for prescriptive incentives.** In many cases, lighting contractors can provide adequate light levels in their projects with fixture wattages below the minimum values that Public Service has specified within the product. It does not benefit the energy efficiency cause

to specify minimum wattages. Lighting contractors on their own will ensure that adequate lighting levels are provided in order to ensure customer satisfaction.

C. <u>NEW CONSTRUCTION</u> <u>Business new construction</u>

1. Add prescriptive incentives for HPs and HPWHs. Educate builders and architects about potential applications for HPs and HPWHs in commercial buildings and encourage HP suppliers and contractors to serve this market as well as the residential market. Offer HP and HPWH incentives to builders even if a new building is only built to (or close to) minimum code.

D. <u>SMALL BUSINESS SOLUTIONS</u> | <u>SBS</u>

1. Include direct install measures for all customers requesting a site assessment, not just customers under 100 kW.

E. LED Street Lighting Municipal street lighting

- 1. Open the LED Street Lighting product to additional lighting contractors.
 - All qualified contractors should have the ability to bid on Public Service's municipal street light projects. This work should not be given automatically to the Company that owns the line extension contract, as has been done in the past.

IV. <u>DEMAND RESPONSE (DR)</u>

A. PEAK DAY PARTNERS | Residential DR

- 1. Implement a pilot that would offer residential customers that already have AMI meters incentives to reduce peak demand on up to 10 critical peak days.
 - Provide control devices to customers that restrict certain appliances (like dishwashers, clothes washers or clothes dryers) from operating during peak demand periods, either for free or at a discount.
 - AMI meters would be used to estimate the reduction in peak load achieved, with incentives paid to customers per kW of achieved peak reduction.
 - Issue RFP to hire a qualified contractor to implement this pilot project.
- 2. Member Proposal | "DR Performance Pilot" | Third Party/DR Aggregator Action Group. Public Service should conduct an RFP in the first half of

2023 to solicit ideas for new DR offerings that achieve peak demand reduction by residential customers with AMI meters.

- Could be pilot or performance-based proposal
- Goal would be to fill gaps in the residential DR program portfolio.
- Proposals should emphasize:
 - Data-driven program design (i.e. using AMI)
 - Technology-agnostic pathways for delivering flexibility (*i.e.* keep options open for innovation of all kinds)
 - o Grid-optimized value closely aligned with avoided costs (*i.e.* solutions that drive toward performance payments vis a vis avoided costs (net benefits) and carbon impacts)