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RE: Q3 2021 60-Day Notice – Residential Heating and Cooling

In accordance with the DSM Biennial Plan Stipulation and Settlement Agreement in Proceeding No. 08A-366EG and subsequent demand-side management proceeding, Public Service Company of Colorado (Company) agreed to provide 60-Day Notice to the DSM Roundtable of any proposal to add a new DSM program, reduce rebate levels, adopt new or discontinue existing measures, or change technical assumptions or eligibility requirements. DSM Roundtable participants have 30 days from the time of notice date to provide comments to the Company on the proposed changes. On September 3, 2021, the Company issued such notice with proposed modifications to the Residential Heating and Cooling product. This letter is in response to that notice.

On behalf of the undersigned parties, I am providing the following as objection to some of the modifications that have been proposed.

First, we object to the inclusion of Natural Gas Boilers as a measure available to all customers. We would only support the incentive for Natural Gas Boilers if it were limited to boilers that replace an existing less-efficient boiler in a low-income qualified household or multi-family building only. To meet Colorado's ambitious climate goals, it is critical that traditional gas space and water heating appliances be replaced with efficient electric heat pumps that are powered by renewable energy. The Company's proposed inclusion does not align with Colorado's goals. If the Company is pursuing, "a renewed focus on reducing peak gas demand in certain areas to reduce constraints on the local distribution system", we encourage them instead to prioritize and/or increase incentives for efficient electric heat pumps and other renewable heating and cooling technologies.

Second, we object to the proposed changes to eligibility requirements for all the heat pump measures – air source, ground source and ductless. The Company's proposed modification have material negative impact to achieving our local and our state-level goals. Further, the changes erode benefits available to the company and its rate payers and further inequities of services available to customers in rural and mountain area communities. We would request that the Company forgo the proposed changes or, at a minimum, consider a tiered incentive approach that is more inclusive of all customers that could benefit from heat pump adoption.

The Company has long included heat pump measures within the Residential Heating and Cooling product, with heat pumps serving as cost-effective measures delivering energy and demand benefits solely based on their cooling efficiency. This served many customers in selecting a heat pump as a viable option over traditional air conditioning. However, as recognized by the interveners in the Company's 2021/2022 DSM Plan filing, heat pump adoption is not growing at a rate that is necessary to address the growing impacts of climate change and associated increase in cooling demand, nor to achieve state-level emissions reduction goals. More significant investment is needed to motivate customer adoption and to help transform the market towards greater overall benefit.

As documented in Hearing Exhibit 105, Attachment A-Settlement Agreement, to the Public Utilities Commission Proceeding No. 20A-0287EG, a settlement that the undersigned parties were party to, the Company and settling parties agreed to rebate values as stipulated in Appendix 1 of that Exhibit. The changes created greater differentiation for heat pumps and added a new measure for cold climate heat pumps to more appropriately recognize the heating benefits this equipment delivers. The settlement also enabled the company to take credit for gas and electric savings where the heat pump was also providing heating benefit. It was not the intent of this settlement, nor the understanding of the parties, that energy savings specifically tied to the utility's own heating service become a requirement for equipment or customer eligibility, rather it was to enable the company to account for that benefit where it existed.

As outlined in the notice, the Company proposes to modify the eligibility requirements for all heat pumps used for space conditioning based on home heating type. It narrows heating type to only electric resistance and natural gas furnaces and boilers. Where natural gas is the heating source, the customer would be required to receive gas service from the Company to be eligible for a rebate. The modification also requires that the heat pump replace heat, making cooling-only units no longer rebate eligible. In effecting these changes, the Company will be undermining the intent of the settlement. Instead of sending a clear signal to customers and the HVAC industry that heat pumps are the solution that provides the greatest benefit, the Company would be narrowing customer eligibility and creating new requirement that will be confusing to both customers and installers.

Heat pumps, whether cooling only or ones installed where the Company is not the gas provider, still provide significant and growing benefit to the Company, its rate payers and its customers. 2021 marked a record number of days, including record number of consecutive days, over 95 degrees. The City of Boulder has been advised by its Environmental Advisory Board that Boulder could soon see heat extremes on the order of 112 degrees, with similar highs expected across the front range. This increase in heating days and magnitude of temperature present significant concern and, in the absence of adequate intervention, will result in significant growth in peak cooling demand and higher costs to customers. Continued and accelerated support of heat pumps as a cooling choice not only helps ensure customers are making an efficient choice, but also helps drive the heat pump market at a rate that will bring down barriers and overall cost.

Currently, the Company serves approximately 360,000 electric-only customers, a portion of which rely on heating other than electric resistance. These customers should still have the benefit of rebate opportunities to serve their cooling needs and technology solutions that can provide overall participant benefits. Many of these customers do rely on propane as their current heating source. Heat pumps replacing propane has repeatedly been shown to be the most cost-effective solution for the customer. It also delivers significant emissions reductions.

While the onus is on the Company to offer products and services that are cost effective to all rate payers it must also equitably provide products and services in a way that maximizes the availability of those products and services to all customers. While we appreciate the Company's efforts to maximize the cost effectiveness of the Residential Heating and Cooling product, we believe the product can still be cost effective even if the Company takes a less prescriptive approach. In the case of heat pumps, we believe the Company will be better served in achieving its overall savings, investment, and electrification goals, by maximizing participation in the measure through the least restrictive eligibility possible. Making the heat pump rebates available to any electric customer, irrespective of heating types, does not preclude

the Company from taking heating savings benefit where that benefit exists to them. At the time of rebate application, the Company knows the services they offer to the customer and the heating type can be documented as part of the application.

If the Company demonstrates that the Residential Heating and Cooling product cannot be cost effectively offered at current levels without restricting eligibility, we request that, at a minimum, a tiered approach be used based on the cooling-only benefits for each heat pump type – ducted, both air-source and ground-source, and ductless. In this case, the Company should revise Section E of the notice to provide the appropriate distinction among the tiers. In this section, we would note that the requirement to replace electric resistance heat may create confusion as many heat pump installations include electric resistance back-up; thus, we would recommend using “replace or offset”.

Again, we appreciate the Company’s efforts to ensure they are appropriately stewarding rate payer investments and for the opportunity to provide comment on the proposed product changes. Again, we are requesting that the Company forego the proposed changes or adopt an alternative tiered approach that better supports all electric customers who would benefit from heat pump adoption. I would be happy to further discuss our concerns or to provide input on any revisions the Company wishes to undertake.

Sincerely,

Carolyn Elam, Sustainability Senior Manager, City of Boulder

David Hatchimonji, Residential Program Manager, Boulder County

Jonathan Rogers, Renewable Energy Specialist, City and County of Denver

Justin Brant, Utility Program Co-Director, Southwest Energy Efficiency Project

Gwen Farnsworth, Managing Senior Policy Advisor, Western Resource Advocates

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Cc: Mark Schoenheider, Xcel Energy
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