

November 4, 2021



On September 3 2021, Public Service Company of Colorado (“Public Service” or “the Company”) issued a 60-Day Notice to modify its existing Residential Heating & Cooling product to 1) add a measure for natural gas boilers to increase rebate eligibility in targeted areas throughout the state, 2) clarify eligibility requirements for heat pump rebates, and 3) add an additional climate zone for deemed savings calculations in the product to more accurately calculate savings achieved in high-altitude regions.

The Company received written comments on the Notice from the Colorado Energy Office (“CEO”) and a coalition consisting of representatives from the City of Boulder, Boulder County, City and County of Denver, Southwest Energy Efficiency Project, and Western Resource Advocates (“Coalition”). The original Notice, stakeholder comments, and Company responses can be found on the Company’s website, here:

https://www.xcelenergy.com/company/rates_and_regulations/filings/colorado_demand-side_management

The Company hosted meetings with both parties to discuss their concerns, and after careful consideration of the comments, the Company determined that changes to the original Notice are warranted. The Notice with amendments detailed below will be implemented on November 5, 2021. A summary of comments and the Company’s formal responses are provided below:

1. Natural Gas Boiler Rebates:

The Coalition objected to the addition of natural gas boiler rebates with an exception for boilers that replaced an existing, less-efficient boiler in an income-qualified household or multi-family building. The comments expressed concern that the addition of boiler measures would adversely affect Colorado’s climate goals and recommended the Company focus on transitioning traditional gas space and water heating appliances to efficient electric heat pumps power by renewable energy.

Response:

The Company agrees that its beneficial electrification offerings, including dual fuel heat pumps, are an important part of the clean energy future and provide significant benefits in reduced gas usage and reduced carbon emissions. As stated in the original Notice; however, the Company is adding natural gas boiler rebates back into its DSM portfolio as part of a renewed focus on reducing peak gas demand in certain areas to reduce constraints on the local distribution system thereby helping to avoid costly gas infrastructure upgrades. Some areas with such constraints have a greater prevalence of

boilers than is standard for the state. High efficiency boiler rebates could be an effective strategy to address this problem.

The Company notes that (with the exception of ground source heat pumps), all heat pump measures in the Company's current DSM plan rely on using the customer's current gas heating source as a backup. In most cases, this would be a ducted air source heat pump with a natural gas furnace as backup. For customers with a boiler, it would likely be a mini-split heat pump with a natural gas boiler as backup. Because the natural gas backup heat source is used on the coldest days when the natural gas peak occurs, a dual fuel heat pump system will do little to reduce natural gas peak loads, unless the customer also upgrades the natural gas backup system (furnace or boiler).

The only way the Company could reduce the gas peak through electrification measures is by replacing the natural gas backup heat source with an electric resistance heat source for use on the coldest days. The Company does not recommend this strategy due to the substantial customer bill impacts and increased upfront equipment costs. This is especially true in areas such as Summit County, which can have very low temperatures in the winter. Furthermore, high participation in this strategy would add significant incremental load to the electric grid causing a need for costly infrastructure upgrades for both generation and distribution.

In order to pursue the original objective of peak gas demand reduction while being responsive to stakeholder concerns, the Company will implement the following changes to the original Notice:

- The minimum AFUE for a boiler rebate will be increased from 90% to 95%;
- Customers who install a qualifying boiler shall be eligible for a 50% bonus rebate on a qualifying heat pump that is installed within the following year; and
- The Company agrees to targeted marketing and education efforts in regions with high boiler adoption that highlights the benefits of full system upgrades including heat pump installation to mitigate growing air conditioner adoption rates in those regions.

2. Heat Pump Rebate Eligibility:

The CEO and Coalition both objected to space-conditioning heat pump eligibility language limiting rebate participation to customers who receive primary space heating fuel service from the Company. Both parties felt this limitation would adversely affect heat pump adoption, broader electrification market transformation efforts, and Colorado's climate goals. Recommendations included foregoing the proposed update or creating a tiered rebate structure based on which services a customer receives from the Company.

Response:

The Company appreciates these comments and agrees that the benefits of heat pumps should be made available to as many customers as possible. Upon further review, the

Company agrees that all customers with electric service from the Company shall be eligible for all space-conditioning heat pump rebates. The rebate levels will be the same for all customers as established in the 2021-22 DSM Plan, regardless of heating fuel service, for the sake of simplicity, product integrity, and to encourage adoption. The Company shall not claim the heating savings for customers where the Company does not provide the existing heating fuel.

Clarifying language regarding heat pump water heater eligibility will remain in place.

3. Additional Climate Zone:

Neither party commented on nor objected to the additional climate zone for deemed savings calculations. The Company will implement these changes as outlined in the original Notice.