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December 19, 2024

Ms. Abigail Daken
ENERGY STAR® HVAC Program
U.S. Environmental Protection Agency
Submitted via e-mail: HVAC@energystar.gov

RE: Final Draft of the Version 5.0 ENERGY STAR Furnace Specification

Dear Ms. Daken:

Rheem Manufacturing Company ("Rheem") appreciates the opportunity to submit the following comments regarding the Final Draft of the Version 5.0 ENERGY STAR Furnace Specification ("Draft.")

Rheem is an industry leader for total heating, cooling, and water heating solutions and one of the few global brands with product offerings covering residential and commercial heating, cooling, conventional and hybrid storage water heaters, tankless water heaters, solar water heating systems, pool and spa heaters, commercial boilers, residential hydronic and geothermal systems, indoor air quality accessories, and replacement parts for all categories. Rheem, headquartered in Atlanta, Georgia, manufactures in Fort Smith, Arkansas; Montgomery, Alabama; Scottsboro, Alabama; Waterbury, Connecticut; and Oxnard, California, and operates distribution facilities throughout the US, Canada, and many other countries around the world.

Rheem has received negative feedback from industry partners relative to the oil furnaces criteria in the Draft and would like to convey these insights to the Environmental Protection Agency (EPA) for consideration in the final specification. Separately, Rheem generally supports the requirements for gas furnaces and appreciates the agency's incorporation of stakeholder feedback.

Rheem shares the EPA's focus on advancing decarbonization and energy savings and believes the ENERGY STAR program will maximize efficiency gains by maintaining visibility of efficient products to consumers in a technology neutral manner. Rheem continues to support a national, performance-based efficiency program that recognizes accessible energy-saving products and provides visibility of such to consumers, as originally intended by the ENERGY STAR program. To that end, we respectfully request that the following feedback be considered:

- Residential furnaces are an essential component of rapid heat pump deployment for space heating, with adoption in northern U.S. regions dependent on backup emergency heating in the form of oil and gas heating, a much more efficient and economical form of heating than electric resistance. The 87% AFUE threshold for oil furnaces is an unnecessary increase and will cause field issues with condensation. AFUE of 87% requires properly-sized stainless chimney liners to be installed in existing chimneys, as flue gas temperatures exiting the furnace will typically be around 300°F. This level also requires manufacturers to use more expensive materials to ensure the integrity of the heat exchanger. With such conditions, installers may resort to modifying equipment in order to adjust flue gas temperatures – with reports that this is occurring even with the lower efficiency models now.

- This change in specification is occurring at a time when the oil furnace is being used as a supplemental heat source for heat pumps in many installations. An increase from 86% to 87%, which is a total increase of 1.2%, will save the typical consumer that uses 500 gallons per year a mere 5 to 6 gallons of oil. The result is a significant installation cost increase due to the cost of chimney liners, which on average is approximately $2,500.00, added to the additional costs of the furnace itself, all to save $15 to $20 per year on the fuel oil bill.

Rheem requests that EPA consider the benefits versus costs associated with the increase in minimum efficiency and adjust the final specification for oil furnaces accordingly. We appreciate the opportunity to provide comments and looks forward to continued collaboration.

Sincerely,

Allison J. Skidd

Allison J. Skidd
Director, Global Regulatory Affairs – Air
Rheem Manufacturing Company

CC: Karen Meyers, Lily Mak