



November 10, 2017

Ms. Abigail Daken
Manager, ENERGY STAR for HVAC
U.S. Environmental Protection Agency

Submitted electronically to commercialwaterheaters@energystar.gov

Re: ENERGY STAR® Program Requirements Product Specification for Commercial Water Heaters
Eligibility Criteria Draft 1 Version 2.0

Dear Ms. Daken,

Thank you for the opportunity to comment on the Program Requirements Product Specification for Commercial Water Heaters Eligibility Criteria Draft 1 Version 2.0 issued on October 12, 2017. As you know, the A. O. Smith Corporation (“Company”) is a proud ENERGY STAR® program partner and along with its wholly owned subsidiary, Lochinvar LLC, is the largest manufacturer of commercial water heating equipment in the United States, prides itself on its strong working relationship with you and the Product Management team at EPA.

In general terms the Company is supportive of the specification standards as set forth in the proposal for commercial water heating equipment. However, the Company does have some specific concerns with certain elements of the specification and has included recommendations that it outlines more fully below.

Definitions

EPA has decided to include a new product category – “commercial-duty residential heat pump water heater” – into the Draft version 2.0 specification. In developing this new product category, EPA states it *“has determined that there are heat pump water heaters designed for commercial use that have input rates less than or equal to 12 kW”* but do not meet the Department of Energy’s (“DOE”) current definition of a commercial heat pump water (see 10 CFR §431.102). While EPA’s statement may be accurate, the Company is concerned that the EPA’s creation of a new commercial-duty residential heat pump water heater product category may cause unnecessary confusion in the marketplace. In addition, unlike the three-year deliberative statutory and regulatory process by which the DOE created an analogous residential-duty commercial gas storage water heater (RDC) product category, EPA is acting on its own initiative without the same rigor and intensive stakeholder process that produced the RDC

product class. Moreover, it would appear from the exclusions contained in the “Scope” of the Draft, that the EPA is attempting to create a product category for a very small set of manufacturers that could, in the absence of the new product category, arguably certify their products to ENERGY STAR® under the current residential heat pump specification and gain the same marketplace benefit of having the ENERGY STAR® mark.

Moreover, while the Company can appreciate EPA’s desire to create this new product category to address, in its view, a perceived void in the marketplace to incentivize a certain class of high efficiency commercially intended heat pump water heater, the Company ultimately believes it is premature at this time to create this new product class. The Company recommends EPA not adopt this new product class and instead continue to work in further consultation with the industry, DOE, and other interested stakeholders to address EPA’s perceived goal of incentivizing a specific type of heat pump water heater intended for commercial installations.

Finally, the Company would also urge EPA to review carefully DOE’s Enforcement Policy for Certain Commercial Water Heaters as published on October 20, 2017, which has an effective date of January 1, 2018. The application of this Policy may have an impact on certain commercial water heaters under the Draft specification. Lastly, and as EPA may know, DOE has pending a Notice of Proposed Rulemaking (NOPR)(see Docket No. EERE-2014-BT-STD-0042 /RIN 1904-AD34), to amend the minimum energy conservation standard for commercial water heating equipment. According to the Unified Regulatory Agenda, DOE intends on completing this rulemaking in May, 2018. This rulemaking, as well as the anticipated initiation of the next round of energy conservation standard changes for consumer water heaters, may afford a more deliberative opportunity to arrive at a consensus definition of the market category of heat pump water heater EPA is attempting to incentivize.

Certification Criteria

Product Performance Requirements for Gas-fired Water Heaters

At this time the Company recommends not including a Maximum Standby Loss requirement for Instantaneous Gas-fired Water Heaters with ≥ 10 gallons of water in this version. The new test procedure for standby loss measurement in instantaneous gas-fired water heaters is very different from past test methods. Many manufacturers are still working through the new test procedure and declared ratings have not yet been through annual audit testing by third-party testing. ENERGY STAR® strives to qualify the top 20% of available products in a given class. In the case of standby loss for gas-fired instantaneous water heaters, time needs to be allowed for the test procedure to be applied and the standby loss database to be stabilized before EPA sets a maximum a standby loss level for this class of products.

Product Performance Requirements for Commercial Heat Pump Water Heaters and Commercial- duty Residential Heat Pump Water Heaters

The Company agrees with the proposed performance standard for commercial heat pumps at $COP_h \geq 3.0$. as it is reasonable and demonstrative of system efficiency for this product category. In

contrast, the Company has concerns with the proposed performance standard for commercial-duty residential heat pump water heaters assuming EPA decides to keep this product category in the ensuing final specification. By EPA's own definition for this product category (i.e. a < 12kW heat pump without an integrated storage tank), UEF, which is a test of system efficiency with an integrated storage tank, appears incongruous with the proposed product category. It would appear that the proposed performance standard is not an appropriate match to the proposed product category, which further supports the Company's position that the proposed new commercial-duty residential heat pump water heater product category is premature.

Minimum Manufacturer Limited Warranty - Commercial Heat Pump; Commercial-duty Residential Heat Pump

As the Company has commented previously, it has consistently taken a position that ENERGY STAR® should not set criteria for warranties given that these are individual business decisions and have no correlation to energy-efficiency. It is unfortunate that the EPA continues to insist on including warranty terms in its specifications. Notwithstanding the Company's opposition to including warranty terms, it would recommend EPA setting a 3 year warranty on the compressor and 1 year on parts. These terms would better align ENERGY STAR® to current industry warranty criteria.

As always, the Company appreciates the opportunity to provide these comments. If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,



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