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March 2, 2017

Abigail Daken
US Environmental Protection Agency
Ariel Rios Building 6202J
1200 Pennsylvania Avenue, NW
Washington, DC, 20460

Dear Ms. Daken:

The Consortium for Energy Efficiency (CEE) respectfully submits the following comments in response to ENERGY STAR® Light Commercial (LC) HVAC Draft Version 3.1 Specification, released by the Environmental Protection Agency (EPA) on January 27, 2017.

CEE is the binational organization of energy efficiency program administrators and a staunch supporter of the ENERGY STAR® Program. CEE members are responsible for ratepayer-funded efficiency programs in 45 US states, the District of Columbia, and seven Canadian provinces. In 2014, CEE members directed over $6.7 billion of the $8.7 billion in energy efficiency and demand response program expenditures in the two countries. These comments are offered in support of the local activities CEE members carry out to actively leverage the ENERGY STAR brand. CEE consensus comments are offered in the spirit of strengthening ENERGY STAR so it may continue to serve as the national marketing platform for energy efficiency.

CEE highly values the role ENERGY STAR plays in differentiating energy efficient products and services that the CEE membership supports locally throughout the US and Canada. We appreciate the opportunity to provide these comments.

CEE Supports the Proposed 3.3 COP at 47°F Performance Requirement for Large Unitary and Variable Refrigerant Flow (VRF) Heat Pumps

We appreciate the responsiveness EPA showed to our earlier comment that the previously proposed COP at 47°F heating requirements for unitary and VRF heat pumps in the ≥135,000 Btu/h and <240,000 Btu/h (large) size range matched the federal minimum required performance of 3.2 COP at 47°F, and that therefore the specification might not meet consumer

expectations that an ENERGY STAR-labeled heat pump would provide heating energy savings over a non-labeled heat pump in climates with mild winters.

In the Draft Version 3.1, EPA proposes a 3.3 COP at 47°F heating requirement for large unitary and VRF heat pumps. The Draft Version 3.1 cover memo states that this level allows for differentiation from the minimum federally required performance and "for products that provide heating savings to be distinguished, while maintaining a good selection of qualifying products." CEE analysis of product listings in the AHRI directory finds that 36 models, or 20%, of Large Air-Cooled Heat Pumps and 1,291 models, or 80%, of Large VRF Air-Cooled Heat Pumps will meet the specified levels.[1] Based on current model listings in the AHRI Directory, CEE finds that the product universe for large unitary heat pumps is relatively small and there currently is minimal opportunity to increase COP at 47°F requirements and still meet ENERGY STAR brand tenets for product availability. Increasing the COP at 47°F requirement from 3.3 to 3.4 would reduce the number of qualifying existing models from 36 models (20% of available models) from two manufacturers to 13 models (7% of models) produced by only one manufacturer.

Based on data provided during development of version 3.0, EPA estimates that a large unitary or VRF heat pump meeting the proposed COP at 47°F heating criteria would save 205 kWh, or approximately three percent of heating energy, annually compared to a model meeting only the minimum standard, and would provide a simple payback of approximately three years. CEE supports EPA in setting ENERGY STAR criteria to represent performance levels that provide savings nationally in a variety of climates and agrees that the proposed COP at 47°F levels are appropriate given current market conditions. As EPA is not proposing changes to the required EER, IEER, and COP at 17°F criteria required by the specification (all of which deliver energy savings above the minimum standard), the COP at 47°F requirement should only have a modest impact on consumers, particularly those in extreme climates. CEE and its members plan to revisit the appropriateness of the CEE Commercial Unitary Air-Conditioning and Heat Pumps Specification in 2017 ahead of the new federal minimums that take effect in 2018.

CEE would once again like to thank the EPA for the opportunity to comment on LC HVAC Draft Version 3.1 Specification. Please contact CEE Program Manager Bjorn Jensen at (617) 337-9280 with any questions about these comments.

Sincerely,

Ed Wisniewski
Executive Director

[1] This analysis does not account for duplicate model listings in the AHRI Directory.