

Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy
Natural Resources Defense Council
Northeast Energy Efficiency Partnership

June 27, 2014

Ms. Abigail Daken
United States Environmental Protection Agency
Office of Air and Radiation
1200 Pennsylvania Avenue NW
Washington, DC 20460

RE: ENERGY STAR Specification for Water Heaters, Version 3.0 Final Draft

Dear Ms. Daken:

On June 19, 2014, the U.S. Environmental Protection Agency (EPA) distributed the final draft of its ENERGY STAR version 3.0 specification for water heaters. This letter is written in response to the draft specification and is submitted on behalf of the Appliance Standards Awareness Project (ASAP), the American Council for an Energy-Efficient Economy (ACEEE), the Natural Resources Defense Council (NRDC), and the Northeast Energy Efficiency Partnerships (NEEP).

In response to the first draft of the version 3.0 specification, our comments focused on cold climate performance issues for heat pump water heaters and EPA's proposed connected product criteria. Our comments here concern EPA's treatment of these issues in its final draft.

Cold Climate Performance – We support EPA's inclusion of a compressor cut-off temperature reporting requirement for heat pump water heaters but continue to urge EPA to do more to mitigate performance differences that could be experienced in cold climates.

As mentioned in previous comments, the energy saving benefits of a heat pump water heater (HPWH) are premised on the heat pump compressor acting as the primary water heating source. If the ambient temperature surrounding the water heater falls below a certain level, the compressor will cut-off and the HPWH will switch to a far more energy consumptive electric resistance mode. Because of this, the location of a HPWH within a house, and the geographic location of the house (e.g. northern U.S., southwestern U.S., etc), can directly impact efficiency. EPA has begun to recognize this issue by proposing that manufacturers report the ambient temperature at which the HPWH compressor will cut-off. We continue to believe that EPA should include compressor cut-off requirements and testing in the ENERGY STAR specification in the same or similar manner to that used in Northwest Energy Efficiency Alliance's Northern Climate Water Heaters Specification.

We also understand, however, that the primary purpose of the current revision process is to implement new specification requirements at the same time, or prior to, the new federal standards that go into effect in April 2015. And while we would ideally like EPA to fully address cold temperature performance issues in version 3.0, we appreciate that the required dialogue and consultation with stakeholders would protract the revision timeline. We look forward to discussing comprehensive ways to address cold temperature performance in the next specification revision process.

Connected Product Criteria – We support EPA's proposal not to include criteria for the connected functionality of water heaters in the ENERGY STAR specification at this time.

As we mentioned in our previous comments, given the possibility of future legislation or waivers concerning large grid-enabled electric resistance water heaters, we understand EPA's interest in beginning to provide a framework for connected water heaters in the ENERGY STAR specification. However, as acknowledge by EPA, until we have a better sense of what effective connected functionality can and should look like for water heaters, it is premature to include such criteria in the ENERGY STAR specification. Therefore, we support EPA's decision not to include a criteria for connected water heaters at this time.

In summary, we commend EPA for commencing the revision process for version 3.0 to assure ENERGY STAR's continued relevance and value in light of the 2015 changes to the federal standards. We understand the complexities of carrying out this process at a time when the federal test procedure and accompanying metric are still awaiting finalization and appreciate EPA's willingness to take on the important task of revising the specification despite these challenges.

Thank you for considering these comments. We look forward to continuing our work with EPA to help advance water heater efficiency.

Sincerely,



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