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US Environmental Protection Agency Office of Air and Radiation
1200 Pennsylvania Avenue NW
Washington, DC 20460

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Ms. Daken,

Northeast Energy Efficiency Partnerships (NEEP) and New York Energy State Research and Development Authority (NYSERDA) appreciate the opportunity to provide comments in response to the United States (U.S.) Environmental Protection Agency (EPA) proposal to amend the recently completed Version 6.0 ENERGY STAR Central AC/Heat Pump (CAC/HP) specification, which will be reflected in a Version 6.1 specification.

NEEP launched a regional market transformation initiative for air-source heat pumps (ASHP) in 2013. One of the tools that came out of our initiative strategies was the development of the cold-climate air-source heat pump (ccASHP) Specification and product list. The specification development and evolution has been stakeholder driven and is now on its third version, with version 4.0 in development. Stakeholders are keenly interested in greater alignment of specifications for high performance heat pumps and NEEP anticipates leveraging the eventual version 6.1 specification (cold-climate category) in future versions of the NEEP ccASHP Specification.

NEEP and NYSERDA are generally supportive of the changes and clarifications made in Version 6.1 and continues to feel that the specification will positively contribute to identification of high performance ASHPs in the market. We appreciate the ENERGY STAR Program being responsive to new stakeholder feedback following the completion of Version 6.0. and proposing a series of improvements. As ENERGY STAR prepares to finalize Version 6.1, please consider the following;

1. **Maintain removal of EER requirement for Cold Climate category**
    a. We believe removing EER requirements for the cold climate category appropriately recognizes the inherent tradeoff between heating and cooling performance in heat pumps and reflects a recognition that the cold climate category specification should focus on differentiating systems optimized for *heating* performance and efficiency.
    b. For further context, reference NEEP comments submitted to the Draft 1 Version 6.0 Specification associated with EER; https://www.energystar.gov/sites/default/files/NEEP%20Comments%20on%20CACASHP%20Draft%201%20V6.0.pdf

2. **Expand clarification of Installation Capabilities**
    a. High-quality installations of air-source heat pump (ASHP) systems generate referrals, increase sales, reduce callbacks and improve customer comfort and satisfaction. Installation practices

also have a major impact on efficiency and performance of an ASHP system. We support efforts aimed at helping ensure that these high performance systems operate to their potential.

b. In discussions with Manufacturers, prior to the release of the Version 6.1 proposal, some expressed confidence in having the technical functionality but apprehension over whether their unique installation capabilities met the intention of the ENERGY STAR installation capability descriptions. While you have increased clarity around what qualifies for each installation capability, we recommend that any further clarification or confirmation of different scenarios would be useful to manufacturers and stakeholders generally. This could take the form of an FAQ or similar. This is an opportunity to avoid confusion and frustration as manufacturers begin to submit products for qualification.

3. **Consider alternative requirements for single and two speed equipment.**
   a. The current installation capacity requirements that apply to variable speed equipment but not to single and two speed creates an unfair playing field. The current structure lowers the bar for the very systems that we should be seeking greater assurances from. We recommend that ENERGY STAR either increase efficiency performance levels (i.e. HSPF) for single and two speed systems if no installation capabilities are required or applying some combination of existing or new installation capability requirements to these products.

4. **Recommend additional actions to support Manufacturer CVP testing**
   a. The Controls Verification Procedure (CVP) to confirm that the performance metrics measured at the Appendix M1 low ambient test point at 5° F are achieved by the native controls represents an important aspect of the cold climate category specification. Because it represents a new procedure to manufacturers, we recommend that EPA and the U.S. Department of Energy provide ongoing support to manufacturers in the lead up to the specification's January, 2023 effective date. This technical assistance could take the form of a help desk or "office hours" function or some kind of informational webinars focused on how to conduct this test correctly.

Thank you for offering the opportunity to provide comment to the ASHP/CAC V6.1 specification. ENERGY STAR must continue to serve in a leading role in recognition of high performing energy efficient products, and NEEP and NYSERDA looks forward to continuing to support ENERGY STAR's efforts into the future. Please don't hesitate to contact us with any follow up questions or clarifications.

Sincerely,

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