

Abigail Daken, Product Manager ENERGY STAR for HVAC United States Environmental Protection Agency Office of Air and Radiation Washington DC, 20460 November 14, 2016

Ms. Daken,

Northeast Energy Efficiency Partnerships (NEEP) appreciates the opportunity to provide comments to ENERGY STAR's Connected Thermostats V1.0 Specification Draft 3. After a careful review of the draft documents, as well as participation in the EPA led webinar on November 3<sup>rd</sup>, NEEP submits the following comments.

NEEP is generally very supportive of the direction of the specification. We have a few small recommendations and requests to help improve robustness as outlined below:

## **Standby Power**

NEEP recognizes that standby power is a by-product of the high functionality of connected devices. Typically, unless there is a strong motivation to curtail standby power use, connected products will not try to do so. As such, we do not oppose the 3W standby power level proposed, but encourage EPA to strongly vocalize intentions to reign in that level in the future. It is only with that motivation that we have historically seen standby power levels decrease in other connected product categories. NEEP hopes that EPA communicating very clearly that this level will reduce in future specification revisions will motivate manufacturers to pay attention to minimizing standby power.

Additionally, NEEP strongly encourages EPA to make the standby power level publically available on the qualified products list such that stakeholders who are concerns about the negative impacts of a higher always-on level, potentially those in climates where the benefit of the connected thermostat is not as substantial, can use that information to inform their decision.

## **Proposed Savings Levels**

NEEP is supportive of EPA's proposed savings levels of 8% for heating and 10% for cooling. Through our research and review of secondary evaluations, we feel those are realistic cutoff points and are confident that several products will be able to meet those levels. While these levels will not describe the actual energy savings in any one household, these levels are at a sufficiently high thresholds to suggest a reliable level of savings in the aggregate. Through discussions on the public webinars, manufacturers have expressed that the metric may actually discount real savings, and likely in some cases over-estimates true savings. Since the objective is the aggregated impact, NEEP strongly cautions EPA against going any lower for those levels.

For product seeing alternate pathways to certification, NEEP requests EPA to raise the savings thresholds from 4% and 5% to be closer in alignment with 8% and 10% proposed for the standard pathway. Through description and the language of the specification, the alternative pathways should be more accurate in their assessment of



Comments to ENERGY STAR Connected Thermostat Specification V1 Draft 3 Page 2 of 2 savings. As such, hitting a higher level of savings, closer to 8% or 10%, should be realistic. If a product was not able to achieve certification because of lower performance against the metric, a lower threshold for the alternative certification may motivate them to choose that pathway when in reality, they should not earn certification. As this specification has the likelihood of determining which products are eligible for utility program incentives, having a potential loophole this size is concerning, as a business could have a lot of money on the line whether they earn or do not earn ENERGY STAR recognition.

## Clarity on the variance in climate zones

NEEP understands EPA's reasoning for not disqualifying a product that did not meet the heating or cooling threshold in any one climate zone, but rather having weighted averages based on the heating and cooling energy intensity of a climate zone. That being said, NEEP requests EPA to consider making the information about climate zones that, for specific products, do not meet the thresholds, available. This will be very helpful to consumers as well as efficiency programs to temper expectations for the savings they may be able to achieve in their specific home. One suggestion could be flagging climate zones where the threshold falls below 6% and 8% for heating and cooling respectively using color coding, or in description on the QPL to the effect of "less than 6% heating savings in marine climate was achieved."

Thank you again for offering this opportunity for NEEP to provide comments on this third draft of the Connected Thermostat Specification. We are hopeful that this specification can be completed soon and products can start certifying in early 2017. Please don't hesitate to contact me with any follow up questions or clarifications.

Sincerely,

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