Ms. Daken,

Northeast Energy Efficiency Partnerships (NEEP) appreciates the opportunity to provide comments to ENERGY STAR’s Connected Thermostats V1.0 Specification draft 1. After a careful review of the document, this letter is submitted on behalf of NEEP and the Vermont Energy Investment Corporation (VEIC), henceforth referred to as “NEEP.”

In general, NEEP is very encouraged that ENERGY STAR is drafting a specification for these products. This draft specification is incomplete with regards to the metric section focused on savings calculations and thresholds. It is thus not possible to fully support this as a specification that will provide significant energy savings to the Northeast and Mid-Atlantic region. We are hopeful, however, that metric information will be developed and available for comment in subsequent versions. As such, our comments focus on the format of the specification presented in this draft and the usability of this type of specification for efficiency programs.

Regarding software updates and testing, NEEP suggests requiring re-submission of information when major software updates take place (moving from version 4.0 to version 5.0, but not from version 4.0 to 4.1, for example) or if no major update occurs, every 6 months.

Regarding labeling, NEEP agrees with EPA that a physical ENERGY STAR label on a products may not be feasible. NEEP would suggest EPA set standard expectations for labeling in any online apps or interfaces for the thermostats rather than set a physical requirement. This would help ensure a quicker and easier delisting of products, as well.

NEEP requests some clarity around the data submission process for a connected thermostat, realizing that this may be forthcoming with more metric information. In principal, NEEP considers EPA’s proposal of receiving submitted heating/cooling season data every 6-months to be satisfactory in ensuring regularly updated information. We would ask for clarity if smart thermostat manufacturers would need to submit data every 6 months for the duration of a product being covered by the specification, or if this data would be submitted for a set period of time (i.e. 2 years) once the product qualifies. Additionally, we would ask the EPA to provide guidance for efficiency programs that might have offered an incentive on a product that did not meet the savings threshold when the retroactive data was submitted. Additionally, the specific dates suggested for submission may be challenging for manufacturers to comply with, especially considering holiday staffing constraints for some of the smaller manufacturers. NEEP would recommend shifting the dates to 7/15 for heating season data and 1/15 for cooling season data.
NEEP would also request clarity on the expectations for the entire installed base. We can envision a scenario where one manufacturer is especially successful in selling products in warm-weather climates, in which case their heating/cooling seasons might be different from other manufacturers who have a product that is installed throughout the US. Additionally, if there aren’t sub-climates of the United States established, NEEP can envision a product that has great savings throughout an installed base, but within a more temperate climate has very marginal savings. In this case, a utility in a temperate climate may be able to offer an incentive based off the national estimated savings and not see those savings realized. Furthermore, NEEP also recommends EPA set guidance for what would be considered “cooling season” and “heating season,” as depending on the thermostats effectiveness, those windows could be longer or shorter for different manufacturers.

As with other ENERGY STAR specifications, NEEP would also encourage the EPA to set threshold limits for the percentage of an installed base that meets the ENERGY STAR criteria. As there will be a significant range of actual savings achieved by these products, we would want to ensure that a small number of homes with huge savings don’t shift the scales and allow an undeserving product to be covered by the specification. We would ask EPA to consider a threshold such that at least 80% (or more) of installed base meet within at least 1% the ENERGY STAR threshold. This is similar to other ENERGY STAR specifications where a percentage of the tested products must pass the qualifying level but there is some allowance for variation. Sub-regions may help clarify this.

Finally, as defining a baseline is critical for efficiency programs to promote an efficient product, NEEP would encourage that the EPA develop systems to share data about Connected Thermostat products to ensure efficiency programs are able to establish cost-effective savings for these products.

Thank you again for offering this opportunity to provide comments on this first draft of the Connected Thermostat Specification. Please don’t hesitate to contact me with any follow up questions or clarifications.

Sincerely,

Claire Miziolek
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