

December 5, 2014

Ms. Melissa Fiffer  
ENERGY STAR  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

Subject: Comments regarding ENERGY STAR Draft 1 Version 4.0 Product Specification for Room Air Conditioners

Dear Ms. Fiffer,

We offer the following comments on behalf of the American Council for an Energy Efficient Economy (ACEEE) on the *ENERGY STAR Draft 1 Version 4.0 Product Specification for Room Air Conditioners*. We appreciate the opportunity to comment on the draft specification, and value the work you have done to ensure careful analysis of proposed changes. We support EPA's efforts to address how products perform in the field by including installation requirements, and we look forward to seeing other EPA product categories incorporate ways to improve consumer use and field performance of products in future product specifications.

ACEEE is a nonprofit, non-partisan, organization dedicated to advancing energy efficiency as a means of promoting both economic prosperity and environmental protection. ACEEE fulfills its mission by conducting in-depth technical and policy assessments; advising policymakers and program managers; working collaboratively with businesses, public interest groups, and other organizations; publishing books, conference proceedings, and reports; organizing conferences and workshops; and educating consumers and businesses.

**We offer the following comments and recommendations:**

**Installation requirements:** ACEEE strongly supports EPA's effort to improve the installed efficiency of RACs with requirements for proper installation. Significant efficiency and comfort gains are possible by addressing how products are installed by customers. NREL estimates window installation can increase whole house air leakage by 10-20%, affecting the ability of the unit to cool a room as intended.<sup>1</sup> We strongly support the insulation and weather-stripping requirements for RACs. We suggest considering a requirement to ensure customers are provided with enough insulation and weather-stripping material to fit most windows. Alternatively, EPA could require labeling on the product that specifies what size opening the material provided can cover, and/or whether the material can be adjusted to fit multiple opening sizes.

**Covers for Through the Window (TTW) ACs:** We strongly support the required insulation cover for TTW units. Since these units are not typically removed in the winter months, we urge EPA to consider a more stringent R-value requirement than required for insulating window RACs. The current required value (R-1) provides less insulating value than a typical double paned window. We also recommend including language that specifies covers must not only insulate, but also air seal units.

**Open access to data:** We support the requirement that customers have access to their own data; companies should not own or be able to limit consumer access to a customer's personal use data. We also support the requirement for manufacturers to provide documentation to allow for transmission, reception, and interpretation of customer use data that customers authorize to third parties. By requiring transmission of energy consumption data and operational status/user settings and messages, we believe that EPA's connected requirements do not

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<sup>1</sup> [http://energy.gov/sites/prod/files/2013/12/f5/testing\\_residential\\_ariconditioners\\_booten\\_winkler.pdf](http://energy.gov/sites/prod/files/2013/12/f5/testing_residential_ariconditioners_booten_winkler.pdf)

undermine potential manufacturer efforts to develop proprietary software or algorithms that aim to interpret or disaggregate energy data.

**Temperature set-point for demand response capability:** Comfortable, healthy living conditions are highly dependent on relative humidity, not solely temperature. We recommend considering relative humidity when setting a limit to protect consumers from conditions that might be detrimental to their health.

**Product availability:** We urge that EPA include only products that are currently available on the market to be listed as ENERGY STAR qualified. A list that includes products that are not available on the market will result in frustration for customers interested in using the list to find the best products available, and for utility partners who are offering incentives for products that people cannot find for purchase. Furthermore, having models that aren't available on the list of products makes it very difficult for utility partners to accurately set program goals and calculate accurate savings estimates.

Thank you for the opportunity to provide comments. We look forward to the next draft specification for this product.

Sincerely,



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American Council for an Energy-Efficient Economy



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