

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

October 26, 2020

Dear ENERGY STAR® Room Air Conditioner Brand Owners and Other Interested Parties,

Recognizing the potential grid benefit and customer convenience of room air conditioners with connected capabilities, and in response to stakeholder requests to reduce the complexity of testing of such products, the U.S. Environmental Protection Agency (EPA) is amending the ENERGY STAR testing requirements for room air conditioners with connected functionality with the intention of encouraging more models to be certified as ENERGY STAR. This proposed amendment will not impact currently certified products.

As demonstrated for federally regulated products like central air conditioners and heat pumps, an alternative method for certification can be a viable path when different models are available with similar components and programming. For room air conditioner, EPA is proposing to allow manufacturers and brand owners the option to certify models as having connected functionality through an Alternative Demand Response Validation (ADRV). Manufacturers and brand owners with at least two models certified with connected functionality may forego demand response validation testing for new models by using an ADRV. The ADRV is a set of parameters developed and proposed by the manufacturer that predicts a basic model's ability to meet the demand response portion of the connected criteria. These parameters can include, but are not limited to hardware and software documentation, connection types and capabilities, and computer simulations.

Proposed Changes to the Test Requirements Section

5) Test Requirements:

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- D. Compliance with connected functionality requirements, as specified in Section 4, shall be demonstrated through examination of product and/or product documentation.
- E. Compliance of a basic model with demand response functionality (section 4.G.) shall be:
 - a. Validated by testing using the ENERGY STAR Test Method for Room Air Conditioners to Validate Demand Response (June 2017) in order for a product to be listed as having connected functionality on the Qualified Product List, and to be eligible for any connected allowance.

OR

- b. Predicted via an Alternative Demand Response Validation (ADRV). An ADRV is developed based on the specific set of manufacturer-defined parameters from a minimum of (2) tested basic connected models (TBCMs) that have been tested according to the ENERGY STAR Test Method for Room Air Conditioners to Validate Demand Response (June 2017) and meet the demand response requirements of the connected criteria. Examples of these parameters can include, but are not limited to, hardware and software documentation, connection types and capabilities, and computer simulations. To use an ADRV for a model's certification, the manufacturer shall submit 1) test data from the relevant TBCM, and 2) a short memo to the certifying body stating their intent to use an ADRV to meet the demand response portion of testing requirements and explaining how the TBCM test data is relevant to the model for certification.
 - i. A TBCM manufactured by an original equipment manufacturer (OEM) and sold across different brands and brand owners may be used to support an ADRV across those brands.
 - ii. Manufacturers are responsible for ensuring the accuracy and reliability of the ADRV. Models certified based on an ADRV will be subject to verification testing based on the ENERGY STAR Test Method for Room Air Conditions to Validate Demand Response.

In recognition of advances in connected functionality in the market and to align with optional connected criteria in other ENERGY STAR specifications, EPA has made non-substantive updates to the connected criteria in the room air conditioner specification.

Given the current circumstances, EPA is extending the normal comment period deadline to allow stakeholders to provide any comments. If you have comments or concerns about this amendment, please submit them by December 7, 2020 to appliances@epa.gov. Please direct any specific questions to Park.Ga-Young@epa.gov or (202) 564-1085, or Steve Leybourn at Steve.Leybourn@icf.com or (202) 862-1566.

Thank you for your continued support of ENERGY STAR.

Sincerely,



Ga-Young Park
Product Manager for Appliances
ENERGY STAR Labeled Products