



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

OFFICE OF
AIR AND RADIATION

February 4, 2021

Dear ENERGY STAR® Water Heater Brand Owner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is pleased to distribute the [Final Draft Version 4.0 ENERGY STAR® Water Heater specification](#) and the [Final Draft ENERGY STAR Test Method to Validate Demand Response](#). Stakeholders may submit comments on the final draft to EPA no later than March 4, 2021. EPA plans to finalize this Version 4.0 Water Heater specification and the Test Method to Validate Demand Response before the second quarter of 2021.

With the Version 4.0 revision, EPA seeks to recognize a variety of products that have both excellent efficiency and advanced design features, including those products with demand response and connected capabilities. In light of stakeholder feedback to the Draft 1 specification, this draft incorporates some changes to recognize a variety of efficient water heating technologies. As for all revisions, products may certify to the new version as soon as it is final, and products currently certified remain so throughout the 9-month transition period.

Final Draft Summary

The Final Draft Version 4.0 includes changes from the Draft 1 proposal that are in line with stakeholder feedback. In accordance with stakeholder recommendations, EPA has defined two new product subcategories – split-system heat pump water heaters and 120-volt integrated heat pump water heaters. Based on stakeholder feedback, these products will be unable to meet the criteria for electric storage water heaters as proposed in the Draft 1 specification. Because split-system and 120-volt products are well-suited to installations for which integrated 240 volt products would not be appropriate, EPA is proposing separate less stringent criteria to recognize these new categories.

EPA has also raised the efficiency criteria proposed for > 55 gallon heat pump water heaters to a Uniform Energy Factor of 3.30, thereby setting a single level for 240-volt integrated heat pump water heaters of all tank sizes. This change was suggested by several stakeholders who confirmed that currently certified products not meeting the more stringent level are being phased out and replaced by more efficient models. Thus, EPA does not expect this change will impact product availability.

No major changes are proposed to the Connected Criteria. More details regarding all changes described above are included in note boxes throughout the specification document.

Test Method to Validate Demand Response

The Final Draft Test Method to Validate Demand Response includes changes from the Draft 2 proposal that are in line with stakeholder feedback.

In accordance with stakeholder recommendations, DOE and EPA amended the test method to provide explicit instruction on the time to wait to establish that a loss of connectivity has occurred and how to verify that the water heater accurately reports when it is heating water. DOE and EPA also amended the criteria for determining when a water heater has fully finished heating water. Finally, DOE and EPA made a slight adjustment to the curtailment request to more closely align with how the request will be sent in the field.

More details regarding the changes described above are included in note boxes throughout the test method document.

Comment Submittal Process

Stakeholders may provide written comments for EPA consideration to WaterHeaters@energystar.gov by March 4, 2021. All comments will be posted to the [ENERGY STAR Water Heaters Product Development](https://www.energystar.gov/products/water_heaters) website unless the submitter requests otherwise.

Please direct any specific questions to Abigail Daken, EPA, at daken.abigail@epa.gov or (202) 343-9375, and Julia Hegarty, ICF, at julia.hegarty@icf.com or (202) 862-1163. For test procedure inquiries, please contact Catherine Rivest, U.S. Department of Energy, at Catherine.Rivest@ee.doe.gov or 202-586-7335. Thank you for taking the time to review these Final Draft documents. I look forward to continuing working with you.

Sincerely,



Abigail Daken, Product Manager
ENERGY STAR for HVAC

Enclosures:

[ENERGY STAR Final Draft Version 4.0 Water Heaters Specification](#)

[ENERGY STAR Final Draft Connected Residential Water Heaters Test Method to Validate Demand Response](#)

[ENERGY STAR Draft 1 Version 4.0 Water Heaters Comment Response Matrix](#)

[ENERGY STAR Final Draft Version 4.0 Water Heaters Data Package](#)