



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

OFFICE OF
AIR AND RADIATION

April 5, 2021

Dear ENERGY STAR® CAC/HP Brand Owner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is pleased to distribute the [ENERGY STAR® Version 6.0 Central Air Conditioner and Heat Pump \(CAC/HP\) Final Specification](#) and the [ENERGY STAR Cold Climate Heat Pump Final Controls Verification Procedure \(CVP\)](#). EPA would like to thank the many stakeholders who have devoted time and effort to informing this specification revision process. Version 6.0 requirements will be effective January 1, 2023, although EPA encourages early adoption of this specification.

This specification revision has the potential to deliver significant savings. Over its lifetime, a central air conditioner certifying to ENERGY STAR under this specification could save \$800 in household energy costs, and a heat pump could save up to \$2000. If all central air conditioners and heat pumps sold in the US met these criteria, the energy cost savings would grow to \$3 billion per year and 105 billion pounds of greenhouse gas emissions would be prevented. In addition, this revision offers the option for products to be recognized as connected, providing expanded ability to respond to grid needs with minimal impact to consumers.

This specification was developed through a process that included release of a discussion guide, three draft specifications and two limited topic proposals, along with multiple stakeholder meetings. Several themes were repeated throughout the process, including industry concerns with the burden of preparing to comply with the 2023 Federal minimum efficiency standards and test method as well as California refrigerant standards. As a result, EPA has aligned the effective date of the Version 6.0 specification with the effective date of the new Federal standards.

Stakeholder comments, previous drafts of the specification, and related materials are available on EPA's ENERGY STAR website at www.energystar.gov/specifications. Click on the "View the Version 4.0 Development Process" link for Central Air Conditioners or Heat Pumps.

Translation to EER2

From comments and discussions with stakeholders, EPA understands that the proposed translation of EER to EER2 may not be accurate for high efficiency products. In the absence of better information, EPA has maintained the proposed EER2 criteria, but encourages partners to share any test data they may have to support a lower EER2 criteria that would be equivalent to the 12.5 EER criteria. Should a better understanding of the conversion arise, EPA will revise the EER2 criteria before 2023 when that metric is required.

Installation Capabilities

As proposed in the [Limited Topic Proposal on Installation Criteria](#), EPA has limited the applicability of the installation criteria to variable capacity products only. This decision allows for a wider set of products to meet the Version 6.0 criteria, while encouraging products with advanced controls and communicating software to improve installation quality. EPA has also made small adjustments to some features based on conversations with stakeholders.

Controls Verification Procedure

The final version of the CVP includes changes from the draft that are in line with stakeholder feedback. As the CVP will not be required for new certifications until January 1, 2022, EPA encourages stakeholders to report any substantive issues with the CVP so that it may be improved as appropriate, but the Agency believes the procedure accomplishes the goal of confirming cold climate heat pump operation under native controls in its current form.

Timeline and Next Steps

EPA shares partners' desire for a smooth transition from one ENERGY STAR specification to the next, so that consumers can expect ENERGY STAR labeled products to fully meet the latest requirements upon their effective date. In addition, the Appendix M1 test method and associated metrics will become effective on January 1, 2023. With this in mind, EPA has established the following timeline:

- Effective immediately, manufacturers may elect to have their Certification Body (CB) certify their eligible products to the Version 6.0 requirements, including recognition as connected and the ENERGY STAR Cold Climate Heat Pump label. These certifications can be made according to the current Appendix M test method and associated metrics until January 1, 2022.
- As of January 1, 2022, CBs will be instructed to stop certifying new product submittals to Version 5.0. Note, however, that existing certifications will remain valid for purposes of ENERGY STAR qualification until January 1, 2023. Beginning on January 1, 2022, early certifications to Version 6.0 must be made according to the Appendix M1 test method and associated metrics.
- Any CAC/HP manufactured as of January 1, 2023, must meet Version 6.0 requirements to bear the ENERGY STAR mark. All certifications of products to the Version 5.0 specification will be invalid for purposes of ENERGY STAR qualification and the product finder will only include models certified to Version 6.0. Products that certified early using the Appendix M compliance pathway must submit data according to the Appendix M1 test method by this date.

ENERGY STAR partnership as a manufacturer is limited to organizations that own and/or license a brand name under which they sell eligible products in the United States and/or Canada. Partnership is not available to original equipment manufacturers (OEMs) that do not sell directly to consumers or end users. OEMs may certify products on behalf of the ENERGY STAR brand owners/licensees; however the brand owner must be the ENERGY STAR partner associated directly with the certified product models, since only partners are authorized to use the ENERGY STAR certification mark.

EPA thanks the many stakeholders who provided feedback during the specification revision process and looks forward to working with you as you certify and market your energy-efficient

central air conditioners and heat pumps. Please direct any questions regarding the specification and its timeline 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 marketing or webpage questions, please contact Dan Lawlor at Lawlor.Daniel@epa.gov or (202) 564-8561. 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 your continued support of the ENERGY STAR program.

Sincerely,



Abigail Daken, Product Manager
ENERGY STAR for HVAC

Enclosures:

[Final Version 6.0 ENERGY STAR CAC-HP Specification](#)

[Final Version 6.0 ENERGY STAR CAC-HP Data Package](#)

[Final Controls Verification Procedure](#)

[Final Draft Version 6.0 and CVP ENERGY STAR CAC-HP Comment Response Matrix](#)