April 1, 2020

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

The U.S. Environmental Protection Agency (EPA) welcomes your input on the enclosed ENERGY STAR Cold Climate Heat Pump Controls Verification Procedure (CVP). EPA and the Department of Energy (DOE) plan to hold a stakeholder meeting on April 13, 2020 to discuss the CVP proposal in greater detail. Stakeholders are encouraged to submit comments to EPA no later than April 30, 2020.

As proposed in the Draft 2 Version 6.0 Central Air Conditioner and Heat Pump (CAC/HP) Specification, EPA seeks to recognize products that have superior performance as appropriate for different climates. For cold climates, this includes certifying products that meet a minimum Coefficient of Performance (COP) of 1.75, and a minimum Percentage of Heating Capacity of 70% at 5°F. These values are certified at a fixed compressor speed, and EPA recognizes a need to verify that the fixed settings used for lab testing are translated to performance under the unit’s native control. The proposed CVP verifies that 5°F criteria can be achieved under the native controls of the unit.

Consistent with past practice, ENERGY STAR partners will have the option to certify products to the Version 6.0 specification as soon as the specification is finalized. To allow products to certify in the extended time period between the final criteria publication and the anticipated effective date, the CVP provides explicit test conditions for use with Appendix M certification, as well as a reference to the Appendix M1 conditions for products certifying to that test method. Once the effective date of the specification is passed, the CVP will be revised to reflect that all products must use Appendix M1 for certification.

Proposal Summary
The attached proposal intends to confirm that the performance required in the specification will be achievable once the unit is installed in a home. The proposal details that the unit should be set to operate under native controls. For products certified with the Appendix M test method, the CVP explicitly outlines the appropriate test conditions to verify the COP and Percentage Heating Capacity at 5°F. For products certifying with the Appendix M1 test method, the CVP references the low ambient temperature test conditions defined in Appendix M1. The performance is recorded after the unit reaches steady state, and power measurements indicate the COP and Percentage Heating Capacity at 5°F are at or above the minimum specification requirements.

EPA and DOE request feedback on several aspects of this proposal. More details regarding the proposal and specific questions are included in note boxes throughout the draft document.
Comment Submittal Process
Stakeholders are encouraged to provide written comments for EPA consideration to CAC-ASHP@energystar.gov by April 30, 2020. All comments will be posted to the ENERGY STAR CAC-ASHP Product Development website unless the submitter requests otherwise.

Stakeholder Meeting
EPA and DOE will host a stakeholder webinar meeting on April 13, 2020 from 1:00 to 3:00 pm EDT to discuss the CVP proposal and address initial stakeholder comments and questions. Stakeholders are encouraged to inform EPA of any industry events that may conflict with this date. Stakeholders interested in participating in this discussion should RSVP at this link by April 10, 2020.

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 Antonio Bouza, U.S. Department of Energy, at antonio.bouza@ee.doe.gov or (202) 586-4563. Thank you for taking the time to review this CVP document. I look forward to working with you over the next several months to finalize the Version 6.0 ENERGY STAR CAC/HP specification.

Sincerely,

Abigail Daken, Product Manager
ENERGY STAR for HVAC

Enclosures:
Draft ENERGY STAR Cold Climate Heat Pump Controls Verification Procedure