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



## OFFICE OF AIR AND RADIATION

March 31, 2021

Dear ENERGY STAR® Electric Vehicle Supply Equipment (EVSE) Brand Owner or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) is pleased to share the <u>Final ENERGY STAR Version 1.1 EVSE Specification</u>. EPA would like to thank the many stakeholders who have invested time and effort to contribute feedback that has informed this specification revision process. These Version 1.1 requirements will become effective immediately. EPA will host a webinar on **Thursday, April 8, 2021 from 3 – 4 PM Eastern Time** to outline the process for certifying DC EVSE and answer any stakeholder questions. Please register for the webinar.

With this Version 1.1, EPA expanded the scope of the ENERGY STAR EVSE specification to include DC charging products. This updated specification establishes requirements to recognize the most efficient DC-output products. Due to the potential for DC chargers to increase the range of EVs and the efforts to establish EV charging corridors for cross-country EV transportation, there has been an increase in demand for this product type. Adding DC charging stations to the ENERGY STAR scope will bring additional value to stakeholders by recognizing the safe and efficient models with the ENERGY STAR label.

This specification was developed through a multi-year process that began with the development of a test method to ensure there was a repeatable and appropriate procedure for testing DC-output EVSE for energy efficiency. The test method development process included the release of a discussion guide, two working session memos, and three draft test methods, along with multiple stakeholder meetings and input from stakeholders. EPA then began to develop energy efficiency criteria for DC-output EVSE with the release of two draft specifications. Stakeholder comments, previous drafts of the specification and test method, and related materials are available on the ENERGY STAR Version 1.1 EVSE Specification Development webpage.

#### Feedback on the Final Draft Specification

EPA received a few stakeholder comments in response to the Final Draft specification. These comments are summarized in the enclosed <u>comment response document</u>, along with the Agency's responses. EPA made modest updates to the Final specification in response to these comments:

- EPA removed the term 'portable' from describing DC-output EVSE with integrated batteries that
  cannot be disabled, as a stakeholder noted it would inadvertently prevent equipment that have
  integral batteries that are intended to be installed from claiming a battery management system
  allowance.
- EPA received stakeholder feedback that the requirement to report compliance with ISO-15118 was
  vague and other standards should also be considered. EPA updated the reporting requirement to
  emphasize advanced energy management functionality, while ensuring that ENERGY STAR program
  requirements are durable enough to evaluate these protocols as they evolve over time. As a result,
  the criteria will allow for reporting of additional protocols beyond ISO 15118, such as SAE J1772, IEC

- 61851-1, CHAdeMO 2.0, that are being leveraged by the EV charging industry to enable smart charging.
- Stakeholders requested that EPA allow for flexibility in the frequency allowed during testing to the ENERGY STAR DC-output EVSE Test Method to accommodate testing in in-house testing laboratories that may not be located in the United States. EPA has updated the AC-input supply requirements in the final <u>ENERGY STAR DC-output EVSE Test Method</u> (now marked revised as of March 2021) to allow testing at either 50 or 60 Hz, although it is still preferred that the unit be tested at the highest rated voltage and frequency combination listed.

#### Testing and Certifying DC-output EVSE for ENERGY STAR

Manufacturers should pursue testing through a third party testing laboratory, or enroll an in-house laboratory as a witnessed or supervised manufacturer test laboratory through a recognized Certification Body to begin testing and certifying products to the ENERGY STAR DC-output EVSE criteria. Currently UL Verification Services Inc., TUV SUD America, Inc., and Intertek Testing Services NA are recognized Certification Bodies for EVSE with approved W/SMTL programs. All EPA recognized test labs and certification bodies for EVSE can be found <a href="here">here</a>.

Again, EPA will be hosting a webinar to outline the process for certifying DC EVSE on **Thursday**, **April 8**, **2021 from 3 – 4 PM Eastern Time**. Please register for the webinar.

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.

Please contact me at (202) 564-8538 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or Emmy Feldman at (202) 862-1145 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or Emmy Feldman at (202) 862-1145 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or Emmy Feldman at (202) 862-1145 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or Emmy Feldman at (202) 862-1145 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or Emmy Feldman at (202) 862-1145 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or Emmy Feldman at (202) 862-1145 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or Emmy Feldman at (202) 862-1145 or <a href="mailto:kwon.James@epa.gov">kwon.James@epa.gov</a>, or this effort.

Thank you for your continued support of ENERGY STAR.

Best Regards,

James Kwon, Product Manager ENERGY STAR for EVSE

Enclosures:

**ENERGY STAR EVSE Version 1.1 Final Specification** 

**ENERGY STAR EVSE Version 1.1 Final Test Method** 

ENERGY STAR EVSE Version 1.1 Final Draft Specification Comment Response Document

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