

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



OFFICE OF AIR AND
RADIATION

June 11, 2020

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

The U.S. Environmental Protection Agency (EPA) is currently in the process of expanding the scope of the ENERGY STAR Electric Vehicle Supply Equipment (EVSE) Specification to include DC fast chargers. The Agency is pleased to share a [first draft of proposed requirements](#) along with the [Final Test Method](#) for DC-output EVSE. This scope expansion will be reflected in a Version 1.1 specification. Currently certified products will not be affected. Stakeholders are encouraged to submit written comments to evse@energystar.gov by **July 27, 2020**. EPA will hold a webinar on **Monday, June 29, 2020 from 3:00 PM – 5:00 PM Eastern Time** to discuss these documents. To participate in this webinar, [please register here](#).

With this initial draft, EPA introduces proposed performance criteria for DC-output EVSE and outlines minor changes made to finalize the test method in response to stakeholder feedback on the Final Draft Test Method. Key specification topics and updates included in the Final Test Method are outlined below. Additionally, EPA responds to other comments received on the Final Draft Test Method in the accompanying [comment response document](#).

- **Definitions** – EPA included the definition for minimum dispenser configuration to provide guidance on how cabinet/dispenser product configurations are proposed to be tested, in order to reduce testing burden for modular products. In addition, EPA updated the product family definition to clarify that acceptable variations within the product family apply for cabinet/dispenser configurations.
- **No Vehicle and Partial On Mode Requirements for DC-output EVSE** – EPA proposed Maximum No Vehicle Mode and Partial On Mode power requirements, as a function of the nameplate maximum output current. EPA included a power allowance for products with high resolution displays, as the Agency understands this feature requires additional energy. EPA will consider additional power allowances if features require them and supporting data are provided.
- **Operation Mode Requirements for DC-output EVSE** – EPA is proposing an average loading-adjusted efficiency requirement for Operation Mode, or active charging efficiency. EPA analyzed charging profiles of popular electric vehicle models to develop the loading condition weighting factors. EPA also analyzed typical meteorological year weather data (TMY3) to develop appropriate weighting factors for the measurements resulting from the different temperature tests.
- **Idle Mode Power for DC-output EVSE** – EPA has proposed a reporting requirement for Idle Mode.
- **Connected Functionality Criteria** – EPA has included updates to the optional connected criteria which, as proposed, contain new requirements pertaining to scheduling and remote management capabilities and define demand response signals that the EVSE should support.
- **Final DC-output EVSE Test Method**
 - **Operation Mode Loading Conditions** – A stakeholder pointed out that it was difficult to achieve the maximum rated output for the 100% loading condition at the proposed 350 V. Based on this

input, EPA has updated the test voltage to 400 V for all loading conditions which would enable the product to achieve maximum current and maintain repeatability in testing. In addition, EPA specified that if a model cannot achieve the rated output power at the voltage listed (400 V), it should be tested at the lowest voltage required to achieve the specified loading condition.

- **Room Illuminance Conditions for Products with ABC enabled by default** – In response to stakeholder input, EPA has included a minor update to require that products with Automatic Brightness Control (ABC) enabled by default be tested with the image that appears after the product is configured.

Upcoming Webinar

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. Stakeholder participation is key to the ENERGY STAR specification development process and is strongly encouraged. EPA plans to hold a webinar on **Monday, June 29, 2020 from 3:00 PM – 5:00 PM Eastern Time** to discuss the Final Test Method and Draft 1 Version 1.1 specification. **To participate in this webinar, [please register here](#) to attend.**

Feedback

Given the current circumstances, EPA is extending the normal comment period deadline to allow stakeholders to provide any comments on the Version 1.1 specification **no later than July 27, 2020**. Please send comments via e-mail to evse@energystar.gov. All comments received will be posted to the [Version 1.1 EVSE specification development webpage](#), unless the submitter specifically requests that his or her comments remain confidential. Stakeholder engagement is vital to the ENERGY STAR program and EPA looks forward to further work with stakeholders in the development of the EVSE Version 1.1 specification.

Please contact me at (202) 564-8538 or Kwon.James@epa.gov, or Emmy Feldman at (202) 862-1145 or Emmy.Feldman@icf.com, with questions or to share feedback for this effort.

Thank you for your continued support of ENERGY STAR.

Best Regards,



James Kwon, EPA Product Manager
ENERGY STAR for EVSE

Enclosures:

[ENERGY STAR EVSE Version 1.1 Final Test Method](#)
[ENERGY STAR EVSE Version 1.1 Final Draft Test Method Comment Response Document](#)
[ENERGY STAR EVSE Version 1.1 Draft 1 Specification](#)