

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



OFFICE OF  
AIR AND RADIATION

September 12, 2019

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

The U.S. Environmental Protection Agency (EPA) welcomes your input on the [ENERGY STAR EVSE Version 1.1 Final Draft Test Method](#). This draft addresses stakeholder feedback on the Draft 2 Test Method that was released in June 2019. Stakeholders are encouraged to submit written comments on the Final Draft Test Method to [evse@energystar.gov](mailto:evse@energystar.gov) by **September 26, 2019**.

EPA highlights key changes in the Final Draft below and provides rationale for these proposed changes in noteboxes throughout the test method. Additionally, EPA responds to comments received on other topics in the accompanying [comment response document](#).

- **Definitions** – EPA updated the schematic of the DC EVSE test boundary to respond to stakeholder questions. In addition, EPA updated the definition for Cabinet/Dispenser configuration to reflect that there could be multiple cabinets/dispensers.
- **Scope/Product Binning** – EPA is proposing a slight modification to the previously proposed product bins and associated requirements the Final Draft. Products with an output power less than or equal to 65 kW will be required to meet both standby and operation mode criteria. Those with an output power greater than 65 kW and less than or equal to 350 kW will have standby criteria but will only need to report operation mode efficiency, and those above 350 kW will continue to be out of scope.
- **DC-input EVSE** – In response to stakeholder feedback, EPA has specified that the highest nameplate rated voltage should be used as the input for testing DC-input EVSE.
- **Operation Mode Loading Conditions** – EPA has included four loading conditions based on various percentages of full output in order to ensure that all products will have four Operation Mode test points resulting in efficiency values across the product's full capability and load profile. EPA retained two fixed measurement conditions of 50 kW and 150 kW after reviewing peak DC charging power for a number of popular EVs on the market today. Maintaining these two exact loading conditions will allow for easy comparison from product to product. EPA chose 350 V across five loading conditions because it appears that most products in our dataset are capable of 350 V output. EPA noted that if a product is not capable of 350 V, then the mid-point of the voltage range should be chosen for testing.

#### **Data Assembly**

The Agency is not proposing performance levels for DC EVSE at this time but is assembling data to inform doing so. Using the [data assembly form](#), manufacturers are invited to provide test data for their current models according to the Final Draft Test Method for inclusion in the dataset. EPA considers that the Final Draft Test Method is sufficiently developed at this stage to test the energy efficiency of EVSE within the proposed scope of products. EPA believes that additional changes to the test method in response to stakeholder feedback will be minor, such that any data collected now will be valid for the purposes of informing the specification development process. Once

EVSE test data is available, EPA will use the data to develop a proposal for energy efficiency requirements. EPA anticipates releasing draft requirements for this expanded set of EVSE for stakeholder review and comment in late November 2019. Stakeholders are encouraged to submit any data to EPA by **October 24, 2019**. Please note that for data assembly purposes, data submitted to EPA is not required to undergo third party certification.

Stakeholders may provide any remaining comments on the Version 1.1 Final Draft Test Method **no later than September 26, 2019**. Please send comments via e-mail to [evse@energystar.gov](mailto: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 to include DC-output EVSE in the ENERGY STAR program.

Please contact me at (202) 564-8538 or [Kwon.James@epa.gov](mailto:Kwon.James@epa.gov), or Emmy Feldman at (202) 862-1145 or [Emmy.Feldman@icf.com](mailto:Emmy.Feldman@icf.com), with questions or to share feedback on this Final Draft Test Method.

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 Draft Test Method](#)  
[ENERGY STAR Version 1.1 Draft 2 Test Method Comment Response Document](#)  
[ENERGY STAR Version 1.1 Test Method Data Assembly Form](#)