

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



**OFFICE OF
AIR AND RADIATION**

June 6, 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 Draft 2 Test Method](#). This draft includes proposals in response to stakeholder feedback on the Draft 1 Test Method that was released in November 2018. EPA will host a stakeholder webinar to discuss this Draft 2 Test Method on **June 25, 2019 from 2:00 PM – 4:00 PM Eastern Time. Please register [here](#) to attend.** Stakeholders are encouraged to submit written comments on the Draft 2 Test Method to evse@energystar.gov by **July 8, 2019**.

The Version 1.1 Draft 2 Test Method includes the following changes from Draft 1 based on stakeholder feedback:

- **Scope** – EPA is proposing to:
 - Exclude DC-output EVSE with an output power greater than 350 kW.
 - Include DC-output EVSE with an output power less than or equal to 350 kW, as follows:
 - Products with an output power less than or equal to 50 kW will be tested against standby and operation mode criteria articulated in the Version 1.1 specification, which will be shared with stakeholders for comment at a later date.
 - Products with an output power greater than 50 kW and less than or equal to 350 kW will be tested against standby criteria outlined in the specification and will report operation mode efficiency information.
- **DC-input EVSE** – EPA has edited the test procedure to account for DC-input EVSE. Based on additional input from a DC-input EVSE manufacturer, EPA has proposed testing at nameplate rated voltage to best reflect a variety of DC-input voltages. EPA has added operation mode loading conditions for DC-input EVSE.
- **Temperature Testing** – Based on discussions with manufacturers, EPA does not expect much variation in energy use for standby modes due to ambient temperature. As a result, EPA is proposing that EVSE with active cooling or heating be tested in all three temperature conditions for Operation Mode but only in the temperate temperature condition for standby modes. Also, EPA has included guidance that passively-cooled EVSE need to be tested in the temperate temperature condition only for all modes of operation.
- **Network Connections** – In response to stakeholder feedback that DC EVSE will more likely be installed with a cellular network connection, over Wi-Fi or Ethernet, due to their typical locations, EPA has prioritized a cellular connection type in the test procedure.
- **Illuminance Conditions** – EPA has updated the high illuminance test condition to a brighter test environment to reflect the fact that DC EVSE are typically installed outdoors, where ambient light levels may be magnitudes higher than an indoor environment. However, to reduce testing burden, EPA indicated that testing at the light and dark illuminance conditions for products with ABC enabled by default should only be

conducted during standby mode testing (No Vehicle Mode, Partial On Mode, and Idle Mode) and not during Operation Mode.

- **Integral Battery Banks** – EPA has continued to require that an integral battery be disabled, if possible. However, for DC EVSE that contain a battery that is not able to be disabled, EPA has provided additional instructions for testing due to concerns that the battery may cause inaccurate results because the product is using the battery to provide power, rather than input AC. As a result, for DC EVSE that contain a battery that cannot be disabled, EPA will require that the integral battery be fully charged prior to testing but that the power consumption be monitored and measured after each modal test until there is no more power draw, in order to capture any energy used to recharge the battery.

EPA welcomes feedback on these proposals and any other input on how to best measure the energy efficiency of DC EVSE. Stakeholders are invited to submit written comments to evse@energystar.gov by **July 8, 2019**.

All work on the test method and specification development effort will be posted to the [Version 1.1 EVSE specification development webpage](#). Stakeholder engagement is vital to the ENERGY STAR program, and EPA welcomes stakeholder suggestions regarding additional ways to enable participation in this process. 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, or Emmy Feldman at (202) 862-1145 or Emmy.Feldman@icf.com, with questions or to share feedback on this Draft 2 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 Draft 2 Test Method](#)
[Comment Response on Draft 1 Test Method](#)