

ENERGY STAR®, a U.S. Environmental Protection Agency program, helps us all save money and protect our environment through energy efficient products and practices. For more information, visit www.energystar.gov.

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



OFFICE OF AIR AND RADIATION

March 27, 2023

Dear ENERGY STAR® Electric Vehicle Supply Equipment (EVSE) Brand Owner or Other Interested Party: The U.S. Environmental Protection Agency (EPA) is pleased to share with you a proposed amendment to the ENERGY STAR Version 1.1 Electric Vehicle Supply Equipment specification. This amendment addresses updates to the criteria for AC EVSE prompted by recent state requirements in terms of added product functionality. EPA has not revised any criteria pertaining to DC EVSE and currently certified DC and AC products will not be affected by this update. Stakeholders are encouraged to submit written comments on this amendment to evse@energystar.gov by April 10, 2023.

In response to extensive stakeholder feedback as well as data shared by multiple partners, this amended specification proposes a new base allowance and new functionality adders for the AC-output EVSE energy efficiency criteria. Data shared demonstrated that some of the mandated features warrant additional allowed energy across multiple modes. This proposed amendment also includes minor updates to the connected criteria. Key specification updates are outlined below.

Definitions – EPA has included the definition for a speaker, PLC board (ISO 15118), RFID card reader, Revenue Grade Meter and a credit card reader in harmonization with the state regulatory requirements to clarify treatment of these features for the purposes of ENERGY STAR certification.

Base Allowance – EVSE is a rapidly evolving product category wherein many new features have been added to improve customer experience since the last revision. These additional features require more advanced processors leading to higher energy consumption. As such, EPA has amended the base allowance from 2.6 watts to 4 watts based on the data and feedback received from stakeholders.

No Vehicle, Partial On, and Idle Mode Adders – EPA has proposed additional allowances for EVSEs in the No Vehicle Mode, Partial On Mode, and Idle Mode for functionalities such as credit card readers, Revenue Grade Meters, RFID systems and PLC boards that will be enabled during testing in accordance with the state regulatory requirements. EPA is proposing an additional allowance for in-use speakers for improved driver engagement with the vehicle and its functions. Occupancy sensing is an important feature from an energy savings standpoint. When EVSE systems are sophisticated and well designed, occupancy sensing can be used as a primary input to determine the time required to put various subcomponents to sleep, identifying utility rates, detecting vacant spots as well as equipment security. To encourage innovation in this space and reward systems that lead to significant savings through occupancy sensing, EPA is also proposing an adder for this function. EPA would appreciate stakeholder comments and the submission of any additional data to support further refinement of this proposal, as needed.

Connected Functionality Criteria – To be recognized as having connected functionality, EPA has proposed an additional requirement that the EVSE have the necessary hardware (PLC board for ISO 15118) to facilitate high-level communication between the EV and the EVSE based on a wired communication technology beyond basic signaling. At this time, EPA intends compliance with this criterion to be confirmed through review of documentation by a certification body, rather than with a test procedure. For instance, this might include

annotated product manuals, a record of product examination, etc. Products already certified as connected will continue to maintain their connected listing on the ENERGY STAR website.

Feedback – The exchange of ideas and information between EPA and stakeholders is critical to the success of ENERGY STAR. Stakeholder participation is key to the ENERGY STAR specification development process and is strongly encouraged. Please send comments via e-mail to evse@energystar.gov by April 10, 2023. All comments received will be posted to the EVSE specification development webpage, unless the submitter specifically requests that their comments remain confidential. EPA looks forward to further work with stakeholders in the completion of this amendment to the EVSE Version 1.2 specification.

Please contact me at (202) 564-8538 or kwon.James@epa.gov, or Abhishek Jathar at (202) 862-1203 or Abhishek. Jathar @icf.com, with questions or to share feedback on this amendment.

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 1.2 Draft Specification

For more information, visit: www.energystar.gov

This message was sent to you on behalf of ENERGY STAR. To manage the types of emails you receive from ENERGY STAR, visit the <u>subscription center</u>.