

ENERGY STAR V1.1 DC EVSE Final Draft Specification Comment Response Document

Topic	Subtopic	Stakeholder Comment	Suggested EPA Response
General		<p>A stakeholder recommended that EPA provide a reference to the revised Final Test Method.</p> <p>A stakeholder noted that the effective date of the Version 1.1 specification shall be specified, where the effective date is currently listed as 2016.</p>	<p>Based on this stakeholder suggestion, EPA updated the reference to the Final Test Method with the most recent date revision (Mar-2021).</p> <p>EPA appreciates these stakeholder comments. However, EPA would like to note that since this is an amendment to the Version 1.0 specification (V1.1, instead of V2.0), the effective date will remain the same as the date when the specification Version 1.0 was originally published, in 2016. In other words, the updates in the V1.1 specification is available for certification upon finalization.</p>
Certification Criteria	Power Allowances	<p>A stakeholder commented that a DC EVSE with an integrated battery need not necessarily be portable and the use of word 'portable' would impose unintended restrictions on the equipment that will be eligible for certification without the use of the battery management system allowance.</p>	<p>EPA appreciates these stakeholder comments. EPA agrees that the use of the word 'portable' will inadvertently prevent certain products from receiving the battery management system allowance. EPA also believes that EVSE with an integral battery increases the capability for Demand Charge Management and Demand Response and hence removed the word 'portable' from the power allowances in Table 5 and 6 of the ENERGY STAR V1.1 DC EVSE Specification.</p>
Scope		<p>A stakeholder requested that EPA expand the scope of DC-output EVSE covered by Version 1.1 to include DC Fast Chargers rated up to 400 kW, in order to harmonize with SAE J1772.</p>	<p>EPA chose to group these products into distinct categories with fewer requirements for high power EVSE in response to stakeholder feedback that larger DC-output EVSE are newer to market, are not as commoditized, and are more customizable than lower power EVSE. Further, there is a lack of data on efficiency for these products. EPA agrees that operating efficiency is a key metric for consumers and hopes to include criteria for the products with output power of 65 kW up to 350 kW, and potentially beyond, in a future revision of the specification once data is available.</p>
Connected		<p>Several stakeholders commented that EPA should focus on the functional requirements the enable connected functionality, rather than attempting to pre-determine which protocols should be used by the industry. They also mentioned that it would be inappropriate for EPA to signal to consumers that ISO 15118 is the de facto standard. They mentioned that EVSE to vehicle protocols continue to be amended and improved and hence reference to ISO 15118 should be updated.</p> <p>These stakeholders commented that subclause (iii) which relates to ISO 15118 is vague and unclear, as there are a variety of features that can be enabled via ISO 15118.</p> <p>Lastly, these stakeholders recommended against including a mandatory reporting requirement for UL 9741 for V2G functionality.</p>	<p>EPA appreciates this stakeholder feedback. The connected criteria are intended to emphasize advanced energy management functionality, while ensuring that ENERGY STAR program requirements account for the protocols that enable this functionality as they evolve over time. As a result, EPA has updated the Section 3.10.6 subclause (iii) to allow for additional protocols beyond ISO 15118, including SAE J1772, IEC 61851-1, CHADEMO 2.0 etc. that are being leveraged by the EV charging industry to enable smart charging..</p> <p>EPA has also updated the subclause (iii) to report whether EVSE has the transceiver and/or necessary hardware to support smart charging for energy management (i.e. beyond simple managed charging with pulse width modulation or CAN bus) using these various station-to-vehicle protocols. EPA has also updated the reference to state 'ISO 15118-2 or later'.</p> <p>EPA understands that Vehicle to Grid (V2G) capability is still an emerging capability with limited practical use cases supported by the vehicle and has removed this reporting requirement and will evaluate including this reporting requirement in future revisions of the specification.</p>