

ENERGY STAR EVSE Draft 2 Stakeholder Comment Summary and Response

Topic	Subtopic	Stakeholder Comment	EPA Response
General		<p>A stakeholder noted their support for the ENERGY STAR EVSE Specification, noting that it will facilitate energy efficiency and demand response efforts by utility companies. Another stakeholder mentioned that the webinar did not provide enough time to review all stakeholder input and requested another webinar so that all industry participants' input could be considered before moving to the next step in the process.</p> <p>A stakeholder noted that the EVSE is not a significant consumer of energy compared to the on-board charger and the EV sub-systems, suggesting that EPA focus efforts on the on-board charger instead of the EVSE.</p> <p>This stakeholder also noted that costs to develop and safety-certify new EVSEs are significant and can take two years or more. They requested evidence that the savings are sufficient to justify the ENERGY STAR Specification.</p>	<p>EPA appreciates this stakeholder feedback. EPA scheduled a webinar following the release of the Post Draft 2 Memo, prior to the release of this Final Draft specification, to cover changes presented in the memo and provide an additional opportunity to gather stakeholder feedback.</p> <p>Based on the ENERGY STAR Market and Industry Scoping Report for EVSE published in September 2013 (energystar.gov/scoping), EPA identified that differentiation between models was possible based on power draw. Based on available data, EPA considers that an opportunity exists to encourage the market toward more efficient products. EPA's fuel efficiency label for electric vehicles already accounts for the energy efficiency of the on-board charger inside the vehicle. With this ENERGY STAR Version 1.0 Specification, EPA is addressing the off-board EVSE to differentiate the energy efficiency of standalone EVSE in No Vehicle, Partial On, and Idle Modes.</p>
Definitions	Secondary Functions	A stakeholder suggested that the list in this definition is not complete (i.e., "secondary functions may include.."). In addition, this commenter requested that "Safety functions (e.g., ground fault protection, missing ground detection)" be added to the list as the first item. Finally, they recommended adding the term digitally when describing the function of "Communicating with the vehicle", as the pilot already communicates with the vehicle.	EPA has made the proposed changes to the specification to add more clarity to the definition of Secondary Functions.
Definitions	Modes	A stakeholder noted support for the changes to the modal definitions.	EPA has maintained the modal definitions in the Final Draft. As described in the Post Draft 2 Memo, per stakeholder feedback, EPA changed the term "Off Mode" to "No Vehicle Mode" but maintained the same definition.
Definitions	Off Mode	<p>A stakeholder requested clarification to the definition of Off Mode because:</p> <ul style="list-style-type: none"> <li>the pilot (defined as a secondary function) is active but the description says the EVSE is "only providing tertiary function"</li> <li>"can only be entered or exited through manual intervention" is unclear</li> </ul>	As noted above, EPA changed the term "Off Mode" to "No Vehicle Mode" but maintained the same definition, per stakeholder feedback that "Off Mode" was a confusing term. "No Vehicle Mode" most closely relates to State A in SAE J1772.
Definitions	Operation Mode	A stakeholder suggested that EPA clarify Operation Mode definition to specify that the EVSE contactor is closed and that the vehicle is drawing current.	The definition of Operation Mode indicates that the equipment is providing the primary function (i.e., providing current to a connected load), thus EPA considers that the definition is sufficiently clear.
Definitions	Idle Mode	A stakeholder suggested that EPA clarify the Idle Mode definition to specify that "the contactor is closed and the vehicle is not drawing current" instead of "the EVSE . . . is not actively providing current".	EPA added this clarification to the definition for Idle Mode.
Definitions	Partial On Mode	A stakeholder noted that State C1 is not listed in the table referencing the J1772 states. They also suggested that EPA change the wording in the table to read "State B1 is when the vehicle is connected but the EVSE is not ready to close the contactor. State B2 when the EVSE is ready to close the contactor but the vehicle is not yet ready." They noted that State B1 and State B2 exist in J1772 but State B does not.	EPA has updated the reference to State B in the Test Method and Specification to reflect States B1 and B2, thus harmonizing with the current J1772 Standard definitions where only States B1 and B2 are referenced and not State B as its own state.

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Scope	Level 1 v Level 2	<p>A stakeholder recommended that EPA exclude Level 1 EVSE from the scope of the Specification for the following reasons:</p> <ul style="list-style-type: none"> <li>• Consumers should be encouraged to move towards Level 2 and certifying Level 1 will support the idea that they are recommended to consumers;</li> <li>• Only consumers that want to have a faster charger will shop around for a Level 2 EVSE, thus ENERGY STAR would be helpful to drive consumers to the most efficient solutions;</li> <li>• Level 2 EVSE: <ol style="list-style-type: none"> <li>1. Provides faster charge times, is inherently more energy-efficient, and as a result represents a more flexible load that is more likely to be incorporated into DR systems.</li> <li>2. Are likely installed by professional electricians, which helps to avoid faults</li> <li>3. Are necessary for large battery BEVs</li> <li>4. More efficiently satisfy overhead loads that are present during and after charging.</li> </ol> </li> </ul>	<p>EPA appreciates this stakeholder feedback and recognizes the multiple benefits that Level 2 EVSE offer consumers. At this time, EPA believes that choosing between a Level 1 and a Level 2 EVSE is a consumer choice, and will continue to include Level 1 EVSE to ensure additional energy savings for consumers limited to purchasing Level 1 EVSE. However, EPA plans to emphasize in materials released with the Version 1.0 Specification the benefits for choosing a Level 2 EVSE. EPA will also review the data resulting from Version 1.0 to determine whether to include Level 1 EVSE in future versions of the specification.</p>
Power Factor		<p>A stakeholder recommended that EPA add a minimum power factor requirement for each mode because low power factors have the potential to create added stress on the electric power generation, transmission, and distribution systems. They noted that EPA has established minimum power factor requirements for other products in ENERGY STAR, such as compact fluorescent lamps and LED lighting products. They noted that EPA would be able to set a reasonable baseline that would not be burdensome for manufacturers and not detrimental to utility customers.</p>	<p>EPA again reviewed the EVSE test data results from its testing of products and from data received from manufacturers and found that power factor ranges from 0.41 to 0.64, depending on the model and mode (No Vehicle, Partial On, or Idle). Factoring in the power in those modes, the reactive power therefore ranges between 3 and 32 VAR. Since this reactive power can generate losses in building wiring, EPA considers that it is worth collecting data for stakeholders to better understand the overall impacts of EVSE. Since the collecting of power factor data is not a significant burden given the test setup, EPA proposes to retain the reporting requirement in the test method. However, not enough differentiation exists at this time among products to warrant a requirement (i.e., there are no power-factor-corrected models which would have PF &gt; 0.9). EPA will continue to monitor the market to understand the extent to which a power factor requirement is necessary and feasible.</p>
Definitions	Average Power	<p>A stakeholder noted that they did not believe that measuring the average power over a cycle of 60 Hz is an appropriate way to measure typical average energy usage because functions like demand response, managed charging, and network connectivity do not have constant power draw, instead it will depend on how much the processor is doing and how much communication is happening. This commenter suggested a longer window (e.g., 15 minutes).</p>	<p>EPA believes that the IEC 62301 (Section 5.3.2 Sampling Method procedure), as referenced in the Test Method, should account for the concerns regarding the measurement of average power.</p>
Data Analysis		<p>A stakeholder stated that the data provided was not represented correctly because the accuracy of the equipment used for testing was only to the +/- 1 W and requested that their data not be used for comparison. He also noted that given that the industry is in early stages of development, it may not be appropriate to specify ratings to the nearest 0.1 W in a system that can dissipate hundreds of watts of waste energy when actively charging.</p>	<p>EPA appreciates that this stakeholder provided data to inform the EVSE Version 1.0 specification. As a result of the concerns regarding the accuracy of the equipment used for the testing, EPA has removed these data points from the dataset.</p>

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Partial On/Idle Mode Base Allowance		A stakeholder recommended increasing the base allowance to at least 5 W for both Partial On and Idle Modes given that the industry is in the early stages of development. In addition, they noted that safety standards are expected to increase in the future and their next generation products will operate with a baseline consumption over 3 W with no enhanced functionality.	Over one-third of models in EPA's dataset used to inform the development of this specification currently meet the criteria in the Final Draft Specification. EPA estimates that its dataset represents approximately half of the EVSE market today. With the ENERGY STAR program, EPA seeks to select efficiency levels reflective of the top performing models available on the market, while still giving consumers choice among product manufacturers. EPA's proposed efficiency criteria in this Final Draft highlights the most efficient products from 5 manufacturers.  EPA regularly reviews the criteria and the market to determine if the criteria continues to be appropriate in the future.
Partial On Mode		A stakeholder requested clarification on the phrase "capability to wake the product from Partial On Mode" because the EVSE is already awake if it is in this mode.	This phrase is intended to describe the transition from Partial On to Idle Mode (i.e., the EVSE is waking up from Partial On to enter Idle Mode). For clarity, EPA has modified the definition to read "capability for the product to transition from Partial On Mode".
Idle Mode		A stakeholder recommended that EPA remove Idle Mode requirements because the EVSE is not a primary consumer of energy in this mode. This commenter also noted that the EVSE is a slave to the vehicle when plugged in and it is not possible for an EVSE to power down once charging is complete. Rather, the purpose of the EVSE is to monitor for safety conditions that cannot be turned off in Idle Mode. Finally, they noted that the EVSE spends very little time in the Idle Mode.	EPA understands the nature of the relationship between the vehicle and the EVSE during Idle Mode, such that the time spent in Idle is less than time spent in other modes. Nonetheless, based on test results showing a significant variation between the power used for models that are similar in capacity and the anticipated increase in EVSE proliferation in the market, EPA considers that an opportunity exists to reduce the power consumption in Idle Mode. As such, EPA will continue to recognize those models that can minimize energy use in Idle Mode.
Idle Mode	Relay Power	Two stakeholders recommended that EPA remove requirements for the efficiency of the relay noting that the size and quality of a relay is dictated by electrical safety standards. In addition, durability and reliability is tied to the quality of a relay chosen for an EVSE. They noted that setting a threshold for energy loss for a contactor would only force EVSE manufacturers to undersize a critical functional safety component in the system.  One of these stakeholders noted that the comment period did not provide enough time to assess the appropriate relationship between the size of an EVSE and the power consumption required for a relay. The other stakeholder stated that ENERGY STAR mandates safety requirements for electric water heaters.  In addition, both of these commenters strongly urged EPA to require NRTL certification for any product that will be certified to ENERGY STAR because safety can be sacrificed to achieve lower power consumption, and products are not currently required to meet NRTL certification to be sold in the U.S. In order to maintain safety and the quality of the ENERGY STAR brand, they recommended that a NRTL certification is necessary. One stakeholder noted that this is the only standard (NEC Section 625 EVSE and UL 2594) that is accepted in the US.  Finally, one stakeholder supported the efforts to collect additional information to determine an appropriate relay power allowance that accommodates safety functions, while encouraging energy efficiency.	EPA appreciates this feedback from stakeholders and, as a result, has changed the approach to calculating the Maximum Idle Mode Power Requirement. In the Draft 2 Specification, relay power was provided an allowance $0.25 * \text{Max Current}$ . In the Final Draft Specification, EPA has increased this allowance to $0.4 * \text{Max Current}$ following another review of the dataset and stakeholder feedback on the importance of right-sizing the relay for the size and safety of the EVSE. EPA's proposed change will allow all products with the exception of outliers to meet the requirements for relay power. Doing so will help differentiate models with significantly larger relay powers than those that have the same maximum current. The Relay Power graph demonstrates this.  Due to stakeholder input on the importance of ensuring that products seeking to meet the ENERGY STAR also meet current voluntary safety standards, EPA has added a requirement for the NRTL certification, the national standard for used by EVSE stakeholders to denote product safety. EPA seeks to ensure that products meeting the ENERGY STAR also meet consumer quality expectations.

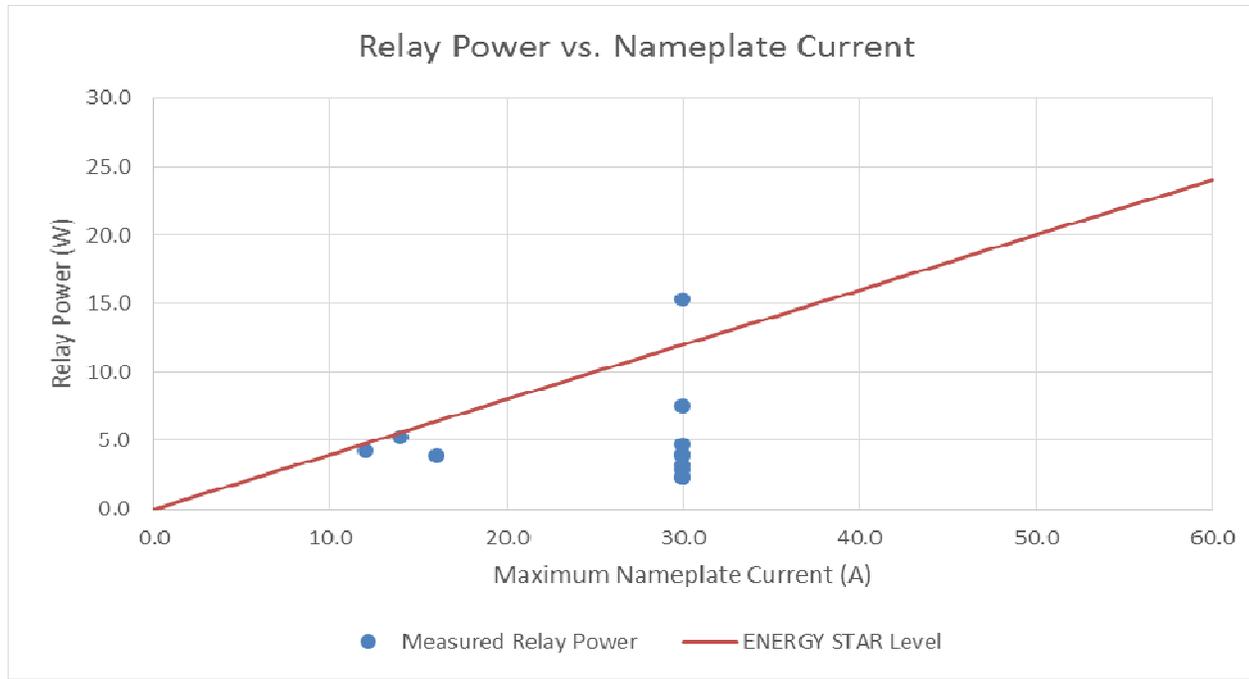
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Network Connected Allowance		<p>A stakeholder recommended that EPA reduce the proposed 1.0 W allowance for Wi-Fi and Ethernet capability, referencing the Small Network Equipment requirements, which are 0.7 W and 0.3 W, respectively. This stakeholder requested that EVSE products be tested with full network connectivity, or activation of all network connection technologies. They also suggested that the settings used to verify "Full Network Connectivity" be retained during Idle Mode and are only currently required for Partial On Mode. Finally, this stakeholder recommended collecting information on the frequency of network data transfer events that could affect energy usage.</p> <p>Another stakeholder noted that the communications module power data that EPA used to base its allowances did not include the processor board that interfaces with the communications module. This processor board provides all the needed functionality for whatever protocols are in use so need to be reflected in the allowance. They suggested adding 2 W to the current proposal for communications. This stakeholder also recommended measuring power over a longer period of time (e.g., 15 minutes) because an EVSE communication profile is generally not smooth, with periodic bursts.</p>	<p>EPA appreciates this stakeholder feedback. The overhead energy used for communication is accounted for in the proposal that EPA put forward in the Draft 2 Specification as EPA believes that this should be on the order of less than 1 W, based on testing. The electronics catalog Digikey showed that the majority of modules for Wi-Fi and LAN used under 1 W for operation and Cellular modules used under 2 W. In order to evaluate its current proposal, EPA welcomes a final submission of data from stakeholders showing that the overhead will be significantly above the proposed criteria. Absent submission of new data, EPA will finalize the criteria for network connectivity as has been proposed in Draft 2 and retained in this Final Draft.</p>
Connected Functionality		<p>A stakeholder supported the changes made to the connected functionality section of the Specification to ensure more end-users will be able to find and purchase EVSE that will be suitable for their applications.</p> <p>A stakeholder noted that it may be premature to note on the ENERGY STAR website if models have "Connected Functionality" because it may result in unclear or contradictory criteria. They recommended that EPA require the ability to receive DR requests and respond.</p> <p>Another stakeholder suggested deferring Connected Functionality because:</p> <ul style="list-style-type: none"> <li>• The description of Demand Response is too narrow and there are many other functions that EV charging can provide to benefit the grid that are more useful than DR (e.g., demand dispatch, bi-directional communication, direct load control, etc.).</li> <li>• Consumer override is a good idea but may not always be available on the EVSE itself, instead it could be through a phone app.</li> </ul>	<p>EPA's goal is to enable current EVSE models on the market to meet the connected functionality criteria, while encouraging the development of enhanced capabilities as DR market opportunities evolve. In the Final Draft proposal, EPA continues to maintain less prescriptive optional criteria for certification of EVSE as connected that focus on the ability for connected EVSE to support Demand Response. However, in order to enhance clarity, EPA has added language that the optional certification is for EVSE capable of supporting DR "either as shipped or in the future (e.g., via software updates or integration with an external service)" An informative note has been added that encourages development of DR capabilities that enable support of both signals-based DR and price response, direct control by the load management authority, and via EVSE management software and/or energy management systems. This note further encourages EVSE brand owners to engage with utilities to ensure EVSE DR capabilities align with utility needs. Finally, recommended content for the DR capabilities summary has been revised to encompass stakeholder recommendations, e.g., supported DR services, ability for the EVSE to be directly accessed, supported open communications, applicable certifications, etc. This approach is intended to recognize EVSE with connected capabilities, encourage development of DR functionality that aligns with utility needs, and enable brand owners to differentiate their product in the capabilities summary.</p>
Certification		<p>A stakeholder noted that the 3rd Party Certification process could create significant financial burden to manufacturers and that may result in an increase in the first cost of EVSE. This commenter requested that EPA study the financial impact to ensure the intended benefits outweigh the costs for the consumers.</p>	<p>To ensure consumer confidence in the ENERGY STAR label and to protect the investment of ENERGY STAR partners, since 2011 EPA has required all ENERGY STAR products to be third-party certified. The Agency encourages a broad market of recognized certification bodies to keep costs and turnaround time competitive, and takes care to avoid unnecessary burden and any duplicative testing for manufacturers. Since the introduction of third-party certification requirements EPA has seen increased manufacturer participation in the ENERGY STAR program.</p>
Test Method	2-minute Transition to Partial On Mode	<p>A stakeholder agreed with the removal of the Auto Power Down testing and the addition of a two minute transition period to testing in order to incentivize a transition to a lower power state.</p>	<p>EPA appreciates this feedback and has maintained the removal of APD in favor of a two-minute transition period in testing.</p>

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Test Method	Display Brightness Testing	A stakeholder recommended that EPA add a requirement that screens be tested at 65% or more of maximum screen luminance, similar to what is done for ENERGY STAR Displays, noting that products may have easily accessible settings to verify this percentage. They noted that the brightness settings of products in the field could be substantially different than the default settings. They also suggested requiring a measurement of maximum and test luminance values during testing of products with screens that include adjustable brightness levels without Automatic Brightness Control (ABC) to help determine whether any significant variations occur across products based on intended use.	EPA appreciates this stakeholder feedback and made the following changes in the Post Draft 2 Memo that are reflected in the Final Draft Specification in regards to display brightness: <ul style="list-style-type: none"> <li>• Clarify that models that cannot display the IEC three-bar pattern have their luminance (screen brightness) tested using the default image that appears as-shipped. In contrast to standalone Displays and Televisions; EPA expects that not all EVSEs will be able to display standard test patterns. This addition to the criteria in the Specification can be seen in Appendix A.</li> <li>• Clarify that models be adjusted to 65% of maximum brightness during the test (which is the brightness that was used when developing the allowance) to within the tolerances of the adjustments available on the EVSE (e.g., if the EVSE provides settings resulting in 50% and 75% of maximum brightness, choose the 75% setting).</li> <li>• Clarify that the power testing be conducted with the default image that appears as-shipped.</li> </ul>
Test Method	Test Setup	A stakeholder requested that: <ul style="list-style-type: none"> <li>• the reference to an "Electronic AC Load" be removed from Figure 1b because this is not used in any of the testing required for ENERGY STAR</li> <li>• the "Test Load" section be removed because it is not needed to verify eligibility for ENERGY STAR but instead replace with a description of the Vehicle Emulator Module (VEM)</li> <li>• EPA remove the switch referenced as "S2" in Figure 3 and instead labeling the switch marked "S1" as "S2", consistent with J1772.</li> </ul> <p>Another stakeholder recommended that a definition for "S1" be added.</p>	In regards to this feedback, EPA has responded as follows: <ul style="list-style-type: none"> <li>• EPA has maintained the reference to an AC Load in Figure 1b because this is meant to demonstrate the boundary conditions for testing. The AC load is intended to be connected to the EVSE output in lieu of a vehicle. However, EPA has clarified that the load need not be electronic (e.g., could be resistive).</li> <li>• The description of the VEM can be found directly below the definition of the test load required for testing.</li> <li>• EPA has updated Figure 3 to reference S2.</li> </ul>
Test Method	Test Conduct	A stakeholder stated that there is no need to mount the EVSE to a thermally non-conductive surface for these tests.	EPA has maintained this requirement because cooler devices will operate more efficiently. If the surface used for one test has the potential to be cooler than for others, the results are not comparable. In addition, EPA does not believe this will be burdensome because inexpensive materials can be considered thermally non-conductive (e.g., plywood).
Test Method	Test Procedures	A stakeholder: <ul style="list-style-type: none"> <li>• noted that the reporting of input voltage and frequency should be nominal amounts and not exact values</li> <li>• requested removal of the Off Mode and Operation mode testing as there is no requirement for Off Mode power consumption in the ENERGY STAR Specification</li> </ul>	EPA has removed the request to record the input voltage and frequency for the UUT preparation, but instead expects the EPA-recognized labs performing the testing to ensure it is in accordance with Table 1. <p>EPA will retain the test procedures for Operation Mode in order to showcase for stakeholders data on energy use in this mode. Doing so will help to determine if there may be a potential to differentiate products based on power consumption for this mode in a future revision to the specification.</p> <p>Off Mode has been changed to the term "No Vehicle Mode" in the Post Draft 2 Memo, and this is reflected in the Final Draft Specification. EPA has proposed criteria set for this mode in a follow-up memo to the Draft 2.</p>

# ENERGY STAR EVSE Final Draft Relay Power



ENERGY STAR EVSE Draft 2 Follow Up Memo Stakeholder Comment Summary and Response

Topic	Stakeholder Comment	EPA Response
APD	<p>A stakeholder disagreed with allowing the same energy use for all three modes. They noted that this would eliminate incentives to power down unneeded functions. They recommend that EPA retain the criteria from the Draft 2 specification that require rapidly transitioning to a low power state if user activity is not occurring. This stakeholder also recommended that EPA research the potential for communications functions to power down when not actively communicating in Partial On and No Vehicle Modes.</p>	<p>To clarify, the Final Draft specification does not have the same requirements for all three modes. For Idle Mode, there is an additional allowance for the relay power. The Partial On and No Vehicle Modes do not have this allowance. The base allowance of 2.6 W reflected an appropriate criteria for all three modes that capture top performing products, based on the dataset. EPA also considers the allowances for network connectivity to be appropriate, based on the energy performance of networking devices, as noted in the electronics catalog Digikey, and on the performance of similar devices in other ENERGY-STAR qualified products.</p>
Connected Functionality	<p>A stakeholder agreed with the proposed approach to connected functionality, noting that it provides important flexibility. They supported the requirements regarding a product being capable of DR but not necessarily supporting DR upon shipment because there will be cases where EVSE will not be able to participate in DR programs. They suggested that EPA continue to not be overly prescriptive in its standard to avoid favoring certain communication pathways over others. Finally, this stakeholder supported the idea of EPA adding broad recommendations (not requirements) for DR capable EVSE to employ certain functionalities.</p> <p>Another stakeholder disagreed with the proposal to certify products as DR-capable if they require upgrades to meet the criteria. They noted that this could confuse stakeholders and it may diminish the pool of DR-capable EVSE since upgrades may be unavailable or consumers may lack the experience or interest to install them. Lastly, they stated that certifying an actual product will result in greater certainty than a possible future capability of the product.</p>	<p>EPA's goal is to enable current EVSE models on the market to meet the connected functionality criteria, while encouraging the development of enhanced capabilities as DR market opportunities evolve. In the Final Draft proposal, EPA continues to maintain less prescriptive optional criteria for certification of EVSE as connected that focus on the ability for connected EVSE to support Demand Response. However, in order to enhance clarity, EPA has added language that the optional certification is for EVSE capable of supporting DR "either as shipped or in the future (e.g., via software updates or integration with an external service)" An informative note has been added that encourages development of DR capabilities that enable support of both signals-based DR and price response, direct control by the load management authority, and via EVSE management software and/or energy management systems. This note further encourages EVSE brand owners to engage with utilities to ensure EVSE DR capabilities align with utility needs. Finally, recommended content for the DR capabilities summary has been revised to encompass stakeholder recommendations, e.g., supported DR services, ability for the EVSE to be directly accessed, supported open communications, applicable certifications, etc. This approach is intended to recognize EVSE with connected capabilities, encourage development of DR functionality that aligns with utility needs, and enable brand owners to differentiate their product in the capabilities summary.</p>
In-use Display	<p>A stakeholder noted that in addition to providing the equation to calculate the in-use display allowance, it would be helpful for stakeholders if EPA showed power allowances for typical parameters (e.g., 25 square inch display screen and a maximum brightness of 100 candelas/m<sup>2</sup>.)</p>	<p>EPA has added an example to help clarify the equation for calculating the in-use display allowance.</p>
Level 1 vs. Level 2	<p>Two stakeholders agreed with the discussion during the webinar regarding eliminating Level 1 EVSE from the scope because:</p> <ol style="list-style-type: none"> <li>1. EVSE's are more analogous to ENERGY STAR appliances that are installed by third parties.</li> <li>2. As more EVs are sold with larger batteries, only Level 2 EVSE will be able to accommodate them.</li> <li>3. Level 2 provides faster charge times and more flexibility.</li> <li>4. Onboard charging systems are optimized for higher voltage levels.</li> </ol>	<p>EPA appreciates this stakeholder feedback and recognizes the multiple benefits that Level 2 EVSE offer consumers. At this time, EPA believes that choosing between a Level 1 and a Level 2 EVSE is a consumer choice, and will continue to include Level 1 EVSE to ensure additional energy savings for consumers limited to purchasing Level 1 EVSE. However, EPA plans to emphasize in materials released with the Version 1.0 Specification the benefits for choosing a Level 2 EVSE. EPA will also review the data resulting from Version 1.0 to determine whether to include Level 1 EVSE in future versions of the Specification.</p>
Multi-port EVSE	<p>A stakeholder suggested that EPA remove inflated allowances for energy consuming features of multi-port EVSE. They noted that as-is, the draft would allow the maximum power requirements to be multiplied by the number of ports. They suggested editing to allot one allowance for displays and network protocols for a multi-output EVSE.</p>	<p>EPA has corrected this and removed the potential for inflated allowances for multi-port EVSE by dividing each allowance by the number of ports.</p>
No Vehicle Mode	<p>A stakeholder agreed with the term "No Vehicle Mode", the definition, and how the requirements are laid out to provide allowances for different communication protocols.</p>	<p>EPA appreciates this stakeholder feedback regarding the definition and criteria for No Vehicle Mode.</p>

ENERGY STAR EVSE Draft 2 Follow Up Memo Stakeholder Comment Summary and Response

<p>Test Method</p>	<p>A stakeholder suggested that EPA harmonize with the ENERGY STAR Display specification's testing requirements and require that the EVSE use the test pattern. They stated that these units should be able to accept the test pattern because they are networked to accept external content. He also mentioned that these EVSE may not have a default screen if content is driven externally.</p>	<p>EPA believes that harmonizing with the ENERGY STAR Display specification's testing requirements will be a testing burden for models not equipped to play a testing pattern. As a result, EPA has maintained the option for allowing testing with the default, as-shipped screen.</p>
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