



Edison Electric
INSTITUTE

Customer Solutions

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Mr. James Kwon
U.S. Environmental Protection Agency
Climate Protection Partnerships Division - ENERGY STAR
1200 Pennsylvania Ave NW
Washington, DC 20460

Re: ENERGY STAR Program - Final Draft Version 1.1 ENERGY STAR Electric Vehicle Supply Equipment (EVSE) Specification

Dear Mr. Kwon,

The Edison Electric Institute (EEI) appreciates the opportunity to submit comments on the Final Draft Version 1.1 ENERGY STAR EVSE Specification that was published on June 11, 2020. EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for about 220 million Americans and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States.

Driven by customer demands, technology developments, and federal and state regulatory obligations, the electric sector is undergoing a transition of its generating fleet that will continue over the next decade and beyond. Concurrent with this transition, EEI member companies are investing significant amounts of capital—over 124 billion dollars in 2019 alone—to make the energy grid smarter, more dynamic, more flexible, and more secure in order to integrate and deliver a balanced mix of resources from both central and distributed energy resources to customers.

Electricity is a domestically produced transportation fuel that will transform our nation's transportation sector. Today, the technology and infrastructure exist to promote transportation applications that move both people and goods using electricity as a fuel. This new generation of electric transportation will help the nation enter an era of clean transportation and enhance U.S. energy and economic security.

The continued electrification of the country's transportation sector is also a priority for EEI's own member companies, as more than 48 investor-owned electric companies are investing more than \$1.5 billion in regulatory approved programs to deploy electric vehicle (EV) charging infrastructure and other activities to support electric transportation.

EPA Should Consider Revising the Standby Mode Power Equation.

EEI appreciates the information that has been provided by EPA in its publications and June 29, 2020 webinar slides. However, the equation for standby mode power utilized by EPA is

a “best fit” curve based on only five data points, leading to a significant data gap between approximately 65 and 350 kilowatts (kW). As a result, the current formula might result in a value too low for the units in the data gap that could exclude a wide variety of designs, primary equipment, and auxiliary equipment used or being designed for use in the EVSE market. Until EPA acquires more data, the Agency should instead utilize a “step function” where units rated between 70 and 350 kW are allowed to have at least 140 Watts of standby mode power, which would allow the Agency to appropriately capture a wider range of equipment and models in the market. Once more models in this data range can be tested, EPA can quickly revise the requirements if needed.

EPA Should Consider Separate Requirements for Indoor Only EVSE Equipment.

EPA looks at setting requirements for EVSE equipment in both indoor and outdoor settings uniformly. However, the Agency should consider that units operate at different loads and temperature conditions depending on whether they operate indoors or outdoors. Units that only operate indoors operate in conditions where the ambient temperatures will never go below 55 degrees Fahrenheit or above 85 degrees Fahrenheit—well above the proposed 20 degrees Fahrenheit and below the 104 degrees Fahrenheit range in EPA’s slide. *See* Equation 6 on EPA Webinar slide 27. EPA should consider allowing a different temperature test weighting for indoor only units given the uniformity of indoor conditions likely to prevail.

EPA Should Consider Revising the Minimum Average Loading-Adjusted Efficiency Requirement for DC-output EVSE with Output Power \leq 65 kW

EPA also proposes a minimum average efficiency “pass rate” of 79 percent based on the 24 models examined by EPA. As EPA notes, the DC EVSE market is still evolving, and typical prices are well over \$10,000 in many cases. It is not clear if a 93 percent requirement would eliminate any manufacturer from the marketplace in localities or states with codes or laws that would require DC EVSE equipment to meet Energy Star specifications, however EPA should analyze whether or not such a requirement could lessen competition and could prevent new entrants. In order to limit the potential for limiting market entrants while still saving energy, EPA should adjust the minimum average loading-adjusted efficiency requirement to 0.92 since, as EPA notes, a 0.92 requirement would not exclude any manufacturers and still obtain significant energy savings—approximately 1,058 kWh per year by EPA’s own estimates—and would still set an “efficiency marker” for new market participants, as the Energy Star program is intended to do. Further, setting a requirement of 0.92 could help lower the incremental costs of Energy Star EVSE products to purchasers, because more manufacturers should be able to meet the requirement, resulting in more choices for consumers at likely lower aggregate cost.

Thank you for your review and consideration of our comments. Please contact Steve Rosenstock (202-508-5465, srosenstock@eei.org) if you have any questions about EEI’s comments.

Respectfully submitted,

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