

April 10, 2023

James Kwon  
EPA Product Manager  
Energy Star for EVSE

**RE: Energy Star EVSE Version 1.2 Draft Specification**

Dear Mr. Kwon,

In accordance with the email issued on March 27, 2023, the comments below are hereby submitted on behalf of ABB E-Mobility, the Alliance for Transportation Electrification, Blink, Electrify America, Flo, FreeWire Technologies, National Electric Manufacturers Association (NEMA), and Siemens (the Joint EV Parties). The Joint EV Parties appreciate the Environmental Protection Agency staff's diligence developing the proposed Energy Star Version 1.2 Draft Specification.

We appreciate the effort and analysis that went into the draft, including appropriate consideration of comments made by stakeholders, such as those referenced on page 8. Overall, the Joint EV Parties support the changes that are included in the draft, with a few exceptions as noted below. We urge the EPA to adopt Version 1.2 as expeditiously as possible to reflect the rapid evolution of the EVSE industry (also noted on lines 197 and 198 on page 8).

**Comments**

Definitions 10) Credit Card Reader

The draft definition of "Credit Card Reader" is limited to accessing payment card "information encoded on the magnetic strip or stripe of a payment card." This definition is in conflict with the technical guidelines adopted for the National Electric Vehicle Infrastructure Program (NEVI) and the Charging and Fueling Infrastructure Program (CFI), which includes contactless credit and debit cards. 23 CFR 680.104, which governs these programs, defines "Contactless payment methods" as "a secure method for consumers to purchase services using a debit card, credit card, smartcard, mobile application, or another payment device by using radio frequency identification (RFID) technology and near-field communication (NFC)." Per 23 CFR 680.106(f), all chargers in the NEVI and CFI programs must "(1) Provide for secure payment methods, accessible to persons with disabilities, which at a minimum shall include a contactless payment method that accepts major debit and credit cards..."

Therefore, to be consistent with the NEVI and CFI guidelines, the definition of "Credit Card Reader" should be, "A scanner, reader, or any other electronic device that is used to access, read, scan, obtain, memorize, or store, temporarily or permanently, information encoded on the magnetic strip or stripe of a payment card or via information transferred via a contactless connection using radio frequency identification (RFID) technology or near-field communication (NFC)."

Definitions 12) Revenue Grade Meter

The Joint EV Parties respectfully suggest that the term "Revenue Grade Meter" be deleted from the specification. First, the term is not actually used in the Energy Star specifications; it is in the draft only as

a definition without subsequent use or application. Second, whether or not an EVSE has a meter (“revenue grade” or otherwise) has no bearing on Energy Star certification the way the draft is written.

Having said that and should EPA insist on including the definition of “Revenue Grade Meter”, the Joint EV Parties respectfully object to the definition of “Revenue Grade Meter” (RGM) as a meter that meets the requirements of ANSI C-12.20-2015. The states follow NIST Handbook 44 (HB 44-2023, Section 3.40) in certifying EVSE used for public charging, and the HB 44 requirements differ significantly from ANSI C-12.20-2015. There are many differences, including metering accuracy, displays, data storage and retrieval, minimum measured quantity, environmental requirements, temperature requirements, testing (the ANSI standard has 38 tests vs. a handful for HB 44), and more.

As noted in the comments to the RGM definition, the goal of the Energy Star revision is “consistency with the state regulatory requirements” (lines 114 and 115 on page 5). The states are requiring that meters included in EVSE comply with HB 44, not ANSI C-12.20.

Therefore, given the extensive differences between the ANSI standard and what states are actually using – HB 44 – the Joint EV Parties respectfully urge that the definition of RGM be restated as follows: “Revenue Grade Meter (RGM): A meter that meets the requirements of NIST Handbook NIST HB 44-2023, Section 3.40.” (Again, our preference is that the definition be deleted entirely as not being relevant to the Energy Star requirements.)

#### Section 3.3.1

The allocations for cellular, Wi-Fi and ethernet should be adders and NOT mutually exclusive allocations. In some use cases, all three communication channels are in use at the same time. Here is a use case where all interfaces need to be operational simultaneously:

- a. Cellular for upstream internet connectivity,
- b. Wi-Fi for downstream internet connectivity to non-cellular EVSEs (i.e., where the EVSE is acting as a router), and
- c. Ethernet for load management via connection to a building management system (BMS) or home energy management system (HEMS).

Each of the added functions provides energy savings. First, the use of an EVSE as a router eliminates the need for a more energy-intensive cellular connection for child units connecting via Wi-Fi to the parent unit having the cellular connection. Second, the ethernet connection supporting load management further supports energy efficiency achieved through the load management functions, for example, lower power consumption during peak times when line losses on the grid are higher.

Therefore, given the benefits of combining these functions, the allocations for cellular, Wi-Fi, and ethernet should be additive.

#### Section 3.10.8

This section requires that EVSE have the necessary hardware to support ISO 15118. The note for this section (lines 422-429 on page 16) states, “At this time, EPA intends compliance with this criterion to be confirmed through documentation reviewed by a certification body, rather than with a test procedure.” The problem with this proposal is that there is no existing certification body for ISO 15118. In the absence

of such an organization, the Joint EV Parties respectfully suggest that self-certification is the appropriate solution.

**Conclusion**

The Joint Parties appreciate the opportunity to provide comments on the Energy Star draft revision. We look forward to collaborating with EPA as the final version is developed.

Sincerely,

Alex Ehrett  
ABB E-Mobility

Phil Jones  
Alliance for Transportation Electrification

Matthew Chen  
Blink

David Appelbaum  
Electrify America

Cory Bullis  
Flo

Renee Samson  
Freewire Technologies

Andrei Moldoveanu  
National Electrical Manufacturers Association

Chris King  
Siemens