



April 5, 2024

Shailen P. Bhatt
Administrator, Federal Highway Administration
Docket No. FHWA-2023-0054
1200 New Jersey Avenue SE
Washington, DC 20590

Response to Docket No. FHWA-2023-0054 Request for Information on the J3400 Connector and Potential Options for Performance-Based Charging Standards

We appreciate the opportunity to respond to the FHWA RFI on the J3400 NACS connector and market implications.

Background

Cool the Earth (CTE) is a 501(c)(3) nonprofit organization committed to promoting sustainable practices and environmental stewardship. Our Ride and Drive Clean (RADC) campaign, launched in 2018, is the largest EV collaboration in the Bay Area, with over 150 partners. We focus on helping low-income drivers switch to electric vehicles and supporting those in multi-family homes who rely heavily on public charging infrastructure.

A primary initiative has been advocating for reliable public charging stations. Carleen Cullen, our founder and executive director, co-authored a groundbreaking UC Berkeley study on charging reliability in the Bay Area. Following the study, CTE became a strong advocate for a 97% uptime requirement in NEVI and CFI funding, a standard now included in Federal Highway Administration regulations.

Carleen is also a member of the ChargeX consortium, focusing on improving the consumer experience in EV charging, ensuring that consumer needs are a priority in EV infrastructure decision-making.

J3400 Connectors

As advocates for drivers in the electric vehicle (EV) landscape, we believe that updated regulations for federally-funded chargers should provide for the inclusion of either a CCS or a J3400 connector. This flexibility is crucial to accommodate the diverse needs of drivers and the evolving EV market. Additionally, we do not believe there should be a specified number of each type of connector at each charging station.

We recognize that there may be short-term challenges for drivers of vehicles with only CCS connectors, as they will need an adapter to use J3400 ports. However, we believe that the existing charging infrastructure with CCS ports will be sufficient for these drivers, and the increasing number of new chargers with J3400 connectors will reduce demand on the existing CCS stations. To support this transition, we urge automakers of EVs with CCS inlets to develop and make available low-cost or no-cost adapters for J3400 connectors, ensuring that these are of high quality and deliver the same charging experience as native J3400 or CCS connectors. We particularly recommend that automakers focus on making adapters available for free to low-income drivers, as many of them will be purchasing vehicles second-hand, and most of these vehicles will have CCS inlets for the time being.

Furthermore, we do not support mandating adapters at the stations due to concerns about potential complexities and maintenance requirements, which may impact uptime and lead to a negative consumer experience.



For AC Level 2 charging, there are low-cost J1772 to J3400 adapters available, and vice versa. Therefore, we believe that the allowance of both CCS and J3400 connectors, without a prescribed percentage of connectors, is appropriate.

Regarding persons with disabilities, the J3400 connector is lighter and easier to use, which we believe will be a benefit to those with disabilities.

Key Performance Indicators

As a member of the ChargeX, one of our key focuses has been on Key Performance Indicators (KPIs) related to the consumer experience while using electric vehicle charging infrastructure. We recommend that KPIs should not be directly included in the regulations, but instead, they should be recommended to states for inclusion in the scoring of contracts. This approach allows for flexibility and adaptability in the implementation of KPIs based on state-specific needs and circumstances.

Additionally, we believe it is imperative that the KPIs do not remain static but continue to evolve over time. They should be prioritized based on their relevance and impact on the overall charging experience and infrastructure reliability. To ensure transparency and accountability, the results of the KPIs should be evaluated by national labs and made available publicly. This dynamic approach to KPIs will help ensure that they remain effective and relevant in promoting a reliable and user-friendly EV charging network.

Other Considerations

Uptime Standards and Transparency: We recommend an update to the minimum standard to reflect meeting or exceeding the 97% uptime requirement. When states are scoring bids, there should be a strong weight given to meeting or exceeding this 97% uptime standard. Companies must demonstrate their ability to achieve this uptime criterion to ensure the reliability of the charging infrastructure. Additionally, there should be public reporting of uptime records, usage, and other reliability metrics to maintain transparency and accountability in the performance of EV charging stations.

Clarity in Charging Information: There is significant confusion among consumers regarding the power they expect to receive at charging stations versus what they actually receive. While we recognize the complexities of rate of charge, we believe that charging station vendors must be required to improve their labeling and the information provided at the station or through their app. This improvement should aim to reduce consumer confusion and adhere to truth in advertising standards, ensuring that the information is clear, accurate, and easily understandable. By incorporating these requirements into the minimum standards, we believe that this will markedly improve the consumer experience, as it will set realistic expectations and enhance transparency in the charging process.

Thank you,

Carleen Cullen
Founder and Executive Director
Cool the Earth, a 501(c)3 nonprofit organization