January 12, 2024

California Air Resources Board
Sustainable Communities and Transportation Division
1001 I St.
Sacramento, CA 95814

Re: Advanced Clean Cars II Amendments Kickoff Workshop

Sustainable Communities and Transportation Division Staff:

The Electric Vehicle Charging Association (EVCA) appreciates the opportunity to submit comments in response to the California Air Resources Board's (CARB) Advanced Clean Cars (ACC) II Amendments Kickoff Workshop held on November 15, 2023.

EVCA is a not-for-profit trade organization of 22 leading EV charging industry member companies and two zero-emission autonomous fleet operators. The association was established in 2015 to comprehensively represent the entire EV charging value chain and provide a collective industry voice for decision-makers in California.

EVCA's membership is committed to supporting a convenient, reliable EV charging experience and recognizes that continued coordination between charging network providers, electric vehicle supply equipment (EVSE) manufacturers, automakers, government agencies, and other stakeholders is necessary to further enhance the EV charging experience. CARB's Kickoff Workshop appropriately touched on vehicle interoperability as an important topic within the scope of the ACC II rulemaking process, and to this end, EVCA respectfully makes the following recommendations to improve interoperability between EVs and EVSE:

1. Work closely with the California Energy Commission (CEC) to develop and implement interoperability standards that will facilitate a smoother and more convenient charging experience.

2. Mandate the certification of adapter safety (UL 2252) for adapters provided in accordance with ACC II regulations to improve the EV charging experience and support interoperability.
3. Require adherence to communication standards that improve vehicle interoperability (ISO 15118-2 and DIN 70121), while steering clear of incorporating session timeout limits within these standards.

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1. **Work closely with the CEC to develop and implement interoperability standards that will facilitate a smoother and more convenient charging experience.**

Working closely with the CEC is crucial for integrating interoperability standards into ACC II. It's important for CARB and CEC to align and prioritize these standards, as harmonizing technical requirements for EVSE and EVs is key for a smoother, more convenient charging experience. EVCA suggests that CARB should keep a close watch on the SAE Industry Trade Consortia (SAE ITC) EVPKI Consortium's efforts in developing and maintaining a Certificate Trust List.[1] This oversight is important to ensure compatibility among root certificate authorities, which are fundamental for enabling Plug & Charge (PnC) functionality. Achieving industry consensus on the issues discussed in this consortium is essential for the widespread and effective implementation of PnC. This is because interoperability will not be successful if only vehicles or charging equipment are independently required to comply with ISO 15118.

Additionally, to the extent feasible, CARB should coordinate with CEC on any conformance testing requirements for interoperability standards. EVCA and other parties have highlighted in CEC docket 22-EVI-06 that CharIN is in the process of creating a conformance test for ISO 15118-2, designed to assess compliance of both EVs and EVSEs with the standard (CharIN CCS Extended). EVCA is hopeful about the progress of CCS Extended as a conformance test, although it has not been finalized. EVCA recommends that CARB should examine CCS Extended once it's completed, and recommends that the industry be given time to thoroughly assess the conformance test and the related readiness of labs to assess conformance. This step is vital to confirm that the test effectively enhances interoperability before it's considered as a requirement. EVCA's membership looks forward to being a resource to CARB as it considers conformance requirements.

2. **Mandate the certification of adapter safety (UL 2252) for adapters provided in accordance with ACC II regulations to improve the EV charging experience and support interoperability.**

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[1] https://www.sae-itc.com/programs/evpki

The current regulations of ACC II specify that electric vehicles (EVs) from model year 2026 and onwards that do not have a native CCS port must include an adapter allowing fast charging with a CCS connector.[2] According to the CEC's September 2023 Statement on the North American Charging Standard (NACS)[3], UL has initiated the establishment of safety standards for adapters through UL 2252, and the National Charging Experience Consortium (ChargeX)[4] is actively assessing adapter safety. EVCA suggests that CARB actively monitor UL's standards development for adapters and proposes strengthening existing adapter regulations in ACC II by requiring UL 2252 certification for all adapters supplied by original equipment manufacturers.

3. **Require adherence to communication standards that improve vehicle interoperability (ISO 15118-2 and DIN 70121), while steering clear of incorporating session timeout limits within these standards.**

EVCA endorses requirements for electric vehicles (EVs) that enhance communication between the vehicle and EVSE through established standards such as ISO 15118-2 and DIN 70121. However, EVCA suggests that CARB avoids mandating compliance with the sections of these standards specifying charging session timeouts for contract authentication and authorization. Currently, these standards impose a 60-second session timeout after a driver plugs in their vehicle, leading to charging session failures if the driver takes longer to initiate the charge. Many customers may need more than a minute to authenticate, whether due to locating the appropriate payment card, using one's mobile phone, or other issues.

Session timeouts are a significant cause of charging session failures, but they are preventable. EVCA advocates for longer session timeout periods, providing drivers with sufficient time to initiate a charge after plugging in their vehicles. This extended timeout is expected to enhance the success rates of first-time plug-ins for customers. In essence, standards should be revised by the appropriate bodies to allow a more practical timeframe for customers to commence a charge.

Conclusion

EVCA appreciates CARB's consideration of charging interoperability and its continued ZEV leadership as the state works to meet its ambitious transportation electrification and climate goals. Widespread adoption of EVs is a critical pillar of California's climate, air quality, and economic goals, and interoperability is a key

[2] https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/2acciifro1962.3.pdf
[3] https://efiling.energy.ca.gov/GetDocument.aspx?tn=252421&DocumentContentId=87420
[4] https://driveelectric.gov/chargex-consortium

element of ensuring that EV charging can play a successful role in EV adoption across the state.

EVCA and its membership looks forward to coordinating with CARB to improve EV charging for all California EV drivers.

Sincerely,

Reed Addis
Governmental Affairs
Electric Vehicle Charging Association