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January 15, 2024

California Air Resources Board
1001 I St.
Sacramento, CA 95814

Re: Comments of ChargePoint on Advanced Clean Cars II Amendments

To Staff of the California Air Resources Board (“ARB”):

Thank you for the opportunity to submit comments on updates to the Advanced Clean Cars (ACCII) regulations. ChargePoint offers this letter in response to the ACC II Amendments Kickoff Workshop hosted by ARB Staff on November 15, 2023.

About ChargePoint

Since 2007, ChargePoint has been committed to making it easy for businesses and drivers to go electric with one of the largest EV charging networks and a comprehensive portfolio of charging solutions. The ChargePoint cloud subscription platform and software-defined charging hardware are designed to include options for every charging scenario from home and multifamily to workplace, parking, hospitality, retail and transport fleets of all types.

Vehicle Interoperability

ARB requested input on conformance testing for communication standards related to vehicle interoperability. ChargePoint believes that vehicle-charger interoperability is essential to deliver excellent driver experience. On the charger side, the California Energy Commission (CEC) has established requirements for hardware-side conformance with ISO 15118-2. We generally support the hardware-only approach while vehicle-side capability with ISO 15118-2 becomes more widespread. We note that an ongoing challenge for original equipment manufacturers has been the lack of conformance testing resources for ISO 15118. Conformance testing is valuable as it provides a single point of truth for assessing conformance between vehicles and chargers. Even if a specification is available, the unavailability of conformance testing may lead to inconsistency in its application, thus failing to deliver on the benefits of interoperability in practice. Third-party certifications and labs must also be ready to assess conformance to deliver on the benefits of interoperability standards.

We urge ARB to align ZEV Technical Requirements with the availability of widespread conformance testing available on both the charger and vehicle side. We note that a process to conformance testing for ISO 15118-2 is underway by CharIN via work on the CCS Extended



certification. We encourage ARB to monitor the readiness of ISO 15118-2 conformance throughout this rulemaking, as well as continued coordination between the CEC and CARB on the matter of interoperability.

13 CCR § 1962.3(c)(3): Convenience Cords

In the Workshop hosted on November 15, 2023, ARB Staff suggested that this ACCII amendment process would not consider any technical requirements decided in previous rulemaking. While we understand Staff's preference not to revisit settled issues, both the EV and charging landscape continue to rapidly evolve based on innovation in the industry, maturation of the market, and changing consumer preferences. In such a developing market, it is appropriate and necessary to evaluate whether previously established technical requirements will continue to serve EV drivers, the state, and the market for the advancement of EVs consistent with the phaseout of all gasoline-powered cars by 2035, per ACCII.

We find that a review of 13 CCR § 1962.3, Electric Vehicle Charging Requirements, is germane to Staff's consideration of Zero Emission Vehicle (ZEV) Assurance Measures and warrants reconsideration in this amendment process. ChargePoint believes that Level 2 charging access is critical to ZEV adoption, and we appreciate ARB's intent to expand it.¹ However, we are concerned that the requirement for EVs to be sold with a "convenience cord"² will have the unintended consequence of discouraging the proliferation of Level 2 charging equipment capable of advanced vehicle-grid integration.

Electrifying the transportation sector has the potential contribute to the cost-effective operation of the electrical grid, provided that charging is effectively managed. Managed charging is crucial to mitigate the potential grid impacts of charging load as EV adoption grows. It is best practice for charging equipment to be networked—to control charge time and power based on local grid characteristics. Networked charging stations may offer a variety of load management functions at varying levels of complexity, including scheduling sessions to occur during off-peak times, pausing charging as demand response during peak events, and dynamically responding to utility price signals by ramping charging up or down. These functions are crucial not only to avoid overbuilding of the electrical grid by managing peak demand, but also to decrease the cost of fueling an EV at home for drivers.

Convenience cords, by contrast, offer little to no functionality to unlock the value of vehicle-grid integration for EV drivers, utility ratepayers without EVs, and the electrical distribution system. While some EVs offer load management functionality onboard, charge management at the home station level is ideal because EVs are mobile while grid impacts are local. In other words, wall-mounted Level 2 EV chargers have a fixed position relative to the grid, making them the most

¹ See ACCII Appendix F-4, Purpose and Rationale, § 1962.3. Electric Vehicle Charging Requirements

² A "convenience cord" is a charging cord that meets the specifications defined in 13 CCR § 1962.3(c)(3). It is a cable capable of both Level 1 and Level 2 charging, with dual amperage capability that is user selectable.



sensible points for calculating the load relief achieved by managed charging at the service, feeder, or network level. As the number of EVs in California grows, networked Level 2 charging equipment at home will serve as a critical tool to quantify the load-reduction impacts of managed charging; we believe this is critical to scaling up California's electrical infrastructure to meet demand at least cost.

Level 2 charging equipment with advanced vehicle-grid integration capabilities might present a higher upfront cost compared to a basic convenience cord, exceeding what is practical for standard inclusion with every ZEV. However, including a non-networked Level 2-capable cable standard with every EV poses the risk of bypassing consumers' evaluation of the costs and benefits associated with networked Level 2 charging equipment, and subsequently, bypassing the opportunity for advanced vehicle-grid integration. We believe focusing 13 CCR § 1962.3(c)(3) on providing access to 110-volt, Level 1 charging as standard equipment will increase charging access, be cost effective for consumers, and avoid the possible unintended impacts of unmanaged Level 2 charging.

ChargePoint thanks ARB Staff for considering these comments. We look forward to continuing to engage in the rulemaking process to advance California's ZEV market consistent with the goals of ACCII.

Sincerely,

A handwritten signature in black ink that reads "Mal Skowron".

Mal Skowron
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