

August 24, 2022

Chair Randolph and Members of the Board
California Air Resources Board
1001 I St.
Sacramento, CA 95814

*Submitted to the Clerk of the Board via online comment log portal
<https://ww2.arb.ca.gov/applications/public-comments> “Notice of Public Hearing to
Consider Proposed Advanced Clean Cars II Regulations (accii2022)”*

**Subject: CHAdemo Association stakeholder comments regarding the Proposed
Advanced Clean Cars II (ACC II) Regulations**

Dear Chair Randolph and Honorable Board Members :

Thank you for California’s continued leadership to accelerate the transition to zero-emission vehicles. The CHAdemo Association (CHAdemo) appreciates the opportunity to provide stakeholder comments regarding the Proposed Advanced Clean Cars II (ACC II) Regulations.

While we support Staff’s proposal to require all battery electric vehicles to be direct current fast charging (DCFC) capable, CHAdemo strongly opposes Staff’s proposed Section 1962.3(c)(4) “Direct Current Charger Inlet and 1962.3(c)(5) Alternative Option for DC Charger to require all 2026 and subsequent model year vehicles use Combined Charging System (CCS) 1 Standard (also known as SAE1772 standard). CARB has traditionally made performance-based regulations that forced technological progress – mandating the CCS-1 standard opposes CARB’s ideal.

As we previously stated in our May 31 letter and June 9 testimony, CCS-1 is inferior technology. Among others, its main problems are:

1. The use of Power Line Communication (PLC) between vehicle and charging station. This low-tech communication protocol is adequate for low power AC charging, but it lacks bandwidth/speed for controlling DCFC, relies upon the highly complex ISO15118 for operation and is susceptible to hacking.
2. CCS-1 is not third party certified and tested for strict conformance with specification. This results in failure to charge due to incompatibility between the vehicle and charging stations.

Both CHAdemo and Tesla avoid these problems – both use the automotive industry standard CANbus communication and CHAdemo requires third party testing and certification of charging stations to nearly eliminate incompatibility issues.

Over the past two years, CARB staff frequently commented this vehicle requirement for CCS-1 is necessary to reduce costs for EV charging equipment by eliminating CHAdeMO and Tesla connectors. While this may seem reasonable, the fact is many in-use EVs will rely on CHAdeMO and Tesla charging stations for many years to come. Further, two of the largest EV charging providers – ChargePoint and EVgo have recently announced they will continue to provide charging stations with CHAdeMO connectors. Finally, these 40,000 used CHAdeMO equipped vehicles will be the low cost EVs most favorable to disadvantaged, environmental justice communities and those community members will rely on the charging stations with CHAdeMO connectors.

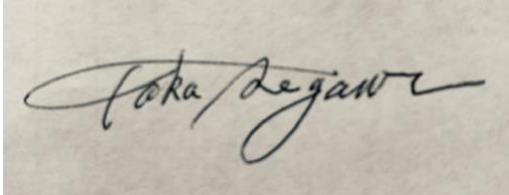
Therefore, based upon the above discussion, we strongly request the Board to direct Staff to remove Section 1962.3(c)(4) “Direct Current Charger Inlet and 1962.3(c)(5) Alternative Option for DC Charger . Allow Automakers to select the best DCFC technology for their customers without regulation.

Failing to remove the DC Charger Inlet requirement, CHAdeMO respectfully asks that the progress review section of the Board resolution be slightly modified to mention cost reduction, advanced technology DCFC, bidirectional charging and consumer protection and the needs to accelerate these goals. Specifically, we request the following edits to the Board resolution:

Be it further resolved that the Board directs the Executive Officer to monitor the implementation of the ACC II Regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB’s comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the Regulations as warranted to achieve reductions anticipated by the Regulations and to achieve other goals including battery recycling, improving the consumer experience, advanced technology DCFC, technology-neutral bidirectional charging, and cost reductions.

Thank you for your consideration of our comments. Please do not hesitate to contact our North American representative, David Patterson, at patterson@chademo.org.

Sincerely yours,



Takafumi Anegawa
President
CHAdemoMO Association