

January 15, 2024

California Air Resources Board
1001 I Street
Sacramento, California 95814

RE: Comments in Response to Advanced Clean Cars II Amendments – November Workshop

Dear California Air Resources Board Staff,

On behalf of the undersigned organizations, we appreciate the opportunity to respond to the California Air Resources Board's (CARB) request for public comments on potential updates to the Advanced Clean Cars (ACC) regulations. We support CARB's efforts to catalyze electric vehicle (EV) adoption in California to meet the state's climate targets.

It is important to ensure that requirements included for automakers in Advanced Clean Cars II (ACC II) are complementary to current market trends and support the rapidly evolving EV landscape. Accordingly, CARB should amend the current ACC II requirements to reflect the recent industry adoption of the North American Charging Standard (NACS) connector. Aligning ACC II with this fundamental shift is the most efficient and cost effective path forward.

Since May 2023, approximately 99% of the EV market has indicated a transition to NACS starting with Model Year (MY) 2025. The following automakers have announced their intent to adopt the NACS standard:

- Ford ¹
- General Motors ³
- BMW ⁵
- Hyundai ⁷
- Nissan ²
- Honda ⁴
- Rivian ⁶
- Lucid ⁸

¹ <https://media.ford.com/content/fordmedia/fna/us/en/news/2023/05/25/ford-ev-customers-to-gain-access-to-12-000-tesla-superchargers-.html>

² <https://usa.nissannews.com/en-US/releases/nissan-to-adopt-north-american-charging-standard-nacs-for-ariya-and-future-ev-models?selectedTabId=releases#>

³ <https://news.gm.com/newsroom.detail.html/Pages/news/us/en/2023/jun/0608-gm.html>

⁴ <https://hondanews.com/en-US/releases/honda-to-adopt-north-american-charging-standard-nacs-for-its-ev-models-in-north-america>

⁵ <https://www.bmwusa.com/newsrelease.do?id=4258&mid=>

⁶ <https://stories.rivian.com/rivian-and-tesla-accelerate-electrification>

⁷ <https://www.prnewswire.com/news-releases/hyundai-electric-vehicles-to-add-north-american-charging-standard-301948002.html>

⁸ <https://lucidmotors.com/stories/lucid-adopt-nacs/>

- Kia⁹
- Mercedes-Benz¹¹
- Jaguar¹³
- Subaru¹⁵
- Mini¹⁷
- Genesis¹⁹
- Toyota¹⁰
- Volvo¹²
- Polestar¹⁴
- Rolls Royce¹⁶
- Fisker¹⁸
- Volkswagen Group (Audi, Porsche, Scout, VW)²⁰

Currently ACC II requires all vehicles manufactured on or after MY 2026 to be equipped with a CCS Direct Current (DC) inlet or to provide a CCS adapter.²¹ Given the wave of announcements above signifying the near complete transition of the U.S. EV industry to the NACS connector, this requirement is obsolete and should be modified. If the current requirement is upheld, 99% of the EV market would be required to supply a CCS adapter, adding additional and unnecessary cost to the vehicle, even for drivers that may not want or need an adapter. It is clear this requirement is contrary to current market trends and could lead to stranded assets.

NACS is currently being standardized by the Society of Automotive Engineers (SAE) as J3400. This process was launched in July 2023 and a Technical Information Report (TIR) was released in December 2023²² with a final standard in June 2024. This standardization process will be complete well before MY 2026.

Given the significant industry shift to NACS J3400, the ACC II rules should be amended to include SAE J3400 as an equally satisfactory charger inlet option for MY 2026 and subsequent vehicles. We propose Title 13, Section 1962.3 of the California Code of Regulations to be modified as follows:

⁹ <https://www.kiamedia.com/us/en/media/pressreleases/21261/kia-to-adopt-north-american-charging-standard-in-the-fourth-quarter-of-2024>

¹⁰ <https://pressroom.toyota.com/toyota-adopts-the-north-american-charging-standard-to-expand-customer-charging-options/>

¹¹ <https://group.mercedes-benz.com/innovation/drive-systems/electric/integration-of-nacs.html>

¹² <https://www.media.volvocars.com/us/en-us/media/pressreleases/316416/electric-volvo-car-drivers-will-get-access-to-12000-tesla-superchargers-across-the-united-states-can>

¹³ <https://media.jaguar.com/en-us/news/2023/09/jaguar-accelerates-towards-its-all-electric-future-tesla-supercharger-deal-north>

¹⁴ <https://media.polestar.com/global/en/media/pressreleases/669136/polestar-will-adopt-north-american-charging-standard-to-enable-access-to-tesla-supercharger-network>

¹⁵ <https://media.subaru.com/pressrelease/2115/117/subaru-adopt-tesla-north-american-charging-standard-north>

¹⁶ <https://www.bmwusanews.com/newsrelease.do?id=4258&mid=>

¹⁷ <https://www.bmwusanews.com/newsrelease.do?id=4258&mid=>

¹⁸ https://assets.ctfassets.net/cghen8gr8e1n/4f7JR0LEe25l5u51K2Kikn/b6696c398e26ddc09d700b0640e75317/Fisker_Tesla_Charging_FINAL.pdf

¹⁹ <https://p-www.genesis.com/ca/en/genesis/the-brand/brand-news/genesis-evs-to-adopt-north-american-charging-standard.html>

²⁰ <https://media.vw.com/en-us/releases/1774>

²¹ Title 13, California Code of Regulations, § 1962.3.

²² <https://www.sae.org/news/2023/12/sae-j3400-tir-released>

(1) Alternating Current (AC) Charger Inlet. Beginning with the 2006 model year, all vehicles identified in subsection (a) must be equipped with a conductive charger inlet and charging system which meets all the specifications applicable to AC Level 1 and Level 2 charging contained in either SAE Surface Vehicle Recommended Practice SAE J1772 REV OCT 2017, SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charger Coupler, or SAE J3400, which is-are both incorporated herein by reference. All such vehicles, manufactured through 2025 model year, must also be equipped with an on-board charger with a minimum output of 3.3 kilowatts or capable of providing sufficient power to enable a complete charge in less than 4 hours. All such vehicles manufactured for 2026 and subsequent model years must also be equipped with an on-board charger with a minimum output of 5.76 kilowatts (calculated as 24 amps at 240 volts AC) or capable of providing sufficient power to enable charging from a state of discharge to a full charge in less than 4 hours.

(4) Direct Current (DC) Charger Inlet. For 2026 and subsequent model years, all battery electric vehicles must be equipped with a DC inlet that meets the specifications applicable to DC charging contained in either SAE J1772 REV OCT 2017, SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charger Coupler, or SAE J3400 which is-are both incorporated herein by reference. 2026 and subsequent model year plug-in hybrid electric vehicles equipped with a DC inlet must meet the specifications applicable to DC charging contained in SAE J1772 REV OCT 2017, SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charger Coupler, or SAE J3400.

Thank you for the opportunity to provide feedback on potential amendments to the ACC II regulations. We appreciate CARB's consideration of this issue and look forward to continued engagement to align these regulations with the evolving needs of the EV charging industry and the state's broader ZEV goals.

Sincerely,

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