STATE OF CALIFORNIA
AIR RESOURCES BOARD

Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure	**)** **)** **)** **)**	**Comment Deadline: May 13, 2024** **Public Hearing Date: May 23, 2024**

COMMENTS OF THE TRUCK AND ENGINE MANUFACTURERS ASSOCIATION

May 13, 2024

Timothy A. French
Truck & Engine Manufacturers Association
333 West Wacker Drive, Suite 810
Chicago, IL 60606

STATE OF CALIFORNIA
AIR RESOURCES BOARD

Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure	**)** **)** **)** **)**	**Comment Deadline: May 13, 2024** **Public Hearing Date: May 23, 2024**

Introduction and Comments

The Truck and Engine Manufacturers Association (EMA) hereby submits its comments regarding the proposal of the California Air Resources Board (CARB) to amend the Advanced Clean Trucks (ACT) Regulation and the Zero-Emission Powertrain (ZEP) Certification Test Procedure. The proposed amendments are consistent with the comprehensive agreement that EMA and CARB entered into in July 2023 regarding the implementation and alignment of a suite of California and federal regulations ultimately aimed at transitioning the medium-duty and heavy-duty (MHD) vehicle sector to zero-emission vehicles. (See CARB website, "CARB and truck and engine manufacturers announce unprecedented partnership to meet clean air goals.") One component of that comprehensive agreement is CARB's commitment to amend the ACT regulations to: (i) revise the manner in which ACT credits and deficits are determined, as well as how California sales volumes are calculated; and (ii) extend the ACT deficit make-up period from one year to three years. The current proposed amendments will implement those agreed-upon revisions. In that regard, we appreciate and support the actions that CARB staff are taking to implement this key element of the transformational agreement between EMA and CARB.

With respect to the first set of proposed amendments – calculating ACT credits and deficits based on when covered vehicles are "produced and delivered for sale" in California – those changes will allow OEMs to track both deficits and credits on a uniform model year basis, and so will allow for a more manageable implementation of the ACT ZEV-sale mandates, which are being phased in on the same model year basis.

The second set of proposed amendments are equally important. Those amendments will extend the ACT deficit make-up period from one year to three years, while imposing a deficit reduction requirement of at least 30% of an OEM's prior year's total deficits, and so will add reasonable ZEV-sales flexibility for manufacturers. Across the industry, OEMs are working diligently and spending billions of dollars to comply with the ACT regulations The proposed regulatory changes will give manufacturers the required flexibility to work with their potential customers to negotiate suitable business cases, to allow for the development and installation of the requisite ZEV-charging infrastructures, and to allow for the necessary supply chains to mature. Although no manufacturer wants to be in a situation where carry-over deficits exist, it needs to be recognized that ZEV technologies, along with the infrastructure and market for zero-emission commercial vehicles, are still a work in progress. The extension of the deficit make-up period, coupled with 30% carry-over limit included in the proposed ACT amendment, will allow

OEMs the needed time to develop an optimized path toward the increasing transition to ZEV trucks that the ACT regulations are targeting.

The extension to a three-year make-up period also will reduce the need for certain OEMs to buy ZEV credits from their competitors under what could amount to undue duress. If OEMs have more time to make up deficits, they can find more options to generate the necessary ZEV credits other than through a direct payment to competitors for those needed credits. As CARB has stated many times, the ACT regulations are designed to improve air quality. They should not serve, directly or indirectly, to enhance the leverage or profitability of certain manufacturers over others. Moreover, banked ACT credits across the industry that are not used or acquired during their credit life promote emissions reductions. In that regard, all manufacturers are designing and building products to meet the ACT requirements, albeit sometimes on different timetables. Forcing some manufacturers to support their direct competition in the initial years of the transition to ZEVs through the compelled purchase of ACT credits could be viewed as creating an unlevel playing field, which CARB has always sought to avoid. Extending the ACT make-up period out to three years is the right step in that direction.

In addition to EMA's general support of CARB's proposal, EMA has a number of technical comments aimed at facilitating the implementation of the ACT ZEV-sales requirements. Those technical comments are listed in the table below.

Section	Description	Current ACT Regulation and Amendments	EMA's Proposed Revisions	EMA's Rational
1963.4(b)	Reporting Amendments	Current Amendment to Reg.: 1963.4(b) Reporting Updates. Reported information may be corrected or updated no later than 180 calendar days following the end of the initial 90-day report period as provided in section 1963.4(a).	1963.4(b)(1) 2021 to 2023 Model Year. Corrections and updates are allowed up to 180 days following the end of the initial 90-day reporting period for Model Year 2025 as provided in section 1963.4(a). 1963.4(b)(2) 2024 Model Year and Beyond. Reported information may be corrected or updated no later than 180 calendar days following the end of the initial 90-day report period as provided in section 1963.4(a).	The amendment language does not account for prior model years. Without specifying allowances for prior model years, manufacturers will not have the ability to make updates and corrections that they initially believed they would have. 25MY was chosen based on the expected date of CARB's final approval for these ACT amendments.
1963.5(2)	CARB Validation of Credits	Authority to Suspend, Revoke, or Modify. If the Executive Officer finds that any ZEV or NZEV credit was obtained based on false information, the credit will be deemed invalid.	Authority to Suspend, Revoke, or Modify. If the Executive Officer finds that any ZEV or NZEV credit was obtained based on false information, the credit ~~will~~ may be deemed invalid.	If a dealer / customer provides false information, manufacturer should not be held accountable unless complicit.
1963.4 (e)	Retention of Records	Records of reported information required in section 1963.4 and documentation showing ~~vehicle delivery to the ultimate purchaser at a location~~ vehicles are produced and delivered for sale in California must be kept by manufacturers and secondary vehicle manufacturers for CARB to audit for a period of eight (8) years from the end of the model year the vehicles were produced. Acceptable documentation for tracking vehicles produced and delivered for sale includes:	Records of reported information required in section 1963.4 and documentation showing ~~vehicle delivery to the ultimate purchaser at a location~~ vehicles are produced and delivered for sale in California must be kept by manufacturers and secondary vehicle manufacturers for CARB to audit for a period of eight (8) years from the end of the model year the vehicles were produced. Acceptable documentation for tracking vehicles produced and delivered for sale includes at least one of the following:	EMA would like it to be clearly stated that only one form of the listed acceptable documents will be required to track vehicles produced and delivered for sale in California. Similarly, only one form of documentation should be required to be retained for the eight year period.
1963.3(c)(1)	AB&T Credit Accounting	(c) Credit Retirement Order. Credit accounts are debited using the following conventions, except as provided in section 1963.3(c)(3): (1) First, credits must be retired by order of model year expiration, starting with the earliest expiring credit.	Add: 1963.3(c)(1): You may bank or trade away ACT credits in a given vehicle group and given model year with an annual net deficit if you have a surplus of eligible banked credits from prior years. For example, if you have 1,000 ZEV banked Class 7-8 tractor group credits from MY2024 and incur a 200 credit deficit in the Class 7-8 tractor group and a 200 credit deficit in the Class 2b-3 group in MY2025, you may apply 400 of the banked credits to cover the MY2025 deficit. Then, any additional credits earned in MY2025 can be banked. This will ensure usage of credits on a first in, first out basis.	The ACT regulation does not clearly specify that banked credits from previous model years can be used / retired to meet annual compliance before credits earned in that model year are used / retired. EMA believes its recommended revision is consistent with CARB's requirements to retire credits by order of model year expiration, starting with the earliest expiring credit.

The proposed amendments also include other revisions to the ZEP Certification procedures and to certain Onboard Diagnostic (OBD) requirements. EMA has a limited number of comments on those aspects of the pending proposal.

The principal issue relates to the communication protocols that are allowed in connection with the certification of ZEPs. CARB should confirm in the Final Statement of Reasons (FSOR) for this rulemaking, as CARB staff previously have confirmed to EMA by email, that J1979-2 can be used for the ZEP test procedures, since it is already included in the latest version of CCR 1971.1. CARB should further confirm in the FSOR that OEMs can request authorization to use J1979-3 through the alternate communications protocols option contained in Section 3.1 of the ZEP test procedures.

In addition, CARB should revise the relevant regulatory provisions to reflect this additional flexibility for communication protocols, as follows:

> 3. Required Diagnostic Communications Tools Compatibility.
> 3.1. A manufacturer must have installed a connector meeting the requirements in subsection (h)(2) of title 13, CCR, section 1971.1, On-Board Diagnostic System Requirements--2010 and Subsequent Model-Year Heavy-Duty Engines, with a vehicle ~~controller area network~~ communications protocol that is capable of connection and communication with scan tools that meet the requirements in subsection (h)(3) of title 13, CCR, section 1971.1, or a connector meeting the requirements in subsection (c)(2) of title 13, CCR, section 1962.5 that are appliable to zero emission vehicles with a vehicle network communication protocol that is capable of connection and communication with scan tools that meet the requirements in subsection (c)(3) of title 13, CCR, section 1962.5 that are appliable to zero emission vehicles or, have a device permanently installed on the vehicle capable of displaying the information required in section 3.2 without the need for additional diagnostic tools. Subject to the advanced approval of the Executive Officer during the certification process, alternative communications hardware and/or protocols, other than those specified above in this subsection C.3.1, may be used if the manufacturer successfully demonstrates that such hardware and/or protocols do not create undue burden or costs for owners and third-party repair establishments requesting access to powertrain diagnostic information (e.g., the hardware and/or protocols are not proprietary and do not need to be purchased through the manufacturer). Any additional software needed to interface with alternative communications hardware shall be made available to the Executive Officer upon request, free of charge.

Finally, and as also recognized under the comprehensive agreement between CARB and EMA, implementation of the ACT regulations will need to be monitored closely so CARB and EMA can – as set forth in their comprehensive agreement – "work together cooperatively to resolve issues that may warrant regulatory amendments to CARB's regulations," and to "actively promote the infrastructure development needed to support the successful implementation of the ACT regulations."

In that regard, and as EMA raised with CARB staff during the workshop held on November 28, 2023, we urge CARB to reconsider whether medium-duty and heavy-duty vehicles powered by hydrogen-fueled internal-combustion engines (H2 ICEs) can be treated as ZEVs under the ACT regulations, at least for some number of interim years, perhaps out to 2035, or perhaps on a slightly discounted basis with respect to the generation of credits. H2 ICE vehicles have zero GHG emissions and near-zero levels of other criteria pollutants. They will be available soon, presumably at more competitive costs, and can operate on hydrogen streams that are less than 99.9% purity. Thus, it is likely that H2 ICE vehicles and the corresponding hydrogen-refueling infrastructure could be more widely and efficiently deployed over the interim years, which could advance the overall progress toward transitioning the MHD fleet toward ZEV technologies. In sum, and again as we have raised with CARB before, we believe that H2 ICE technologies can serve as a viable bridge-technology pathway to a more fulsome transition to MHD BEVs and FCEVs in the future. Significantly, it should be noted that both EPA and the EU have included H2 ICE vehicles in the allowed portfolio of ZEVs. We again urge CARB to do the same.

EMA appreciates the opportunity to submit these comments, and we look forward to working collaboratively with CARB staff over the coming months to implement the comprehensive agreement that CARB and EMA have entered into to ensure that our shared clean air goals are met in California and across the nation.

Respectfully Submitted,

TRUCK AND ENGINE
MANUFACTURERS ASSOCIATION