



December 9, 2019

Honorable Chairman Mary D. Nichols and
Honorable Board Members
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812

Re: Item 19-12-04: Public Hearing to Consider the Proposed Advanced Clean Trucks Regulation and Draft Environmental Analysis Prepared for the Regulation

Dear Chair Nichols and Honorable Board Members:

The California Electric Transportation Coalition (CalETC) appreciates the opportunity to provide our feedback on the Advanced Clean Trucks (ACT) Regulatory Proposal.

CalETC supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, ensure clean air, and combat climate change. CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation including plug-in electric vehicles of all weight classes, transit buses, port electrification, off-road electric vehicles and equipment, and rail. Our board of directors includes Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, and the Southern California Public Power Authority. Our membership also includes major automakers, manufacturers of zero-emission trucks and buses, charging station providers, and other industry leaders supporting transportation electrification.

CalETC has a long history of support for the transition to electrified medium- and heavy-duty vehicles. This transition will be very challenging and will require substantial action beyond adoption of the ambitious ACT sales targets proposed by CARB staff. To create a robust and successful market for zero-emission trucks the state will need to expeditiously:

- Adopt fleet mandates that mirror the sales targets in the proposed ACT regulations;
- Make substantial and reliable investments in zero-emission trucks and the infrastructure essential to fuel these trucks; and
- Invest in workforce training that is specifically targeted to benefit economically challenged communities.

These complementary policies are essential to creating the market conditions necessary for meeting the mandate's ambitious sales targets.

CalETC supports the staff proposal in the ACT regulation exempting complete pickup trucks in the Class 2b-3 group until 2027. We appreciate the staff's thoughtful approach to this challenging segment of the market.

CalETC supports the goals of the proposed ACT Regulation, and we respectfully provide the following more detailed feedback for your consideration:

I. CalETC recommends the CARB Board adopt fleet mandates that mirror the ACT OEM Regulations.

Fleet mandates that mirror the proposed ACT Original Engine Manufacturer (OEM) regulations are essential to ensuring the success of the ACT's OEM regulations. CalETC understands that CARB intends to develop fleet mandates. However, we are concerned that the fleets will need sufficient time for the transition to electric trucks and we anticipate they will likely need as much time as the OEMs are given. Thus, there is a risk of the fleet mandate timeframes lagging the OEM timeframes, which will substantially undermine the successful rollout of the trucks and the ACT itself. CalETC also believes the fleets will require support and lead-time to understand the infrastructure needs of their individual fleets.

CalETC supports the staff proposal in the ACT regulation exempting complete pickup trucks in the Class 2b-3 group until 2027. This is imperative as the market for these complete pickup trucks is currently not ready to meet purchaser needs. These trucks have relatively unpredictable routes, variable loads, and decentralized fueling, making them less well-suited to near-term electrification. It also does not appear there are large fleets of these types of trucks where fleet mandates would be appropriate. We believe that the staff's proposal to provide more time for the market for Class 2b-3 pickup trucks to comply with OEM ACT regulations is justified, additional time is also needed for the fleet mandates that mirror the OEM requirements for this Class and type of truck.

In recognition of the need to have a more comprehensive understanding of all the implications of transitioning the medium- and heavy-duty market to ZEV and the lack of data about fleets in this market segment, CARB staff plans to obtain fleet information from surveys. This fleet information will not be required until the ACT Regulation is adopted and will not be submitted to CARB until a year or more after that. Any proposed fleet mandates would need to be informed by the surveys and integrated with the ACT Regulation. CalETC supports the efforts to gather this survey information and use it to better assess the market for medium- and heavy-duty ZEVs as the CARB staff track the ACT regulations' implementation and considers other medium- and heavy-duty ZEV policies. However, the timing of the data collection and the need for fleet mandates that mirror the OEM proposed regulations is not aligned.

II. Adequate and reliable funding through 2030 is critical to transition the state's medium- and heavy-duty fleets to zero-emission technologies.

CalETC has long advocated for reliable and adequate sources of incentive funding for low-carbon transportation, and especially zero-emission vehicles across all market segments. The Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), infrastructure investments, Low Carbon Fuel Standard (LCFS) credits, and electricity rates help to bring the total cost of ownership for medium- and heavy-duty ZEVs closer to parity with their diesel counterparts. Substantial investments in workforce training will also be essential as this transition to zero-emission vehicles has the potential to create thousands of jobs that could benefit Californians living in economically challenged communities and/or households.

Adequate and reliable vehicle incentive funding, like HVIP, is critically important to achieve the widespread transition to ZEVs and attract private investments to the ZEV market. Predictable and adequate funding for medium- and heavy-duty ZEVs through 2030 would provide market-demand certainty for fleets, manufacturers, and suppliers.

Pursuant to SB 350 (De León) [Chapter 547, Statutes of 2015], investor-owned utilities have filed and received approval for multiple applications before the California Public Utilities Commission to pay for infrastructure to support medium- and heavy-duty electric vehicles. Some of these programs include covering the cost of the charging stations. Some municipal utilities have programs to help pay for the cost of charging infrastructure. In addition to charging-infrastructure funding, utilities have or are proposing electricity rates that would benefit commercial fleets and operators of electric medium- and heavy-duty vehicles. We note that these infrastructure and rate options may not be available to every fleet or operator, the infrastructure programs are not unlimited in size and duration, and there are constraints on eligibility. More infrastructure investment is critical to the successful implementation of the proposed ACT regulations.

The LCFS is a valuable market-based mechanism to help fleets transition to ZEVs. The LCFS has been successful in reducing the carbon intensity of California's transportation fuel and, as a result of the very-low carbon intensity of electricity fuel, serves as an incentive to support ZEV adoption for fleets transitioning to zero-emission trucks and buses. However, for smaller fleets, obtaining revenue from selling LCFS credits can be challenging because it adds complexity and cost to the fleet's operation, particularly if the fleet is operating a small number of electric vehicles. The California utilities are committed to working with these smaller fleets to ensure the LCFS benefits accrue to all ZEVs.

California has a long history of supporting workforce development and this administration is clearly prioritizing the well-being of all Californians with "California for All". The transition to zero-emission vehicles provides a tremendous opportunity to bring good jobs to people and communities

suffering economically. Investments in workforce development that supports the transition to zero-emission transportation will not only help ensure the success of the ACT regulations, it will help the state meet its goal of a California for All.

CalETC urges CARB to appropriately recognize the importance of incentive programs for vehicles, infrastructure, fuels, and workforce training as a complement to any regulation. The ACT regulations should include flexibilities to allow fleet purchasers to access incentive funding even as they are mandated to purchase zero-emission trucks -- at least for the time needed to ensure a smooth transition to the new zero-emission technologies. Additionally, the ACT Regulation should not include any penalties for vehicles purchased with the assistance of incentives.

III. The ACT Regulation sets ambitious sales targets that will present a need to monitor the market across all segments and optimize conditions for the required infrastructure and workforce upgrades.

The ACT Regulation sets ambitious sales percentages for each vehicle class. CalETC and its members are committed to meeting this challenge. As we proceed, we encourage CARB staff to closely monitor the market and technology development across all classes. Class 4-6 trucks are ideal for electrification in the near term; many use cases for these vehicles can electrify and the refueling needs of many Class 4-6 trucks can be accommodated with electricity charging infrastructure. Currently, there are no Class 2b-3 and Class 7-8 ZEVs certified for sale. The regulation contemplates these vehicle types reaching 9% by 2027. This exceeds the market acceleration we have seen for light-duty ZEVs, which took ten years to reach a 10% market share since becoming commercially available in 2009. The trading provisions across weight classes allowed in the ACT regulations will help provide needed flexibility and can help stimulate the market for electrification for Class 4-6 trucks while also supporting Class 2b-3 and Class 7-8 trucks in the future. Given the ACT regulations' ambitious targets and the developing understanding of electric medium- and heavy-duty trucks, we recommend the CARB Board support monitoring and review of the market status over the coming years to ensure these and other regulations contemplated over the next 5-10 years serve to spur the market and support California's economic and environmental leadership.

CalETC also recognizes that workforce development needs and construction timelines for charging infrastructure must be examined in consideration of the ACT regulation's ambitious sales percentages. Unlike light-duty vehicles, medium- and heavy-duty ZEV fleets will need charging infrastructure in place at the same time, or even before, the vehicles are deployed. The cost, workforce needs, and timeline to provide charging infrastructure for medium- and heavy-duty ZEVs will vary depending upon the location of the charging depots and the power level of chargers being installed. CalETC and the utilities are working with CARB staff to develop a modeling tool that can inform both the costs and workforce needs associated with infrastructure supporting medium-

and heavy-duty ZEVs. CalETC recommends that CARB continue and expand upon the work with the Public Utilities Commission, California Energy Commission, and utilities on holistic long-range planning for infrastructure deployment and the workforce needed to support this deployment. CalETC and the utilities stand ready to support these efforts.

CalETC thanks CARB for their commitment to involve stakeholders throughout the development and adoption of the ACT Regulation. Thank you for your consideration of our comments. Please do not hesitate to contact me if you have any questions at eileen@caletc.com or (916) 551-1943.

Sincerely,



Eileen Wenger Tutt, Executive Director
California Electric Transportation Coalition

cc:

Richard Corey, Executive Officer, CARB
Steve Cliff, Deputy Executive Officer, CARB
Jack Kitowski, Chief, Mobile Source Control Division
Tony Brasil, Branch Chief, Heavy Duty Diesel Implementation Branch
Craig Duehring, Manager, In-Use Control Measures Section
Paul Arneja, Air Resources Engineer, Transportation and Clean Technology Branch