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October 29, 2021

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Re: California Municipal Utilities Association's Comments on the October 6, 2021, Workgroup Meeting on the Proposed Advanced Clean Fleets Rule

Introduction

The California Municipal Utilities Association (CMUA) appreciates the opportunity to submit these comments on California Air Resources Board's (CARB) Advanced Clean Fleets (ACF) Proposed Draft Regulation (Proposed Rule) and stakeholder discussions at the October 6, 2021, Public Fleet Workgroup meeting.

CMUA is a statewide organization of local public agencies in California that provide electricity and water service to California consumers. CMUA membership includes publicly-owned electric utilities (POUs) that operate electric distribution and transmission systems that serve approximately 25 percent of the electric load in California, and public water agencies that serve approximately 75 percent of California's water customers. California's POUs and public water and wastewater agencies are committed to, and have a strong track record of, providing safe, reliable, affordable, and sustainable electric and water service.

California's POUs and public water and wastewater agencies operate highly specialized medium- and heavy-duty (MHD) fleet equipment to build and maintain the infrastructure needed to support California's clean water and clean energy goals, including the infrastructure needed to fulfill California's clean transportation goals. In addition to building the infrastructure needed for electrification, many CMUA members have developed incentives to promote electric vehicle (EV) uptake, including specific rate structures to promote EV charging as well as utility-specific programs that provide incentives for the purchase of EVs or EV charging equipment (EVSE).

CMUA supports California's goal to transition to clean transportation resources, including the increased use of near-zero-emission vehicles (NZEV) and zero-emission vehicles (ZEVs), where feasible. As operators of critical public service infrastructure, clean fuel providers, clean transportation program administrators, and MHD fleet operators, CMUA members provide a unique and important perspective on what is needed to develop a successful ACF regulation. CMUA has previously commented on

the development of the Proposed Rule.¹ In addition to those comments, CMUA offers the following recommendations on the Proposed Rule:

1. *Compliant ZEV Vehicles Must be Able to Replace Internal Combustion Engine (ICE) Powered Vehicles on a 1:1 Basis*
2. *CARB Should Establish a Public Process to Confirm That Compliant Vehicles Are Available in Sufficient Quantity Before Imposing a Purchase Requirement*
3. *CARB Should Re-Evaluate Its Proposed Emergency Response Exemption Via a Public Workgroup Process*
4. *The Proposed Rule Should Recognize Public Agency Purchasing and Budget Requirements*

1. Compliant ZEV Vehicles Must be Able to Replace ICE Fleet Vehicles on a 1:1 Basis

In response to the online Question and Answer (Q&A) for the September 9, 2021, workshop, CARB staff noted that matching vehicle replacement on a 1:1 basis may not be possible.² Fundamental to technological development is that new technology must be capable of performing more, not less, work than incumbent technology. CARB should not develop a regulation that will require fleet owners to purchase more than one vehicle to perform work of one current vehicle. Absent this clear requirement, fleet owners will face even higher up-front capital cost as they are required to purchase more than one vehicle to perform the work of one incumbent vehicle. As CARB's Draft ACF Cost Discussion Document shows, up-front costs of ZEV MHD fleet vehicles will be higher than their ICE counterparts.³ While the higher up-front cost of a single compliant ZEV vehicle will already place a burden on many constrained public agency budgets, requiring a public agency to purchase more than one higher cost vehicle to replace a current fleet vehicle will exacerbate public agency budget challenges. Further, the Cost Discussion Document appears to be based on the costs associated with replacing a single existing fleet vehicle with a single ZEV, which means that the additional capital costs associated with purchasing and maintaining more than one new ZEV to replace an existing fleet vehicle is not included at all. Additionally, California policy-makers are actively looking toward approaches to reduce the number of vehicles on the roads. Abandoning a 1:1 compliant vehicle requirement will work contrary to such a goal. Further, requiring fleets to expand the number of MHD vehicles will require increased maintenance, labor, and operating costs as more staff will be required to operate and maintain the extra vehicles. This will prove to be particularly problematic for many CMUA members who already face a shortage of eligible line workers due to expanded demand for emergency response and infrastructure building and maintenance.

¹ Comments submitted on November 10, 2020, submitted jointly as part of the Specialty Vehicle Coalition; April 9, 2021; October 5, 2021. See <https://www.arb.ca.gov/lispub/comm2/bccommlog.php?listname=acf-comments-ws>.

² Q&A for the September 9, 2021, workshop, row 302.

³ Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document, September 9, 2021. See https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf

For these reasons, CARB should return to the 1:1 concept as an operational premise of the Proposed Rule. In the event that CARB rejects the 1:1 replacement component, staff must update the cost assumption document to reflect the higher costs of purchasing, maintaining, and operating multiple vehicles for each incumbent ICE fleet vehicle. Additionally, in order to provide an accurate cost of abandoning a 1:1 compliance premise, CARB should reflect the increase in total social cost of manufacture as well as the increased cost burden of putting more MHD vehicles on California's roads.

2. CARB Should Establish a Public Process to Confirm That Compliant Vehicles Are Available in Sufficient Quantity Before Imposing a Purchase Requirement

CMUA's members have demonstrated their commitment to growing and enabling California's clean transportation future. The Proposed Rule can play a significant part in moving the state toward that future. But there is considerable uncertainty and risk regarding the availability and functionality of ZEVs needed to satisfy the purchase mandate proposed in the Proposed Rule. In order to address this uncertainty and strengthen the success of the ACF objectives, CMUA recommend that a MHD ZEV Technical and Market Advisory Panel be convened to evaluate the functionality and availability of vehicles *prior to* the effective date of a MHD ZEV purchase mandate.

The development pathway for new technology is fraught with uncertainty for both new technology development and production. In spite of best intentions, obstacles to successful and timely deployment can be unpredictable and unavoidable. For example, on October 7, 2021, Elon Musk announced that Tesla would need to further delay the anticipated production date for the Tesla electric Class 8 tractor to 2023.⁴ This is not the first time Tesla has announced a delay in the anticipated production date for its electric Class 8 truck. The original planned production date of 2019 was first delayed to 2020, then 2021, and now 2023. Tesla cited chip shortages and the inability to obtain the needed battery cells as the fundamental reasons for the additional delay. Similarly, on October 8, 2021, General Motors announced an immediate cutoff for 2022 model year fleet purchases, blaming supply chain problems and microchip shortages.

In order for the Proposed Rule to be successful, it is critical that California ensure that compliant MHD fleet vehicles that fulfill the duty requirements of California's MHD fleet operators are available for purchase *before a purchase mandate is imposed*. It would be needlessly costly and irresponsible for the state to require fleet owners to purchase compliant ZEV vehicles before being assured that there are vehicles that can fulfill the duty needs of California's diverse MHD fleets, including the fleets of the state's POU's and public water and wastewater agencies. The state should also ensure that

⁴ Cannon, Jason, *Tesla's Musk 'hopeful' Semi production starts in 2023*, Commercial Carrier Journal, October 10, 2021. https://www.ccdigital.com/alternative-power/article/15279630/elon-musk-optimistic-about-tesla-semi-production-in-2023?utm_term=VersionB&utm_medium=email&utm_content=10-12-2021&utm_campaign=CM_NL_CCJ+Daily&utm_source=CM_NL_CCJ+Daily&ust_id=d5a5ff4954b8418523391848af8776f7f56880a3&oly_enc_id=4335F3745901H7I

there are sufficient quantities of said vehicles available to meet the prescribed purchases

Technical Advisory Panel

This is not the first time that the state has faced the challenge of implementing a purchase mandate in the face of uncertain technology availability. CARB first developed a ZEV mandate as part of its Low Emissions Vehicle regulation in 1990.⁵ To better inform CARB's ZEV regulation, CARB established an independent Battery Technical Advisory Panel to provide "an independent assessment of the availability and performance of batteries for electric vehicles".⁶ The information provided in that assessment prompted CARB to delay implementation of the ZEV supplier mandate.⁷ Similarly, when considering a proposed regulation on Fuel Cell Electric Vehicles, "the Fuel Cell Technical Advisory Panel assisted the ARB in developing an independent assessment of emerging fuel cell technology".⁸

Clearly CARB has seen the considerable benefit of utilizing independent technical advisory panels to better inform ZEV related regulations. To reduce risk and ease the transition toward ZEV MHD vehicles, CARB should once again authorize an independent Technical and Market Advisory Panel (TMAP) to evaluate and report on key elements of the Proposed Rule.

Components of the Panel Evaluation and Report

The MHD ZEV TMAP should evaluate and report on the fundamental performance capabilities, operations and maintenance training, and actual market availability of compliant MHD vehicles. The TMAP should evaluate each of the following:

1. Performance Capabilities of Basic MHD Chassis
 - Range
 - Potential Off-road capabilities
 - Weather related performance
 - Ability to accommodate after-market modifications, including, but not limited to:
 - Excavation trucks
 - Digger Derricks
 - Water filtration and water tankers
 - Dump trucks
 - Stake trucks with cranes
 - Bucket trucks
 - Pumping trucks
 - Material and stake trucks

⁵ <https://ww2.arb.ca.gov/our-work/programs/low-emission-vehicle-program/about>

⁶ Performance and Availability of Batteries for Electric Vehicles: A Report of the Battery Technical Advisory Panel, December 11, 1995. <https://ww2.arb.ca.gov/sites/default/files/classic/research/apr/reports/1290.pdf>

⁷ Summary of Board Meeting, March 28, 29, 1996. <https://ww3.arb.ca.gov/board/ms/ms032896.htm>

⁸ <https://ww2.arb.ca.gov/news/market-based-approach-zero-emission-vehicle-program-working-californians>

2. Vehicle Functionality
 - Vehicle testing to ensure needed and advertised performance elements
 - Pilot studies to evaluate and confirm the actual functionality in-use for specialized fleet needs on a 1:1 basis
3. Status of Operations and Maintenance Training and Availability of Needed Technicians Qualified to Maintain MHD ZEV Fleets
 - Training and experience of staff needed to maintain compliant fleet vehicles
 - Availability of existing qualified maintenance staff
 - Availability of specialized training facilities for needed staff
 - Cost of specialized training and necessary certifications
 - Availability and cost metrics for manufacturer support and warranties
4. Supply Available for Sale and Delivery to California Fleets in the Needed Volume
 - Total number of actual compliant vehicles available for sale and delivery at specified dates
 - Scale of availability to anticipated need

Composition of MHD ZEV Technical and Market Advisory Panel

In order to provide CARB an independent evaluation of the performance characteristics and availability of compliant vehicles, members of the MHD ZEV TMAP should have demonstrated expertise in the key issues related to the design, manufacture, performance requirements, and market for ACF compliant MHD vehicles, including:

1. MHD ZEV vehicle design and engineering
2. Performance requirements for California fleet operators, including expertise in performance requirements for specialized-use or industry-specific vehicles
3. MHD vehicle market analysis

Regulatory Role of MHD ZEV Technical and Market Advisory Panel

CMUA encourages CARB to develop an independent MHD ZEV TMAP as part of the Proposed Rule and require the panel to provide a report annually addressing the requirements listed above, beginning in 2023. The Proposed Rule should include a metric for determining the number of MHD vehicles required by fleet operators, as well as the basis for establishing the minimum performance, availability, and warranty requirements. Further, the Proposed Rule should include a trigger component that would initiate a MHD purchase requirement only after the Board receives the report of the TMAP confirming that all performance, availability, and warranty requirements have been met. Once the needed performance, maintenance, and availability have been confirmed, the Proposed Rule would then trigger the 50% purchase requirement for those vehicles. Each year the TMAP will submit a report evaluating conditions of compliant vehicle performance and availability. Three years after the initial report

confirming needed performance and supply conditions, if the TMAP confirms sufficient supply, Proposed Rule would trigger the 100% purchase requirement.

By establishing an independent MHD ZEV Technical and Market Advisory Panel, CARB can reduce the risk of regulatory failure should there be unanticipated delays or shortages of market supply for appropriately equipped NZEV or ZEV vehicles. Establishing a purchase requirement that is contingent on qualifying product availability sends a clear message to manufacturers that once they produce compliant vehicles that meet the required capabilities, buyers will be there to purchase their products. Further, establishing minimum thresholds for training and labor availability will send strong signal to the workforce. However, should the report demonstrate delays in product availability or adequate workforce expertise to maintain the vehicles, the report would serve as a means to adjust a purchase obligation that would otherwise fail due to a lack of compliant vehicles available for purchase or insufficient labor to safely maintain those vehicles.

3. CARB Should Re-Evaluate Its Proposed Emergency Response Exemption Via a Public Workgroup Process

CMUA has previously commented on the need for CARB to appropriately recognize the emergency response needs of California's POUs and public water and wastewater agencies, particularly smaller public agencies. In written comments, as well as oral comments during both the Public Fleets and High Priority working groups, numerous stakeholder groups expressed similar concerns. Given the importance of a viable emergency response exemption and the number of stakeholders that have highlighted this issue, CMUA encourages CARB to develop an Emergency Response Workgroup to develop a workable emergency response exemption.

4. The Proposed Rule Should Recognize Public Agency Purchasing and Budget Requirements

CMUA reaffirms its comments submitted on October 5, 2021, in which we raised concerns about the ability of its members to readily comply with the timeline for the proposed purchase mandate given the budgeting requirements facing public agencies. Many local public agencies face budgetary restrictions and timelines over which they have no control. The Proposed Rule does not currently allow a cost limit for a qualifying ZEV or NZEV purchases. CMUA agrees that it is reasonable to anticipate that once appropriate ZEV technology is developed to serve the needs of electric and water utilities, both initial procurement and long-term maintenance costs can be expected to fall over time. However, CARB has already found that initial costs will be significantly higher for ZEVs than other technologies. This creates a challenge for public agencies whose long-term financing and budgeting requirements may not readily be changed. For many public agencies, it is not simply a matter of clearing a high-cost purchase with shareholders or a board of directors. Many public agencies face budget processes established in local ordinances that require a separate governing body or regulatory

action to modify. In such circumstances, budget expansion requires multiple years to analyze cost increases and bring them before taxpayers in a public process. Until complete and accurate information about NZEV and ZEV costs is available, many POU's and public water and wastewater agencies will be unable to execute such budget increases. CMUA encourages CARB to include language recognizing potential budget restrictions that would prohibit public agencies from increasing their budgets in a short time period and ensure that the implementation date of any ACF purchase mandate provides sufficient lead time for public agencies to make the necessary budgeting accommodations.

Conclusion

CMUA recognizes that an effective and workable ACF regulation will help California reach its clean transportation goals; it is in that spirit that these comments are offered. CMUA appreciates your consideration of these comments and looks forward to collaborating with CARB on the development of the Proposed Rule.

Respectfully submitted,



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