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RE: Coalition Comments on the March 2nd and 4th, 2021 Advanced Clean Fleets Workshops

The signatories to this letter appreciate the opportunity to comment on the higher-level concepts presented at the March Advanced Clean Fleets (ACF) Workshops[1]. The undersigned Coalition of entities have a common purpose to provide electricity, gas, water and wastewater, as well as, other services to the millions of Californians who rely on these services daily (for the purpose of this letter, each entity type is included when the term 'utility' is used). The customers who rely on these services have an expectation that the lights and stoves will turn on and taps will work 24/7, and that specialty services performed will not be impacted by fleet issues. When an emergency hits California (or elsewhere), it is imperative these services resume as soon as possible. It is in that spirit that these comments are submitted.

[1] https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/advanced-clean-fleets-meetings-events

The Coalition previously submitted comments on November 10, 2020[2]. Coalition member SCPPA submitted similar Specialty Vehicle comments of concern back in March of 2020 during the adoption of the Advanced Clean Truck rule[3]. Without restating those concerns verbatim, the Coalition incorporates both those sets of comments by reference as well.

We acknowledge that the presentations (Staff Presentation[4] and Preliminary Inventory Analysis[5]) presented more refined regulatory concepts and some preliminary technical work, but they still lacked sufficient detail to provide detailed regulatory-level comments, therefore the Coalition has prepared these comments to both respond to what was presented and to provide additional specificity to the proposals. The Coalition's concerns are presented in detail below.

The Coalition appreciates staff's efforts to better understand the need to accommodate the utilities unique operational challenges as entities transition to zero-emission truck fleets. This is not a question of supporting electrification where it can meet operational needs, but as acknowledged by staff at the workshops, electrification may not be suitable for *all* categories of vehicles, including specialized utility vehicles who can be expected to be called on for emergency response and whose duty cycles go beyond standard working 'shifts'. The Coalition also appreciates that CARB staff specifically noted that *"Specialty Vehicles"* as a class of vehicles where more thought is needed. The Coalition looks forward to working with staff on this important class of critical service vehicles.

Regulatory Adoption Process

Our initial comment concerns the fast-track timing that this rulemaking is attempting to be adopted within. The Coalition believes that such a major (fundamentally changing the working fleets in the 5th largest economy in the world) and far-reaching (impacting class 2b-8 vehicles for the next two plus decades) regulation deserves to be fully vetted with stakeholders *PRIOR* to its formal rule adoption posting for 45-day comment period. Though stakeholders may not agree with all aspects of the proposed regulation when it is presented to the Board, stakeholders should understand the proposed requirements well in advance of its official release. This understanding requires that draft regulations, including definitions, standards, and reporting/recordkeeping requirement be released to stakeholders during the informal workshop process with enough time to vet their implications with decision makers and fleet managers. It is fundamentally unfair if stakeholders' first view of the complete regulation is during formal comment period. Additionally, the Coalition requests a 60-day official notice (rather than 45 days) due to the current working situations and the breadth of the rulemaking.

The Coalition also requests that all documents related to this rulemaking be noticed on the ACF listserve, including documents whose primary residency isn't normally on CARB's website—Standard Regulatory Impact Assessment (SRIA), environmental analysis, CEQA equivalent documents, and any additional studies and support materials.

It is more important to get this regulation correct, than to rush its adoption. The durability of the regulation is critical to its success.

Definitions

The Coalition offers the following definition for "Specialty Fleet Vehicles" to be used in the ACF regulation:

- "Vehicles owned or operated by an entity or government agency that provide services with complex specifications beyond basic pickup and delivery functions, including but not limited to booms for aerial/overhead work, PTO equipment, augers, backhoes, cranes, water filtration, vacuum equipment, fumigation sprayers, support vehicles and vehicles designated to deliver otherwise defined Specialty Fleet Vehicles."

Specialty Vehicles Uses

The Coalition remains concerned that specialty vehicles required to service essential public services will not be met within the Proposed Rule timeline. As noted in previous comment letters, and by stakeholders more broadly during the March 2

[2] https://www.arb.ca.gov/lists/com-attach/2-acf-comments-ws-AWJcNlUxAzFSOgZZ.pdf
[3] Letter available on request. Not posted as there was not an informal comment log developed for the ACT rule.
[4] https://ww2.arb.ca.gov/sites/default/files/2021-02/210302acfpres_ADA.pdf
[5] https://ww2.arb.ca.gov/sites/default/files/2021-03/210302emissions_ADA.pdf

and 4 workshops, this concern for maintaining critical operations is multi-faceted. Key elements of concern relate to the availability of vehicles that satisfy fleet needs, the need for adequate planning for the supporting charging infrastructure, and high capital costs not yet supported by rates. Our broad base of members require fleet vehicles that provide essential public services, emergency services, and mutual aid supporting electricity, public works, water and wastewater, and specialty services across and beyond California.

We rely on a diverse fleet of vehicles to maintain critical public infrastructure supporting the electric grid, water supply, wastewater systems and other systems. When needed, fleets are dispatched to repair vital infrastructure, in some cases, to areas far removed from their home service territory. The Coalition's fleet vehicles are called upon during emergencies related to regional natural disasters (including impacts of wildfires, earthquakes, mudslides, etc.) for repair and recovery efforts, as well as mutual aid requests.

The addition of ZEVs to these fleets will require that the necessary charging infrastructure to power ZEVs be in place prior to converting the fleets. Charging infrastructure offers a unique challenge because public agencies must plan for having adequate charging stations to charge the fleet, but may sometimes find a need to charge more vehicles than there are connections available. This includes specialty equipment specifications for vehicles with additional power needs, varying charging schedules, and limited availability. The prospect of having multiple vehicles on hand (to replace one existing vehicle) without a guarantee of meeting operational needs is a lingering concern for members. Additionally, ZEVs tie the ability to charge fleets to grid reliability. Grid reliability hinges on the grid being able to handle the additional load of fleet charging needs, and also operating with the risk that the attached load serving entity may enact a public safety power shutoff which infringes upon the public agency being able to maintain its critical services.

Ratepayer Funding Models

Many entities represented in this Coalition, provide public services (water, electricity, gas, sanitation, etc.) that typically generate funds to purchase, operate, and maintain vehicles from rates and/or fees. While others don't have revenue generating authority. The missions of these organizations are often to provide these essential services at the lowest cost possible to customers/citizens. As such, these entities typically have a lengthy, public process to approve modifications of rates and/or fees and do not have nimble budget flexibility. Zero emission technologies are still evolving, and organizations cannot with all certainty determine what technology mix will fit their operations best at this time. Without knowing what technology mix (battery electric or Hydrogen) will be used, it is extremely difficult to budget for purchases and operations, which in turn, impacts the rate and/or fee approval process. This is a unique challenge to service providers and we recommend that CARB provide regulatory flexibility to align with rate and/or fee approval processes.

Exemption Process

The Coalition encourages and supports the development of a fair, well-established exemption process to enable adoption of clean vehicles where it is feasible, while maintaining a pathway for vehicles that do not yet have ZEVs options available to meet fleet needs. The Coalition understands and supports the bigger policy picture of cleaner transportation and abating the worse impacts of global climate change and are working to decarbonize their fleet vehicles where operational needs can be feasibly met by available specialty vehicle options. However, the Coalition still has concerns about the proposed timeline relative to existing assets with remaining useful life and responsible use of public funds.

We believe that a practical exemption process is key to the success of a durable ACF regulation to govern the transition to ZEVs over the coming decades. *In essence, the exemption process and its underpinning analyses will be the basis for determining the technical feasibility, or infeasibility, of the proposed regulation at any given time during this transition*. Such determinations should be made prior to rule adoption.

We encourage CARB to develop a stakeholder-informed exemption process that takes into consideration the challenges fleets will face as they work to carry out core functions of critical services. To reiterate, our members request consideration for specialty vehicle availability, cost of adoption, charging infrastructure and grid accessibility and reliability, the ability to maintain core services and provide mutual aid during and following natural disasters.

The Coalition offers the following recommendations:

- Timing of Exemption: The Coalition encourages CARB to employ a quick turnaround (~14 days) to enable fleet managers to know if their exemption request has been received, reviewed, and a decision has been made. Turnaround time is essential for fleet managers to ensure that they are able to proceed with purchasing vehicles that meet their needs, and avoiding stop gaps when retiring older fleet vehicles that are past useful life. Additionally, exemptions should be granted with sufficient time to allow for extended procurement processes and allowable up to twelve months prior to the purchase. That lead time would allow for multiple bid processes, if exemption approved; planning time for any required infrastructure; and extended build times, particularly for specialty vehicles.

- Process of Approval: The Coalition encourages CARB to provide clear regulatory language and, if necessary, subsequent guidance for navigating the exemption process contained in an adopted ACF regulation. This process should include, at a minimum the following:
    - Guidance for exemption filing and necessary forms
    - Contact information for CARB staff reviewing request
    - Checklist requirements for successfully receiving an exemption
    - Receipt of exemption acceptance and transparency on the status of any exemption request

- Rationale for Approval: The Coalition encourages that CARB enable broad and varied pathways for receiving an exemption to the ACF regulation. Fleets come in all varieties, and have diverse sets of circumstances that must be considered when developing a rule of this magnitude and situations arise that are beyond the control of fleets. The following reasons are suggested examples of valid exemption requests:
    - 1:1 replacement: The Coalition strongly believes any exemption request must be viewed, and decided, with the foundational requirement that an ZEV replacement vehicle can meet the duty cycle and job performance on a one-to-one ratio and would not result in limited use or require modifications to operations. Denying an exemption request based on anything less would skew the cost assumptions and implementation planning. This “one-to-one” standard should be explicit in the regulatory text.
    - Multiple vendors: As noted on slide 31, fleets need to have more than one available vehicle option vendor at the time of purchase. This requirement is a safeguard for fleets against price gouging, and to ensure that public fleet dollars are being responsibly spent. It should be required bids be reasonable and comparable. For example, if an entity moves forward with a bid process and only two bids are received with one cost substantially more, it cannot be considered comparable and therefore two options are not available from a practical standpoint. This requirement should apply to similar technologies, i.e. having one battery electric and one H_2 vendor, should not qualify as multiple vendors. In addition, multiple bids from the same vendor should not qualify as multiple available bids, because that does not allow for competitive pricing from separate vendors.
    - Capital Cost Considerations: The Coalition encourages further exploring cost as a criterion in the exemption process. This factor is especially critical for public fleets where the higher capital cost of procuring cleaner vehicles is passed on to rate paying customers, including disadvantaged and small community members. Coalition members have maintained services for customers throughout the COVID-19 pandemic even in communities where customers have been unable to pay their fees. Adding cost prohibitive mandates, without recourse for cost considerations as essential public services continue to grapple with recovery efforts may be infeasible. For these reasons, we encourage that cost considerations be included as part of the exemption process.
    - Total Cost of Ownership: Many specialty vehicles do not drive many miles, or operate consistently (only when needed). This combination could prevent the standard total cost of ownership (TCO) assumptions of payback from penciling out for fleet owners. Such low-use, high cost specialty vehicles should be eligible for an exemption.
    - Specialty Equipment Requirements: The Coalition encourages CARB to solidify the requirement, as noted on slide 29, that available chassis must be able to meet fleet needs at the time of purchase (see additional

'upfitting' comments regarding certification, safety and other issues associated with operating vehicles on California roads—length, width, weight distribution).

- Vehicle Manufacturer Delays: The Coalition encourages CARB to solidify the requirement that vehicle manufacturer delays must be considered during the time of purchase.
- Pre-Testing: Rigorous testing may be needed to demonstrate ZEV performance and mileage under the specific and demanding real-world conditions in which utility fleet vehicles must operate. This is necessary to ensure the utility vehicles that fleet managers procure have a proven ability to meet operational needs and that any operational constraints, such as mileage limitations, are well understood prior to deployment in the field.

Ownership Issues

Many municipalities operate more than one "fleet" (e.g., for water, wastewater, and electric fleets) or are operated by the city as one of multiple fleets (e.g., public works, parks and recreation, code enforcement). Balancing the incremental new purchase requirement over multiple fleets would lead to significant planning challenges as each fleet may be separately managed according to its individual operational needs, management structure, physical location, budgeting process and/or duty-cycles. At the March 2nd workshop, CARB staff expressed openness to allowing municipalities to determine the appropriateness of treating their fleets separately or as a single fleet for purposes of compliance with the incremental requirement. This Coalition supports this approach.

Fleet Management Issues

- **Multiple fleet locations**
  There are many fleet owners who have vehicles in both areas of the state as proposed by staff—low-population counties and high-population counties. These fleets can be domiciled quite far from the main fleet facilities and require separate corporate yards, e.g. a Southern California utility with a far Northern California fleet of transmission line maintenance vehicles. Or alternatively, a Sacramento-based fleet with many fleet vehicles domiciled in the Northern counties. The Advanced Clean Trucks Large Entity Reporting effort focused on where fleets were actually at, and how they operated. The Coalition believes it would be appropriate to allow fleet operators the compliance option as to whether or not these "remote in-state fleets" should be viewed as one, or separately. This choice provides flexibility, while still meeting the intent of the proposed rule.

- **Fleet planning**
  Adding new fleet vehicles can be a lengthy process, even after the purchase order (PO) has been signed. Many specialty vehicles must be custom built, with additional time to upfit the chassis, prior to delivery and then placement in service. The extended lead time complicates fleet compliance planning, as fleet managers may not know what model year vehicle they will ultimately receive at the time the purchase order is issued. To mitigate this planning uncertainty, the Coalition recommends that CARB assess Public Fleet compliance with ZEV purchase requirements based on the year the PO was issued, rather than the vehicle model year.

- **Out-of-state fleet vehicles**
  Some fleets operated by a California entity may be domiciled and operate outside of California. For example, an electric utility in California may operate fleets to maintain transmission lines that are located outside the state. These fleets need to be highly mobile and travel significant distances in remote areas due to the nature of their work, and ZEV infrastructure may not be widely available.

- **Service technician acceptance**
  Most fleet staff are currently trained in the maintenance of gasoline, diesel, and/or CNG vehicles. The introduction of MHD ZEVs will require the training or hiring maintenance personnel with the skills, knowledge, and abilities to maintain new vehicle technologies, including high-voltage electric systems in the case of electric vehicles, proper charging settings, and lithium battery maintenance, or alternatively hydrogen technologies. Training needs may moderate as

technology becomes more familiar, but this will take time. As there is currently no dominant market technology, fleet owners will need to provide additional training on all technology types in the fleet.

- **Additional costs of having to maintain multiple drivetrains (diesel, gas, electric, H2, CNG, hybrid)** Existing trucks and truck chassis have established supply chains and adding new technology vehicles to the fleet will require new support supply chains to be set up. Electronics, control systems, motors, chargers, and other related equipment may not be readily available or easily obtainable especially for emerging technology. To maintain these vehicles, fleet maintenance will need to establish relationships with new vendors, write new specifications, and develop new testing and acceptance procedures for the new equipment to ensure that replacement parts are not substandard, and be trained, as discussed above. The costs associated with this will increase with each technology type that the fleet has to maintain, as there is no single dominant technology.

Early Action Pathway

The coalition encourages CARB to consider a pathway for early action credits to provide fleets with flexibility options to manage the overall purchases of ZEVs. We ask that CARB consider including a provision in the proposed rules to recognize fleets that take early action to purchase an increased percentage of zero emission vehicles beyond the compliance requirements. Such an approach has been taken in the existing CARB Truck and Bus Regulation (Title 13 CCR § 2025 (j). For example, if an agency purchased 70% of ZEV 2024-2026 model year vehicles during the first phase of requirements (this would be 20% beyond the required 50%), the 20% could be used to reduce the required 100 percent of 2027 and newer model years to be purchased (e.g., only 80% of 2027 and newer model years would be required to be ZEVs). The same early action pathway should apply to both public and private fleets.

Such early action credit can provide fleets with increased flexibility to manage their longer-term purchases and allow additional time for the vehicle technologies to mature and demonstrate feasibility for fleet operational needs. An additional consideration could be providing early action credit for public fleets that downsize (i.e., eliminate a diesel vehicle without replacement at all).

Upfitting Issues

Members of the Coalition operate thousands of work trucks throughout the state. Many of these are purchased as gliders and modified by certified upfitters to meet operational needs. Modifications made to trucks are pre-designed and approved to meet all safety requirements. For example, individual axles have weight requirements to maintain vehicle structural integrity and safety. A different weight configuration due to batteries, such as backloading, could severely impact the weight distribution and therefore the capabilities of the vehicle. Exemptions and additional regulatory flexibility are needed for upfitted vehicles as those are likely to be the last types of trucks to have zero emission offering. While a glider or chassis may be available in zero emission, exemptions should be granted based on the availability of a certified upfit. Regulatory flexibility may include delayed compliance percentages without having to accelerate ZE purchases for vehicles in the same grouping for private fleets.

Duty Cycles vs Miles of Operation

We are available, and encourage CARB staff to reach out, to discuss the following issues in order to best understand unique characteristics of specialty vehicle duty cycles is had. CARB should accommodate different requirements for certain utility fleet vehicles – where electrification would not be a suitable option – to ensure or restore critical utility services. These utility vehicles continually *support* essential public services such as police and fire. They also provide emergency service to restore water, gas and electric service to communities, especially those at greatest risk such as the elderly and sick, as well as, the public during and after a catastrophic natural disaster. Studies have shown that without rapid repair of critical infrastructure such as electricity and water, fires cause by earthquakes can become larger and more dangerous[6].

[6] Planning level fire following earthquake model for the City of Los Angeles Prepared for the Los Angeles Department of Water and Power, March 2019. (available upon request) Reported on by KPCC https://laist.com/2019/08/27/if_its_a_windy_day_when_a_big_quake_hits_la_could_burn_to_the_ocean.php

Coalition members operate diverse fleets of vehicles, including operating specialty vehicles long distance, in remote areas, on difficult terrain, and for extended operation—sometimes all at the same time. In addition, these vehicles are needed for rapid response/emergency scenarios. Some examples of such operation include:

- Storm situations (heat, cold, wind, rain) which instigate multiple consecutive outages, where crews are working 24/7 and the trucks are also considered health and safety shelters. Such events require the vehicles to idle/travel consecutive shifts and days.
- Snow removal in mountain areas (power and water assets). This is an example where the vehicles must keep up with rapidly changing weather patterns. Not just the plow trucks but the mechanic trucks that support the operation. Again, it is critical that these vehicles can perform multiple consecutive shift and days—for both operation and shelter.
- Regular daily use of Aerial equipment, Derricks, dump trucks, crew trucks, line trucks ***need to run as long as each job lasts***, with unknown construction and repair times. Having these vehicles stopping to charge poses a safety, productivity and service reliability risk.
- Anytime when the vehicle needs to double as shelter, its power source needs to be reliable, readily available and quickly replenished. Many utility core fleet vehicles double as office space for the operator.
- Anyone who needs to respond to emergency issues and travel between the yard and the remote locations (i.e. Loon Lake in the remote Sierra) on a 24/7 duty cycle.
- Extended service duty cycles when water mains rupture is necessary to protect property from additional water damage.
- Vehicles are used to inspect, maintain and repair water infrastructure ranging from the Los Angeles Aqueduct intake in the Eastern Sierra to the Los Angeles Basin, and power infrastructure that spans five Western states (California, Nevada, Utah, Arizona, and Oregon).

It should be noted these concepts are relevant for **both** public and private utilities. The key concepts of concern are 1) matching vehicle capabilities with fleet operational needs, and 2) avoiding unintended consequences. Non-local infrastructure for electrified utility-specific emergency support and restoration vehicles may not be available, or feasible to fuel these fleets.

Vehicles that are powered by fill and go fuels such as diesel, gasoline, or natural gas are able to operate for extended periods. These units are frequently refueled in the field minimize equipment downtime, thereby reducing the amount of time a community remains without water, gas, wastewater, power, or other life-sustaining critical utility services. When these same vehicles are powered by an all-electric platform, the vehicle must be taken out of service more frequently to facilitate battery recharging. Under this scenario, these vehicles may not have the capacity to protect essential workers from the elements, or be able to perform the required (and sometimes unexpected duty cycles).

The coalition respectfully requests recognition of the critical role specialty vehicles play in keeping the lights on, stoves lit, and the water flowing throughout the California, as well as the unintended consequences that will result when there is a loss of power and coalition members are unable to fuel an all-electric fleet of specialty equipment.

CONCLUSION

We urge CARB to recognize the unique role that electrical, gas, water utility and specialty equipment play in both emergency response and essential public service.

This recognition can come in many forms under the proposed Advanced Clean Fleets Regulation. At this time, the coalition is seeking further specific discussions with CARB to chart a feasible path forward that allows for both ZEV advancement and assurances that specialty vehicles will be ready to respond to the myriad of scenarios they are faced with on a daily and year-round basis.

Many of these vehicles can be configured with hybrid electric or Low NOx technology, *but an all-electrification requirement should not be required until feasibility can be assured*. Recognition of such a category of "Specialty Fleet Vehicles" would not be inconsistent with the goals of the regulation.

We look forward to working with staff on this important issue as the rulemaking progresses, and will be reaching out for detailed discussions.

Thank you for the time and attention to this matter.

Respectfully submitted by:

- Southern California Public Power Authority
- California Municipal Utilities Association
- Association of California Water Agencies
- Northern California Power Agency
- California Association of Sanitation Agencies
- California Special Districts Association
- SoCal Gas Company
- Turlock Irrigation District
- Rancho California Water District
- Imperial Irrigation District
- Valley Center Municipal Water District
- Aliso Water District
- Mesa Water District
- Las Virgenes Municipal Water District
- City of Roseville
- San Francisco PUC

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