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**RE: SCPPA Comments on the March 2 and March 4, 2021 Workshops on the Proposed Advanced Clean Fleets Rule**

The Southern California Public Power Authority (SCPPA) thanks the California Air Resources Board (CARB) staff for holding the March 2, 2021 and March 4, 2021 workshops on the proposed Advanced Clean Fleets (ACF) rule and for this opportunity to provide informal comments. SCPPA appreciates CARB staff's willingness to discuss and to understand the needs of different stakeholders including local publicly owned electric utilities (POUs). We look forward to working collaboratively with staff to ensure that the proposed rule can be achieved cost effectively. It is also critical that such a wide-ranging rule not impede SCPPA Members' ability to maintain safe and reliable operations of the electric grid, which is a key strategy for decarbonizing the transportation sector and necessary to support the functions of our society.

SCPPA is a joint powers agency whose Members include the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, and Vernon, and the Imperial Irrigation District. Each Member owns and operates a POU governed by a local board of elected officials. Though our Members collectively serve nearly five million people living and working throughout Southern California, the service territory in which they operate, domicile, and maintain their fleets is much larger and includes several Western States.

SCPPA supports the Specialty Vehicle Coalition's previous comments[1] and provides additional comments on the proposed requirements for public fleets for staff's consideration.

## I. General Comments on Proposed Requirements for Public Fleets

SCPPA recognizes CARB's ambitious goals to reduce GHG emissions attributable to the transportation sector in support of the State's climate goals. As local electric utilities, our Members engage in judicious advanced planning to ensure they can serve the current and future power supply and infrastructure needs of our communities, including those related to transportation electrification, while helping to meet or exceed the State's ambitious energy supply and GHG emissions reduction goals. Some of SCPPA's Members have been exploring the use of Zero-Emission Vehicles (ZEVs) in their own fleets, including hybrid ZEV bucket trucks, ZEV pilots, and installation of heavy-duty (HD) ZEV infrastructure, but remain deeply concerned about practicality and potential impacts to reliability and resiliency impacts under the current proposal's aggressive timeframe for public fleets.

Our Members have both the responsibility to ensure safe and reliable electricity service for our communities *and* to comply with this aggressive fleet regulation as fleet operators. Utility fleets serve an essential role in maintaining and restoring

[1] https://www.arb.ca.gov/lists/com-attach/2-acf-comments-ws-AWJcNIUxAzFSOgZZ.pdf

electricity service through a fleet of vehicles that have been vetted and can reliably meet demanding and unique operational duty cycles. These vehicles are critical for maintaining the most basic essential public service – power. Moreover, as not-for-profit community-owned utilities, we are committed to prudently managing our budgets to keep rates affordable for our customers, many of whom live in communities designated as disadvantaged.

The proposed timeframe to require public fleets to purchase medium- and heavy-duty (MHD) ZEVs, many of which have not yet been proven for electric utility needs, is extremely aggressive. Given the amount of time it can take to procure a new vehicle for a public fleet, purchase orders are often made a year or two in advance of receiving a vehicle. The workshop slides[2] indicate staff's preliminary proposal to subject 2024 model year vehicles to a 50% ZEV purchase requirement. Such a timeline may require investigation and changes to budgets and procurement efforts before the expected effective date of the proposed regulation. SCPPA requests CARB review and analyze this aspect of the proposed regulation and make adjustments as necessary.

SCPPA welcomes that staff's proposal for public fleets includes an exemption concept, but much of the details were not presented and still need to be worked out with stakeholders. Our concerns with this proposed concept are laid out in Section III below.

Due to the important public safety role of electric utility fleets, SCPPA encourages CARB staff to *ensure* the proposed regulations are practical and accommodate public utilities' needs, and that public utilities will not be forced to purchase technologies that do not meet their operational needs as the MHD market segments begin to transition to ZEVs. Similarly, as public fleets would be required to purchase ZEVs early in the transition, the proposed regulations must consider both upfront costs and cost-effectiveness.

At the March workshops, CARB staff described the plan to adopt a single durable rule, the ACF regulation, to govern the statewide transition to clean MHD fleets over the next 5-25 years. Staff also stated their goal is to bring the proposed ACF regulation to the CARB Board this December. Based on the important, wide-ranging impacts and broad applicability of this single proposed rule, SCPPA urges CARB staff to post the draft regulatory language and allow for full vetting and discussion of the proposed language prior to initiating the formal rulemaking process. The level of detail this rule will necessarily contain, and the accelerated rulemaking schedule that is proposed, highlight potential process and transparency issues. The ACF will be much more effective if it includes all stakeholders, even if it takes a bit longer to adopt. SCPPA recommends not forcing this rulemaking timeline into an artificial deadline.

## II. Proposed Requirements for Public Fleets

SCPPA offers specific comments below on the proposed requirements for public fleets to clarify the proposal and to address practical implementation issues.

Ownership

*Proposed regulations should allow municipalities, including municipal utilities, with multiple fleets to determine how the initial incremental purchase requirement is implemented.* Under the current proposal for public fleets, at least 50% of the 2024-2026 model year vehicles added to a fleet must be ZEVs. Many municipal fleets operate more than one "fleet" (e.g., for water service and for electric service) or are operated by the city as one of multiple fleets (e.g., public works). Balancing the incremental new purchase requirement over multiple fleets could 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 each POU to determine the appropriateness of treating their fleets separately or as a single fleet for purposes of compliance with the incremental purchase requirement. This approach is reasonable and SCPPA encourages staff to incorporate it in the proposed regulations.

[2] https://ww2.arb.ca.gov/sites/default/files/2021-02/210302acfpres_ADA.pdf

Reporting

*Proposed regulations should not require public fleets to report within 30 days of "adding" a vehicle to the fleet.* Under the current proposal, public fleets are required to report both annually and within 30 days of adding a vehicle. The requirement to report within 30 days of adding a vehicle to the fleet is duplicative and unnecessary given that public fleet owners are not subject to a replacement requirement. The 30-day reporting requirement should be removed.

Initial ZEV Purchase Phase-In

*CARB should consider requiring public fleets to purchase the best available technology in lieu of a ZEV mandate.* As the market begins to transition to ZEVs, SCPPA encourages CARB staff to consider an alternative purchase requirement for public fleets generally based on the "Best Available Control Technology" concept in air quality regulations. This would effectively require POUs to purchase the best available technology that is either cost-effective or has been achieved in practice. This alternative would still ultimately require POU fleets to transition to ZEVs as technology improves and costs decrease. However, it would help ensure that during the transition, POUs can procure utility fleet vehicles as needed without the risk of incurring prohibitive costs, or that the vehicle has not been proven to meet the POU's needs. Moreover, it would support emissions reduction progress as POUs would be required to purchase the best available technology, which could include hybrid work trucks (battery operated lifts on conventional drivetrains) or CNG.

*Proposed regulations should clarify how compliance with the public fleet incremental purchase requirement for 2024-2026 model year vehicles will be evaluated*. The current proposal for public fleets defines an incremental purchase requirement based on vehicle model year and specifies reporting requirements but does not describe how compliance will be assessed. The proposed regulations need to clearly define how and when CARB will assess compliance with the rule – for example, is a vehicle "added" to the fleet based on the approval of the purchase order, completion of payment, the upfitting of the chassis or delivery of the complete vehicle, or the placement of the vehicle in service? Each of the actions occur at different times, sometimes over multiple calendar years.

SCPPA recommends that the incremental purchase requirements be based on the year purchase orders are approved, not the vehicle model year. The amount of time to procure a new vehicle can be several years, factoring in both the municipal procurement process and the time to custom build the vehicle. This can be even longer for specialized vehicles. The extended lead time for vehicle procurement may complicate compliance planning, as SCPPA's Members may not know what model year vehicle they will ultimately receive at the time the purchase order is issued. To mitigate this planning uncertainty, CARB staff should consider establishing ZEV acquisition requirements based on the purchase order years for new vehicles.

The proposed regulations should also clarify how the incremental purchase requirement will be assessed if only a single vehicle, or an odd number of vehicles, are added to the fleet during the prior year. Some of SCPPA's Members operate small fleets and may only purchase 1-2 vehicles in a given year, while others with larger fleets may purchase vehicles in bulk per scheduled turnover. The ACF should strive to retain public entity purchase processes, even when purchasing zero-emission vehicles. To address small number issues, SCPPA also encourages CARB to consider allowing POUs that exceed the 50% purchase requirement in a given year to carry forward the extra ZEV(s) to the next compliance year.

## III. Proposed Exemption Process for Public Fleets

At the March 2 and March 4 workshops, staff explained that they expect technology advancements to improve and costs to continue to drop, with the market looking very different in the 2030-2040 timeframe. Staff repeatedly indicated they do not believe an exemption process will be extensively needed, but that to ensure the durability of the rule, they plan to build it in as a backstop. SCPPA appreciates that the ZEV market for MHD vehicles may be very different in the next 10 years if battery costs decrease significantly, vehicle design improves, and ZEV manufacturers begin offering vehicles used in utility fleets. However, public fleets must begin purchasing ZEVs on a far earlier timeframe than the next 10 years, and even as ZEVs start to become available, they may be unproven for utility operational needs and/or prohibitively expensive.

SCPPA believes that accommodations for critical utility vehicles and a practical exemption process are 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.

Staff presented a limited exemption concept for public fleets, including:

- ZEV vehicles or chassis were not available from one or more manufacturers,
- Available ZEV chassis could not be upfitted to meet fleet needs, or
- If there were vehicle manufacturer delays.

SCPPA appreciates and supports the inclusion of an exemption concept for public fleet vehicles but recommends the following modifications to address practical implementation issues.

Exemption Process

*Public fleet exemption process must be practical, expeditious, and support safe and reliable grid operations.* Staff indicated at the workshops that details on the exemption process still need to be fleshed out, but as noted above, SCPPA believes the exemption process details are critical. A process where the general concept requires the fleet manager or other designated utility staff to show that one or more exemption conditions applied must not require the proof of a negative. Such a showing is very difficult to make. As CARB staff further considers the mechanism for the exemption, it is critically important the process be expeditious, practical to use, and provide POUs sufficient ability to ensure the vehicles they procure can be relied upon to maintain grid operations.

The municipal procurement process is often lengthy and delaying the start of this process for a prolonged exemption review may hinder a POU's ability to have a fully resourced fleet that can respond to a variety of operational scenarios. Smaller POUs may be particularly affected by delays when replacing vehicles because of the comparatively small number of vehicles in the fleet. However, delays can also cause problems for large POUs that replace fleet vehicles in batches. To minimize the risk of negative impacts associated with delays, SCPPA recommends CARB's exemption process review be completed within two weeks of an exemption claim.

An exemption process that would require a POU to evaluate all MHD ZEVs on the market, regardless of whether the ZEV manufacturer is responsive to the utility's RFP, would create an undue burden on utilities. Some small POUs do not have fleet managers for their utility or for their city, and do not have the resources to evaluate all possible ZEVs. To help alleviate the possible burden, SCPPA recommends that CARB and/or vehicle manufacturers and utility vehicle builders provide an available forecast of utility class ZEVs each year.

Finally, as the POUs are responsible for maintaining grid reliability, it is essential that the exemption process recognizes their expertise in identifying what vehicles and/or chassis can and cannot meet the fleet's operational needs. SCPPA understands the need for CARB staff to do due diligence for oversight of the regulations and stands ready to work with staff to develop a process that supports both CARB's objectives and our Members' ability to perform essential public services.

Vendor Issues

*Proposed regulations should clarify meaning of "available from more than one manufacturer" for public fleets.* Under the current proposal, a public fleet owner may be eligible for an exemption if a ZEV chassis or complete vehicle is not available from more than one manufacturer. SCPPA appreciates the inclusion of "more than one manufacturer", which is required for some public utility procurement processes and also may help avoid price gouging, but further specificity is needed. SCPPA recommends that CARB staff clarify for public fleets that "available" means "available from more than one responsive and responsible manufacturer."

"Availability" alone is insufficient to ensure competition or that ZEVs can be procured by POUs if they do not meet the operational specifications, or the manufacturer is not reliable. In general, each POU follows its own established

procurement guidelines to ensure that a bid is "responsive," meaning that it meets the necessary technical specifications, and from a supplier that is "responsible," meaning the manufacturer or vendor has a demonstrated track record or can otherwise be relied upon. Ultimately, even if two ZEVs are "available" but only one meets the technical specifications, then in practice there is no competition because the POU only has one option. Furthermore, for smaller POUs that only procure one or two vehicles at a time, the small transaction sizes may yield no bids, even if some ZEVs are technically available on the market.

Finally, POUs must retain the ability to define technical specifications for their fleet vehicles. Many public utility fleet vehicles have diverse duty cycles and specific operational needs, especially for specialized equipment needed to maintain or restore grid operations or to provide emergency response functions. For example, some of SCPPA's Members operate transmission over large rural areas and have specific needs for fleet vehicles to travel long distances, sometimes over rugged terrain, and complete their work cycle before returning over those long distances. A technical infeasibility exemption process must not infringe on POU fleet managers' assessment of necessary technical specifications or require POUs to procure vehicles that are not 1:1 replacements or cannot meet the specific fleet need.

*Proposed regulations should clarify "manufacturer delay" for public fleets.* The current exemption proposal identifies manufacturer delays as grounds for an exemption but does not specify what length of delay qualifies. As described above, the public procurement process for new vehicles is often lengthy, including time to build a chassis and separately complete upfitting. Delays can interfere with a POU's ability to operate a fully resourced fleet, especially in the case of vehicle replacements. Additional delays beyond the current manufacturer lead time for conventionally fueled vehicles would place an undue burden on fleet operations. SCPPA supports this type of exemption.

Vehicle Types

*Proposed regulations should provide accommodations for "critical" public fleet vehicles, whose operations are necessary to maintain safe and reliable electric service*. In the current proposal, the ACF rule would not apply to emergency vehicles as designated in section 165.1 of the Vehicle Code. SCPPA believes that excluding emergency vehicles is reasonable and appropriate, but the definition is too narrow and should include utility vehicles that serve an emergency response function.

When disasters occur, utility fleets can be dispatched to repair vital infrastructure at a moment's notice, and having quick, reliable, and replenishable fueling options are a critical necessity. While mobile charging and other technological advancements may be available sometime in the future, utility vehicles providing emergency response functions cannot risk being unable to complete their duty cycle during a catastrophic event. For example, utility crews assisting with wildfire response must have certainty that their vehicles will be able to operate reliably and without refueling issues, potentially for extended periods of time and while needing to respond to incidents in multiple locations. 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.

Emergency response functions for POUs may include, but are not limited to, restoring power to communities after catastrophic wildfire events, storms, or earthquakes, addressing and mitigating dangers from damaged infrastructure, and ensuring that emergency responders like fire departments have power for their operations and communications as well. The vehicles that serve critical public safety functions are essential to both grid reliability and community resiliency and may vary based on an individual POU's operations, so SCPPA recommends that exempted emergency vehicles also include vehicles designated as such by a POU's local governing board.

*Proposed regulations should provide accommodations for public fleet utility vehicles that provide mutual aid*[3]*.* SCPPA Members vary significantly by service area, but even municipal utilities that operate primarily locally may provide mutual

[3] https://www.publicpower.org/system/files/documents/Mutual%20Aid%20Fact%20Sheet.pdf

aid to other utilities in the state or across the country. In mutual aid scenarios, ZEV charging or fueling infrastructure simply may not be available and is outside of the utility's control. For example, Southern California-based utility crews collectively sent 122 vehicles and crews to the East Coast in response to former President Obama's request to assist with the 2012 "Superstorm Sandy" power restoration effort that left 6.2 million people in seven states without power. None of the vehicles sent were alternative-fueled because the Northeast did not have the fueling infrastructure available. Many regions across the United States lack the necessary fueling infrastructure that would justify long distance travel. SCPPA urges CARB staff to make accommodations in the proposed regulations to ensure sufficient utility vehicles will still be available to provide mutual aid.

Cost

*Proposed regulations should provide accommodations for public utility fleet vehicle costs.* At the March 2 workshop, CARB staff explained that they had not considered cost as grounds for an exemption for public fleets, because public fleets could wait to purchase a new vehicle until they had the budget to buy ZEV (no forced turnover). However, waiting to replace a utility fleet vehicle that is necessary to ensure or maintain grid reliability, particularly in the event of vehicle failure, is simply not a viable option for POUs, especially if the cost of the ZEV replacement is several times the cost of a non-ZEV counterpart. Maintaining equipment past its useful life is neither safe nor in the best interest of the state.

Capital costs are especially challenging for POUs, given the early purchase requirements (beginning with the 2024 model year, as currently proposed) and municipal budgeting processes. POU rates are set by the city council or governing board, and POUs may have limited abilities to raise rates and adjust their budgets through local government approval processes. In the early years, there may be both a significant premium for purchasing ZEVs as well as challenges adjusting budgets. Unless grant funding is available to cover a significant portion of the price premiums, POUs may not have the capital funds to purchase MHD ZEVs when replacing vehicles in their fleets.

SCPPA believes it is also important to consider how significant and unexpected changes in the fiscal climate can exacerbate capital cost challenges for public utilities. SCPPA Members have maintained electricity services for customers throughout the COVID-19 pandemic and the resulting economic crisis, in some cases accumulating significant arrearages when customers have not been able to pay utility bills. The addition of potentially significant capital costs in extreme conditions outside of utility control could create an undue burden on both public utilities and their ratepaying community members.

In addition to the upfront capital costs, purchasing ZEVs at a significant price premium for certain types of utility vehicles may not be cost-effective over the life cycle. Low-mileage vehicles and specialty vehicles may not be driven enough to capture the assumed fuel savings that would make the purchase cost effective. While current equipment used by POUs has a well-understood life expectancy, including methods of life extension, this information is not yet widely known for MHD ZEVs operating under utility vehicle duty cycles. For example, the useful charge capacity of electric battery decays over time, and the replacement timing and costs, including possible recycling or disposal costs, could significantly affect the overall cost of ZEV ownership. Similarly, while fuel costs and historical fluctuations are well established for gasoline, diesel, and CNG, there is greater uncertainty about future hydrogen and electricity prices, as well as the costs associated with storing fuel to ensure there are no shortages.

SCPPA encourages CARB to consider both price premiums and the life cycle cost-effectiveness of ZEVs as possible conditions for public fleet exemptions, as well building in sufficient flexibility to be able to respond to significant economic downturns.

## IV. Additional Considerations

SCPPA offers the following additional comments for consideration as CARB develops the requirements for the proposed rule.

Maintenance and Operations

*CARB should consider manufacturers' ability to provide adequate maintenance and warranty support (including battery or fuel cell replacement) for public fleets.* New fleet vehicles are typically required to include at least a year of warranty, sometimes more. However, if the warranty work or maintenance support is substandard, vehicle outages can be prolonged, requiring fleet operators to provide alternative vehicles for the duration of the outage. As an example, one of SCPPA's Members has encountered repeated issues with warranty support for a purchased hybrid vehicle, rendering it useless for months. If manufacturers are unable to provide needed support for ZEVs, the vehicles could be inoperable for extended periods of time.

*CARB should consider the need and time for public fleets to set up new supply chains.* 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. In addition, 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. While this will be a necessary and critical step to transition to ZEVs, SCPPA encourages CARB to be cognizant of the time it will take.

*CARB should consider the need and time for training to maintain and operate MHD ZEVs.* Currently, fleet staff are trained in the maintenance of gasoline, diesel, and CNG vehicles. The introduction of MHD ZEVs will require hiring or training maintenance personnel with the skills, knowledge, and abilities to maintain new vehicle technologies, including high-voltage electric systems in the case of electric vehicles. As an example, one SCPPA Member encountered challenges with using the correct charging settings for hybrid vehicles and maintaining a lithium battery above the low charge threshold, which prevented the battery from being refurbished by the manufacturer. In addition, operating a mixed fleet with multiple new technology types, each of which has different constraints (such as range and fueling needs) relative to existing fleet vehicles, will add complexity and increase the coordination needed for fleet dispatch. SCPPA Members understand that training will alleviate these as new technologies become familiar. However, SCPPA encourages CARB to recognize the time and resources it will take, especially as there is not yet a dominant market technology.

Infrastructure

*CARB should consider public fleet fueling infrastructure needs and costs*. Currently, it is unknown whether fuel cells or electric vehicles will gain dominance in the ZEV market. Developing infrastructure to support fuel cells will likely be a slow process, requiring multiple public agency approvals. If battery EVs become dominant, additional charging infrastructure will be needed at an accelerated pace, including standardized charging for heavy-duty vehicles. In either case, developing and deploying infrastructure will require significant investment and planning time. Developing infrastructure to develop both technology types could be prohibitively expensive, but public fleet operators may have limited options given they would be required to purchase ZEVs in the next couple years under the current proposal, before there is a dominant technology.

*CARB should consider public utility planning needs.* In addition to fueling infrastructure, POUs have the unique responsibility of planning the electrical infrastructure needed to support load. POUs are already carefully and proactively planning for transportation electrification and other load growth to ensure they can supply the future needs of their communities. Significant upgrades may be needed to local distribution infrastructure to support the multitude of heavy-duty ZEV fleets anticipated under the proposed rule, which may take additional time depending on the scope of the upgrade. SCPPA encourages CARB to support local utility planning processes in developing the proposed rule.

*CARB should consider infrastructure barriers for public utility fleets that operate out-of-state or in low-population counties.* Some of SCPPA's Members own and operate fleets for significant generation and/or transmission assets that are outside of their service area or that must cover a significant rural service area. Examples of fleets outside of the service area include out-of-state fleets domiciled in Utah and Nevada, as well as fleets based in low-population counties in Northern California. Another SCPPA Member has an electric service area of nearly 6,500 square miles.

SCPPA encourages CARB to consider the effect of infrastructure barriers for rural and out-of-state fleets when developing the ACF rule, including accommodations for fleets that are based and largely operate outside of California (but owned by a California utility) and where ZEV fueling infrastructure may not be available. SCPPA also encourages CARB to consider extending the three-year phase-in delay for a POU fleet segment that is based in, and operates out of, one of the designated low-population counties in Northern California even if other fleet segments operate out of different counties, as the same circumstances and challenges would apply.

## V. Conclusion

In addition to the specific recommendations above, SCPPA urges CARB to recognize the critical services that public electric utilities like SCPPA's Members provide and to ensure the Advanced Clean Fleets rule accommodates operational needs as MHD market segments begin to transition to ZEV. This recognition can come in many forms, including exemptions, rule timing, or other accommodations.

SCPPA looks forward to working with staff on this important issue as the rulemaking progresses and appreciates the opportunity to submit these comments. Please do not hesitate to contact me at (916) 839-8542 or klarson@scppa.org if you have any questions. Thank you for your time and attention.

Respectfully submitted,

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