



October 29, 2021 | Submitted Electronically

Craig Segall
Deputy Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95812

RE: Follow-Up Comments on the Advanced Clean Fleets Proposal for Public Fleets

The Southern California Public Power Authority¹ (SCPPA) and Northern California Power Agency² (NCPA) appreciate the opportunity to provide additional comments on the California Air Resources Board's (CARB) Advanced Clean Fleets (ACF) proposal for public fleets released to support CARB's September 9, 2021 workshop. SCPPA and NCPA each previously submitted comments dated September 27, 2021³ and outlined in detail our significant concerns with several key elements of the public fleets proposal. Our principal concerns, which still remain, regard the need for a workable emergency response exemption and the need for feasible purchase options for public fleets if zero-emission vehicles (ZEVs) are not available or accessible through public agency procurement processes to replace existing vehicles on a 1:1 basis. Our original comments propose potential solutions to resolve our concerns while welcoming alternatives that would equally address them. Additionally, we requested additional workshops and at least one more pre-rulemaking regulatory draft on this significant rule for stakeholder discussion.

SCPPA and NCPA incorporate our respective September 27th comments by reference here and look forward to working through those issues. We now offer additional comments in the spirit of further advancing progress on the draft rule, based on CARB's recent workgroup meetings for public and high-priority fleets, the publication of Q&As from the September 9th workshop, and other stakeholder suggestions.

¹ SCPPA is a Joint Powers Authority (a public agency), created in 1980, for the purpose of providing joint planning, financing, construction, and operation of transmission and generation projects. SCPPA's 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 publicly owned electric utility (POU) governed by a board of local officials. Our Members collectively serve nearly five million people throughout Southern California. Together they deliver electricity to over two million customers throughout Southern California, spanning an area of 7,000 square miles. On behalf of SCPPA Members, SCPPA is part of (through ownership and contracts) 35 operational generation facilities and 946 miles of transmission.

² NCPA was established in 1968 by a consortium of locally owned electric utilities to make joint investments in energy resources that would ensure an affordable, reliable, and clean supply of electricity for customers in its member communities. NCPA members include municipalities, a rural electric cooperative, and other publicly owned entities for which the not-for-profit agency provides such services as the generation, purchase, aggregation, scheduling, and management of electrical energy. NCPA Members are: the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, Shasta Lake, and Ukiah, Plumas-Sierra Rural Electric Cooperative, Port of Oakland, San Francisco Bay Area Rapid Transit District, and Truckee Donner Public Utility District – collectively serving nearly 700,000 electric consumers in Central and Northern California.

³ SCPPA [comments](#) dated September 27, 2021; NCPA [comments](#) dated September 27, 2021.

Emergency Response Vehicles

- **Workable exemption needed for emergency response vehicles.** We reaffirm our September 27th comments urging CARB to develop a workable exemption for emergency response vehicles that recognizes publicly owned electric utilities (POUs) as essential public service providers. The emergency response exemption must not limit our capacity to rapidly respond to electricity outages or other emergencies when extreme weather events or other disasters damage vital infrastructure. In these instances, POU vehicles respond to emergencies and remain on the jobsite, sometimes for days or weeks on end, to power the equipment needed to replace or repair the critical infrastructure. Utilities' ability to rapidly restore power and ensure safety hinges on having reliable vehicles that can be refueled in the field.

SCPPA and NCPA agree with the multitude of other stakeholders who have similarly explained in written or oral comments that CARB's current proposal, which preconditions exemptions for emergency response vehicles on already transitioning 75% of that same body type in the fleet to ZEVs, is unworkable.⁴ SCPPA and NCPA urge CARB to strike this condition as currently proposed. Further diminishing the meaningful availability of staff's proposed exemption is the requirement to demonstrate that adequate charging infrastructure is not available. Charging infrastructure requires electricity. As was noted in both written and oral comments, the existence of charging infrastructure is moot if the power is out and emergency vehicles are needed to respond to outages and repair electricity infrastructure but are unable to recharge.

SCPPA and NCPA, like several other parties, provided workable alternatives that address the stated concerns without compromising the regulation's objectives. We believe that our proposals to allow POU governing boards to determine, through a public process, which fleet vehicles are necessary for emergency response represents the best path to ensuring POUs can maintain grid reliability and keep the power on while also providing local oversight and accountability. SCPPA and NCPA are both open to exploring other emergency response exemption criteria, provided that such criteria recognize that both vehicle usage and body type can determine the emergency response role. We suggest CARB dedicate a future working group meeting to emergency response exemption criteria.

In response to CARB staff's request for more specific examples of emergency response vehicles, we incorporate by reference the November 10, 2020 comments⁵ of the Specialty Vehicle Coalition, for which SCPPA is also a signatory, that includes examples and photos of specialty vehicles that support emergency response functions of essential public services.

Defining Vehicle Availability

- **Zero-emission vehicles must be able to replace internal combustion engine (ICE) counterparts on a 1:1 duty-cycle basis.** SCPPA's September 27th comments explained that requiring public fleets to purchase more than one ZEV if a single vehicle cannot perform the necessary duty cycle is impractical and unreasonable, and would result in significantly higher compliance costs. SCPPA and NCPA offer the additional explanations below in response to the recently published Q&A responses⁶ for the September 9th workshop, which noted that matching 1:1 vehicle replacements "may not be possible" and requested information on the impact of purchasing multiple zero-emission vehicles to replace a single existing one.

⁴ See, for example, [comments](#) from SCPPA dated September 27, 2021; [comments](#) from NCPA dated September 27, 2021; [comments](#) from the California Municipal Utilities Association dated October 5, 2021; [comments](#) from the Sacramento Municipal Utility District dated October 4, 2021; [comments](#) from the Association of California Water Agencies dated September 27, 2021; and [comments](#) from Southern California Edison dated October 12, 2021.

⁵ Specialty Vehicle Coalition [comments](#) dated November 10, 2020.

⁶ [Q&A](#) for the September 9, 2021 workshop, row 302.

One immediate impact of purchasing more than one ZEV to replace an ICE vehicle is higher upfront capital costs for the extra vehicle(s). The Total Cost of Ownership Document has already noted that increased upfront costs are going to be significant,⁷ without factoring in the need for more than one new ZEV to replace an existing ICE vehicle. Additional staff time would also be required for maintaining, operating, coordinating, and keeping records for the extra vehicle(s), adding to the costs. This is particularly problematic given that the extra vehicle would be redundant and underutilized. Another potentially significant impact is the need for more staff to operate the vehicles, as two vehicles would now be required to respond where only one is currently required. Beyond the additional cost incurred staffing more crews, many POU's have been experiencing labor shortages as line crews are in high demand for wildfire mitigation and other emergency response roles elsewhere in the state and across the country. If multiple ZEVs are needed to do the work of one ICE vehicle and line crews are limited, this could lead to compounding costs and/or delays.

SCPPA and NCPA urge CARB to return to the concept of 1:1 ICE to ZEV replacement that was presented at CARB's March workshops, in which fleets would only be required to purchase a ZEV that is capable of performing the same duty cycle as the vehicle being replaced.⁸ However, should CARB reject this important premise, we reiterate our respective September 27th comments that the cost assumptions document must be updated to reflect the costs of purchasing multiple ZEVs to do the work of a non-ZEV that it is intended to replace.

- **Technology Review and Commercialization Determination.** Utility fleet operators are already exploring the transition to ZEVs; this is not a matter of if, but when. However, the timing and successful achievement of this transition hinges on ZEVs being available and meeting the fleet's needs. NCPA's and SCPPA's respective September 27th comments explained the need for public fleets to have realistic options to replace fleet vehicles when ZEVs are not technologically, commercially, or practically available for the needed duty cycle. To help resolve this issue, SCPPA suggested that CARB post on its website annually a list of ZEVs by January 1 each year that are "available" for each duty cycle. Availability criteria would include, at minimum, certifications that the vehicle is in production and readily available for purchase on the market, meets minimum service availability requirements based on performance data and testing, and has manufacturer warranty and parts support. If no ZEV or near zero-emission vehicle (NZEV) was listed as "available" for the specific application for that year, public fleets would have the option of purchasing non-ZEVs to meet their needs. CARB's proposed concept of requiring fleets to defer vehicle purchases if a ZEV is not available or does not meet the fleet's needs, rather than replacing older, used, or otherwise past end-of life vehicles with the best available technology, should be abandoned. Delaying the procurement of necessary vehicles compromises the ability of POU's to safely maintain their utility infrastructure. It would also be likely to result in additional expenditures in maintaining and repairing older or out-of-warranty vehicles.

The concept of ensuring availability in advance of requiring a purchase mandate is widely supported. Multiple stakeholders have explained the need for ZEVs to be certified as "available" based on specified minimum criteria or expressed support for the concept in written comments or during CARB's workgroup meetings. Several commenters have proposed the concept of an independent technology review committee that would meet annually or biennially to assess status of ZEV technology, market availability, and performance, and either provide exemptions or adjust compliance targets accordingly.⁹ NCPA and SCPPA agree these important components of ZEV availability, and further suggest that it include an established training program

⁷ Refer to Draft Total Cost of Ownership Document at https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf.

⁸ See, for example, Slide 33 of CARB's March 2/March 4 workshop [slides](#), which indicate an exemption process for public fleets "[i]f no ZEV is available or cannot meet fleets needs."

⁹ See, for example, [comments](#) from the Sacramento Municipal Utility District dated October 4, 2021, and [comments](#) from the [California Municipal Utilities Association](#) dated October 5, 2021).

to ensure that the nascent technologies can be properly maintained. It is not enough to merely have ZEVs available for purchase; there must also be processes in place to ensure that the ownership of these vehicles can be supported and maintained, including adequate training for a workforce that will be dealing with the new technologies.

SCPPA and NCPA support the concept of an independent technology advisory committee. We believe such an advisory committee has the potential to substantially mitigate risks for both fleets and manufacturers associated with technology readiness and supply chain availability, as well as reduce the need for individually granted exemptions. The ultimate success of such an advisory committee would be contingent on several factors, including: organizational independence; clear, predefined criteria for assessing performance capabilities, service reliability, and supply of ZEV chassis and upfitted vehicles; established parameters for ensuring available training facilities and workforce to maintain the ZEVs; and a clear, predefined process for how the results of the committee's assessment will adjust or exempt fleets from ZEV purchase requirements if the specific ZEV application is not available.

SCPPA and NCPA recommend that CARB convene a working group dedicated specifically to exploring the technology advisory committee concept. While we believe a technical advisory committee could go far to ensure the successful implementation of the ACF regulation, we also note the concept of an independent technology review committee does not obviate the need for specific exemptions for certain emergency response vehicles or when ZEVs are not accessible to POUs, either through the public agency procurement process or because their purchase would significantly impact rate affordability.

Purchase Requirement (As Currently Proposed)

- **Proposal Structure.** CARB's ACF proposal for public fleets is structured exclusively as a purchase requirement, whereas the proposal for high-priority fleets is structured as a "fleet rule". While SCPPA and NCPA believe important adjustments are needed to make the purchase requirement implementable, the purchase requirement structure is appropriate for most publicly owned fleets. We recognize, however, that public fleets throughout the state are highly diverse in their operations, size, and geography, among other factors, and in light of these distinctions, some stakeholders have suggested public fleets be allowed to voluntarily opt in to the high-priority fleets requirements. SCPPA and NCPA believe that this idea may have merit, and suggest this optionality be more thoroughly explored by CARB and stakeholders, to fully assess the implications of allowing such an option.

Purchase Start Dates. As currently proposed, the majority of public fleets must purchase 50% ZEVs beginning in 2024 and 100% ZEVs beginning in 2027. However, pandemic-induced supply chain issues and labor shortages have roiled vehicle production, and have resulted in backlogs for existing vehicle orders that could take more than a year to resolve. As many stakeholders have noted in written and oral comments, CARB's optimistic vehicle availability projections for the ACF rulemaking do not match what fleet operators are seeing on the ground. Furthermore, the projections lack consistency with the analysis on foreseeable supply chain issues discussed in the September *Report to the Governor on Priority SB 100 Actions to Accelerate the Transition to Carbon-Free Energy*¹⁰ (Priority Action Report) prepared by CARB, the California Energy Commission, California Public Utilities Commission, and the California Independent System Operator.

The report states the following on battery supply chain issues:

"Throughout 2020 and 2021, the world's shipping markets were severely disrupted due to COVID-19. Likewise, the manufacturers of energy technologies (including battery, wind and solar, as well

¹⁰ <https://www.energy.ca.gov/sites/default/files/2021-09/CEC-200-2021-008.pdf>.

as gas turbines) suffered from manufacturing disruptions. The rapid expansion of the battery applications in transportation, BTM building applications, and utility scale projects has created another supply chain challenge as manufacturers try to manage the competing demands from different market sectors. *Supply chain disruptions and constraints are likely to continue for the foreseeable future* [emphasis added] and pose a challenge to the state's objectives of ensuring near-term reliability and achievement of SB 100 goals."

What the Priority Action Report highlights is not an isolated incident, and these disruptions and constraints impact more than just the battery technology needed for EVs.

SCPPA and NCPA believe that stakeholders' proposals to adjust the purchase requirement start date in recognition of supply chain constraints and technology readiness have merit and should be further explored. For example, Metropolitan Water District's (MWD)¹¹ proposes to link the ACF purchase requirement start dates to three and six years from the regulation effective date, respectively, which has the potential to alleviate short-term supply issues by providing additional lead time for OEMs to resolve shortages, address backlogs, and start ramping up ZEV production before public fleets must purchase ZEVs. It could also complement the technical advisory committee concept, which would require time to organize and develop first reports following the regulation effective date, which is likely no earlier than mid-2023, based on CARB's projected rulemaking schedule. Moreover, the additional lead time would help avoid compressing public agencies budgeting processes, especially for FY 2024 and 2025 purchases. As multiple stakeholders mentioned during the recent workgroup meetings, mandating compliance three to four years after the effective date of the ACF regulation would accommodate the complex budgeting processes public agencies are required to follow as stewards of public funds. In addition, some stakeholders suggest linking the purchase requirement start date based to a determination from the technical advisory committee, which could similarly help alleviate supply chain and budgeting issues. SCPPA and NCPA urge CARB to consider and discuss these proposals at future public fleets workshops or working group meetings.

SCPPA and NCPA also suggest CARB explore the concept of phasing the public fleets purchase requirement by gross vehicle weight rating (GVWR) or body type. The high-priority fleets proposal recognizes that specialty vehicles will take longer to develop and come to market, with the first phase-in milestone occurring in 2030. Incorporating a similar concept into the public fleets purchase requirements could lessen the need for fleet-specific exemptions.

Other

- **Definition of Specialty Vehicles.** SCPPA's September 27th comments proposed temporarily modifying the definition of NZEVs for utility specialty vehicles to include hybrid vehicles with electric power takeoff (PTO) until NZEVs with minimum all-electric drive ranges become available for those specialty vehicle concepts. SCPPA had previously suggested using the same definition of specialty vehicles that is currently proposed for high-priority fleets; however, following the October 13th high-priority fleets working group meeting, CARB staff suggested that most vehicles with PTO would not be considered specialty vehicles and the meaning of "custom built vehicle" is unclear.

For clarity, SCPPA and NCPA recommend that CARB adopt the definition of specialty vehicles that was previously proposed by the Specialty Vehicle Coalition early in the rulemaking process:¹²

"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

¹¹ Refer to Metropolitan Water District [comments](#) dated October 5, 2021.

¹² Specialty Vehicle Coalition [comments](#) dated April 2, 2021.

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.”

- **Definition of NZEV.** NCPA’s September 27th comments recommended that the definition of NZEV include renewable fuel and other low-emission vehicles as a bridging technology until ZEVs or NZEVs are available. Doing so would allow public fleets to achieve near-term GHG and criteria pollutant reductions, while also recognizing existing investments in low-emission technologies. Without this explicit recognition in the ACF regulation, CARB risks creating a regulatory framework that would dampen public agencies’ investments in proven, near-term emissions reductions, and potentially strand millions of public dollars invested in these early actions. This concern has been raised in other stakeholder comments as well.¹³ SCPPA and NCPA suggest that CARB and other stakeholders explore this concept.
- **Availability of Infrastructure.** As many stakeholders have emphasized in written and oral comments, the importance of having the infrastructure in place to support the ACF mandate cannot be understated. NCPA and SCPPA support CARB’s announced plan for further stakeholder engagement and targeted discussions on infrastructure needs and buildout. We urge CARB to ensure that the sufficiency and availability of infrastructure is not siloed from the actual purchase mandate, and reaffirm the need for utilities to have early information on fleets operating in their service territories, as detailed in SCPPA’s September 27th comments, to plan the transmission and distribution system upgrades needed to support ZEV charging infrastructure. It is imperative that CARB address the availability, lead time, and costs of the infrastructure need to support the ACF in tandem with the purchase mandate, as they are inexorably linked.

Conclusion

SCPPA and NCPA appreciate CARB staff’s efforts on the Advanced Clean Fleets proposal and encourage staff to continue building out a robust public pre-rulemaking process to develop the rule through additional workshops and draft regulatory language. We are committed to helping CARB develop a successful and durable rule that can transition the state’s MHD fleets to ZEVs, when and where feasible. We look forward to working with CARB staff, other stakeholders, and CARB Board Members on solutions to ensure this important rule can be implemented without adverse consequence on the safe and reliable provision of electricity that is needed to support the state’s transportation electrification goals.

¹³ See, for example, Metropolitan Water District [comments](#) dated October 5, 2021, and Los Angeles County Solid Waste Management Committee [comments](#) dated September 27, 2021.