THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

October 17, 2022

Submitted via Electronic Portal

Liane M. Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

**SUBJECT: Metropolitan's Public Comments on the Proposed Advanced Clean Fleets Regulation**

Dear Chair Randolph and Members of the Board,

The Metropolitan Water District of Southern California (Metropolitan) appreciates the opportunity to comment on the California Air Resources Board's (ARB's) Proposed Advanced Clean Fleets Regulation—State and Local Government Agency Fleet Requirements (Proposed ACF) dated August 30, 2022. Metropolitan supports the overall goal of transitioning to zero-emission vehicles (ZEVs). As a public water provider, Metropolitan's core mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

As part of a holistic, sustainable, and resilient approach, Metropolitan makes the following specific recommendation to the Proposed ACF:

- For essential water service providers, maintain the 2024 50% ZEV purchase requirement compliance date, but extend the 100% ZEV purchase requirement from the currently proposed date of 2027, to 2030. The three-year extension will provide additional time for the zero-emission (ZE) medium-and-heavy duty vehicle market to mature and be vetted; allow charging infrastructure installation to scale up; and facilitate a reasonable transition for water providers, without compromising public health and safety.

  This balanced approach would retain the public entity requirement to begin the ZEV transition in the 2024 timeframe for vehicles that have duty cycles suited for current ZE technology, while allowing the necessary time to plan and identify the best technology for more challenging duty cycle scenarios—without jeopardizing essential water services that could impact public health and safety.

In addition, Metropolitan supports the Association of California Water Agencies (ACWA), California Municipal Utility Association (CMUA), and the California Council for Environmental and Economic Balance (CCEEB) recommendations to streamline the Proposed ACF fleet exemption process in the following areas:

- Adequately define "commercial availability" and consider delivery timelines, cost considerations and true 1:1 replacement specifications (i.e., payload capacity, towing capacity, 4x4 capability, power take-off devices, utility boxes);
- Develop a ZEV Availability List to affirm commercial availability of ZEVs and replace the current ZEV Unavailability List approach;

- Reclassify the "mutual aid assistance" exemption as an "emergency response" provision and revise the criteria to reflect the operational realities under which publicly owned utilities, water agencies, and other essential public service providers operate; and
- Expand the Infrastructure Construction Delay Extension to incorporate realistic planning, design, and installation timeframes.

The rationale for these recommendations is provided below.

**Background**

Metropolitan is a regional water wholesaler that delivers approximately two million acre-feet of water per year to 26 member public agencies, who in turn provide water to nearly 19 million people in Southern California. As the largest distributer of treated drinking water in the United States, Metropolitan's service area spans approximately 5,200 square miles throughout Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties. In addition, Metropolitan owns and operates an extensive range of facilities including the Colorado River Aqueduct, 15 hydroelectric plants, nine reservoirs, 830 miles of large-scale pipes, and five water treatment plants.

*Operational and Emergency Response Mandates*
Metropolitan's Emergency Management and Business Continuity Operating Policy dictates that Metropolitan must maintain sufficient resources (i.e., personnel, material, and equipment) to repair two major simultaneous pipeline failures. Major pipe failures may be the result of an earthquake, man-made accidents, or simple deterioration. These pipe failures can occur anywhere within Metropolitan's 5,200 square-mile service area in the Southern California coastal plain, or along our Colorado River Aqueduct system that spans the Mojave and Sonoran deserts. To respond to these and other emergencies (e.g., wildfires, critical infrastructure repairs, mutual aid requests), standby staff are prepared to mobilize to any emergency directly from home.

Additionally, to maintain Metropolitan's vast water distribution system, staff perform routine preventative and corrective maintenance activities throughout the year. On average, Metropolitan annually conducts 35 large-scale, planned shutdowns of portions of its water system for maintenance or improvements necessary to maintain its critical infrastructure and ensure safe and reliable water deliveries to the Southern California region. These projects vary in duration and location but can span one week or up to several months, often working around the clock, to complete.

*Sustainability Initiatives*
In May 2022, Metropolitan adopted a Climate Action Plan (CAP)[1] that details ambitious strategies to achieve carbon neutrality by 2045. Among the key strategies detailed in Metropolitan's CAP is the transition to a ZE fleet, all the while continuing to meet mandated public service requirements and maintaining reliable water delivery.

To assist in the transition, Metropolitan conducted a study to assess its 900-vehicle fleet, 60% of which are subject to the Proposed ACF (i.e., Class 2B-3 medium-duty trucks to Class 8 tractors) in order to identify vehicle characteristics (e.g., weight class, fuel type, body configuration) and operational demands (e.g., duty cycles, miles driven, power-take-off devices). The results showed that about 50% of the medium-and heavy-duty vehicles operate in difficult duty cycles, including towing, powering auxiliary equipment, and/or operating in off-road areas.

[1] The Metropolitan Water District of Southern California, *Climate Action Plan*, May 2022. (Web link: https://www.mwdh2o.com/media/12469/final-cap.pdf, last accessed October 2022).

This study, coupled with a third-party market assessment, revealed the current lack of available ZE options in the medium-to-heavy duty sector, as has been expressed by many public and private entities working diligently to comply with the requirements of the Proposed ACF.

While Metropolitan recognizes that technology and vehicle capabilities will continue to develop, there is concern that the regulation, as proposed, may hinder our ability to maintain and operate critical infrastructure in the near term.

As such, the following recommendations and case study is presented to ARB for consideration.

**Comments**

***For essential water service providers, extend the 100% ZEV purchase requirement from 2027 to 2030***

The recent extreme heat and grid reliability event that gripped California and the western U.S. during the first two weeks in September exemplifies the need for action to fight climate change and its escalating effects. The insufficient grid capacity highlights the need for public water agencies to be able to respond effectively to maintain and repair critical infrastructure—with the assurance that vehicles will be able to be charged and ready for service. For the overall benefit of the public, the final ACF regulation must support these mandates.

Therefore, extending the 100% ZEV purchase requirement to begin in 2030 will allow additional critical time for ZEV manufacturers to design and manufacture medium-to-heavy duty vehicles that meet the performance standards of water providers' existing in-use vehicles, and for public and privately accessible infrastructure to be ramped up to meet an increasing power demand. The impact of extending the 100% ZE purchase deadline would be minimal since public agencies comprise only 15%[2] of the overall Class 4-8 ACF population, with water providers being a smaller subset of the 15%.

Furthermore, the 2030 date aligns with ARB's projection of positive total cost of ownership. Allowing agencies to devote limited resources toward drought resiliency during this extension is an appropriate and responsible use of public funds.

**Case Example – Metropolitan's Upper Feeder Shutdown**

At the outset of the September Extreme Heat Event proclaimed by the Governor, which resulted in an extended Flex Alert[3] to limit electric vehicle charging, Metropolitan had already scheduled a two-week emergency shutdown of a critical section of pipeline for the Upper Feeder that conveys Colorado River water into Southern California. This shutdown impacted over four million residents in the greater Los Angeles County area who were called upon to stop outdoor watering for 15 days to preserve the region's very limited water supplies from Northern California this year due to the record drought. To meet the aggressive timeline for this leak repair and restore the Upper Feeder within two weeks, Metropolitan crews were required to work 24/7 under very challenging circumstances. These emergency conditions included extreme temperatures, hurricane winds and storm cells, as well as a large wildfire in the Hemet area that threatened our facilities. Vehicles and equipment were pulled from across our vast service area,

[2] California Air Resources Board, *Public Hearing to Consider the Proposed Advanced Clean Fleets Regulation. Staff Report: Initial Statement of Reasons*, August 30, 2022. (Web link: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/isor2.pdf, last accessed October 2022).
[3] California Independent System Operator, *California ISO extends Flex Alert to Thursday Sept. 1., August 31,2022. (*(Web link: https://www.caiso.com/Documents/california-iso-extends-flex-alert-to-thursday-sept-1.pdf, last accessed October 2022).

as they needed to possess off-road capability and power auxiliary equipment that could operate for extended durations during this shutdown.

Some of the critical needs for Metropolitan's fleet to ensure our readiness to perform the work necessary for this emergency shutdown included the following:

- Work schedules – each day, crews for each shift mobilized at their typical domicile, drove to the shutdown location, and operated vehicles for the entirety of their 13-hour shift. As indicated earlier, these shifts were scheduled around the clock.
- Response vehicles and equipment – the vehicles on-site consisted of 18-line trucks (Class 4 and 5) and one utility truck (Class 6 or 7). These trucks were heavily outfitted with cranes, compressors, generators, and welders. Portable equipment such as blowers and generators were also towed to the site by these vehicles at the start and end of the shutdown and on an as-needed basis.
- On-site worker health and safety – due to the remote nature of this work, the vehicles were also needed to provide shelter for staff from the extreme weather during their shifts.

As presented in this real-world example, the critical work performed to meet the aggressive timeline could not have been executed with ZE vehicles that had not been fully vetted to perform in such extreme conditions, and with such high energy demands—particularly for heavier vehicles (Class 4 and above) which are generally the workhorses for Metropolitan and water purveyors. Also, not having accessible charging infrastructure would prove detrimental in such emergency shutdown events. During the September heat wave, the state called upon consumers to refrain from charging electrical vehicles during peak hours to protect the stressed electrical grid. Emergency conditions for the power grid can often coincide with water system emergencies (such as wildfires and earthquakes)—as was the case last month during the extreme heat event—which further heightens the need for reliable fleets to ensure essential water service. Therefore, allowing a three-year extension would create a much-needed buffer timeline to allow both ZE vehicle technology to mature, and the required charging infrastructure to expand.

***Establish a Clear Commercial Availability Definition and Practical Exemption Process***

Since 2019, Metropolitan has met with ARB rulemaking staff and board members, both individually and as part of ACWA, CMUA, and CCEEB working groups, to discuss the overall impacts of the Proposed ACF on public entities. While Metropolitan appreciates ARB's efforts to create an exemption process when either ZEVs or NZEVs are not commercially available or the charging infrastructure is unavailable, the medium- and heavy-duty vehicle market is not ready to support the water sector. As mentioned above, water agencies' fleets comprise significantly less than 15% of the overall Class 4-8 ACF population and have various specialized needs for successful operation. Given the limited number of these specialty vehicles, the vehicle manufacturers are not ready to support these niche applications at this time.

As such, Metropolitan supports the following specific recommendations posed by ACWA, CMUA, and CCEEB to streamline the ACF exemption processes in the following key areas:

- Adequately define "commercial availability" and consider; delivery timelines, cost considerations and 1:1 specifications (i.e., duty cycle, power-take-off), when compared to internal combustion engine (ICE) vehicles. Not properly defining this term will create multiple interpretations and may result in delays when processing ZEV unavailability exemption requests;
- Develop a ZEV Availability List to affirm commercial availability of ZEVs and replace the current ZEV Unavailability List approach. A ZEV availability list will enable public entities to assess more quickly what is "commercially available" to replace ICE vehicles within their fleet, thus expediting ZEV unavailability exemption requests when required;

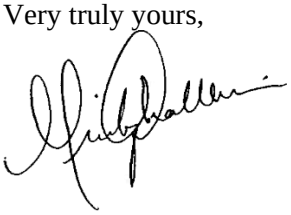
- Reclassify the "mutual aid assistance" exemption as an "emergency response" provision and revise the criteria to reflect the operational realities under which POUs, water agencies, and other essential public service providers operate; and,
- Expand the Infrastructure Construction Delay Extension to incorporate real world conditions. The recent heat wave is evidence of the need for the state to thoroughly assess the reliability of the grid to sustain the increased megawatt energy demand within the next few years. Requiring entities to purchase ZEVs without the proper and robust charging infrastructure in place will result in stranded assets and threaten response times for major water service disrupting emergencies.

These key changes are critical to the successful implementation of the Proposed ACF.

**Conclusion**

Thank you again for the opportunity to comment on the Proposed ACF. Metropolitan looks forward to working with ARB on this transformative issue and asks that ARB adopt our recommendations to enable essential water providers to make the successful transition to ZE vehicles without compromising our public health and safety mandate. If you have questions or need additional information, please contact Carol Kaufman [cykaufman@mwdh2o.com, (213) 217-6207] or Kiersten Melville [kmelville@mwdh2o.com, (213) 217-7187].

Very truly yours,



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