THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

April 6, 2023 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 15-day Changes to the 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 15-day changes to the Advanced Clean Fleets Regulation—State and Local Government Agency Fleet Requirements (Proposed ACF) dated March 23, 2023. Metropolitan supports the overall goal of transitioning to zero emission vehicles (ZEVs) to meet the state's various air quality improvement and greenhouse gas emission reduction goals. 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. However, as drafted, the Proposed ACF will not give public fleets the ability to make a compliant ZEV transition without significantly impacting service and reliability.

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.
Metropolitan adopted a Climate Action Plan (CAP)[1] in 2022 that details ambitious strategies to achieve carbon neutrality by 2045. Among the key strategies detailed in Metropolitan's CAP is the transition to a ZEV fleet, all the while continuing to meet mandated public service requirements and maintaining reliable water delivery. Metropolitan is actively assessing its vehicle fleet and infrastructure capacities to align with the current and future vehicle and grid projections to optimize the conversion to ZEVs.

[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 April -2023).

To successfully transition our fleet of over 500 medium- and heavy-duty vehicles while meeting our reliability mandates, Metropolitan has actively engaged in both the Advanced Clean Truck (ACT) and the ACF rulemaking processes over the last four years. We have participated in numerous workshops, met directly with ARB rulemaking staff and Board members, worked with various sister agencies and professional organizations, and submitted multiple comment letters and emails, all with the goal of ensuring the workability of the final regulations for public agencies to meet our service responsibilities. Metropolitan's two previous comment letters are attached for reference (see Attachments 1 and 2).

Comments

The Proposed ACF must provide realistic target compliance dates for public fleets, specifically water providers

Metropolitan's fundamental request remains unchanged--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 (see Attachment 2 for more details). Essential water providers need more options in the ZEV marketplace, and development of the accompanying infrastructure to advance in order to fully implement the ACF rule in a safe and reliable way. Otherwise, water agencies may not be able to ensure public health and safety, either during normal operations and maintenance or in the event of emergency outages.
Metropolitan's request for extended compliance time is based on the following concerns:

- Manufacturer Availability of ZEV Vocational Work Trucks—Metropolitan's critical operations are supported by the Class 3-6 vocational work trucks that have been outfitted specifically for water system operational needs and 24/7/365 incident response. While the ACT required manufacturers to meet sales percentages beginning in 2024, priority was placed on the development of drayage and delivery vehicles; hence the introduction of vocational work trucks into the marketplace has been slow. Therefore, the public fleet compliance dates should reflect the pace of manufacturer development of the workhorse vocational trucks, rather than that of drayage and delivery trucks.
- ZEV Purchase Dates—The January 1, 2024, effective date of the public fleet ZEV purchasing pathway (less than a year away) is not in alignment with the ARB ZEV Purchase Exemption List which may not be available until January 1, 2025. Additionally, under the ACT, beginning in 2024 manufacturers will only just be starting to meet the phased-in sales percentages for medium- and heavy-duty trucks. Public agencies need proven, commercially available vehicles to maintain reliable service for the environs receiving water service.
- Infrastructure Availability—The Governor's Executive Order B-48-18 set a goal of having 250,000 vehicle charging stations and 200 hydrogen fueling stations installed throughout the State by 2025. Per the California Energy Commission (CEC) Zero Emission Vehicle and Infrastructure Statistics dashboard, as of April 4, 2023, the State

has installed only 87,707 public and shared chargers and 69 hydrogen refueling stations[2]. To allow the required time to develop and install the infrastructure as directed by the Executive Order, the ACF public fleet purchase requirement implementation dates should be aligned with the State's infrastructure goals.

Public Budgeting Process—As one of the planning aspects to comply with the ACF, Metropolitan is assessing the costs to transition to a ZE medium- and heavy-duty fleet. For our 500 plus vehicles, the budget may reach upwards of $130 million—a figure that does not include infrastructure and other ZEV regulated equipment costs. To allow adequate planning to meet these significant expenditures, the ACF purchasing compliance dates must provide necessary time to develop a balanced, comprehensive budget to realistically fund multiple ZEV purchases.

Metropolitan Requests that ARB conduct frequent "Pause and Assess" periods

Upon adoption and implementation of the ACF, it will be critical for ARB to perform frequent reviews of the ability of affected entities to comply with the regulation and the complex exemption process. During the assessment periods, ARB should:

1. Clarify and streamline the exemption process based on real-world experience.
2. Adjust compliance dates based on progress towards meeting both the State's infrastructure goals and growth of the ZEV marketplace, especially in the vocational vehicle arena.

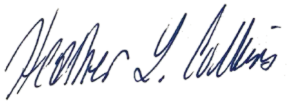
Through the review process, ARB may quickly address and resolve unanticipated issues (i.e., that may arise in the exemption process, with compliance dates due to manufacturer supply chain issues, or in provisions that impact public fleet reliability mandates). As such, Metropolitan urges ARB to conduct "Pause and Assess" periods, at the end of each compliance year, for the first three years of implementation.

[2] California Energy Commission, Zero Emission Vehicle and Infrastructure Statistics (Web link: https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics, last accessed April-2023)

Conclusion

We look forward to working with ARB on the finalization of the Proposed ACF and look to ARB to incorporate 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,



Heather Collins, P.E.
Assistant Group Manager (Interim),
Water System Operations

Attachment 1—MWD Comment Letter on the Proposed Advanced Clean Fleet Rule October 2021

Attachment 2—MWD Comments on the 45-Day Rulemaking ACF Draft October 2022

ATTACHMENT 1

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

October 5, 2021

Submitted via electronic portal:
https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=acf-comments-ws&comm_period=1

Mr. Tony Brasil
Mobile Source Control Division
California Air Resources Board
1001 I Street
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Mr. Craig Duehring
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California Air Resources Board
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Mr. Paul Arneja
Mobile Source Control Division
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1001 I Street
Sacramento, CA 95814

SUBJECT: Metropolitan's Informal Public Comments on the Proposed Advanced Clean Fleets Rulemaking

Rulemaking Staff,

The Metropolitan Water District of Southern California (Metropolitan) appreciates the opportunity to comment on the California Air Resources Board's (ARB's) Advanced Clean Fleets Regulation Proposed Draft Regulation Language- Public Fleet Requirements (ACF Draft) dated September 9, 2021. As an environmental steward, Metropolitan supports the overall goal of transitioning away from fossil fuels to zero-emission (ZE) technologies and we appreciate ARB's leadership to move the state in this direction. As an essential water provider with mandated public service requirements, Metropolitan has been actively pursuing this transition, and is in the process of characterizing our vehicle inventory, reviewing technology options, and researching vehicle manufacturers and vendors to understand the commercial availability of candidate vehicles. However, to better support public agencies and the proposed provisions placed on them by the ACF Draft, Metropolitan recommends that ARB consider the following:

- Recognize the operational constraints of public fleet vehicles and the need for available ZE fueling infrastructure;
- Establish clear and feasible purchase alternatives to give public agencies the ability to procure dependable and reliable vehicles with the lowest emissions possible that are commercially available at the time they are needed; and
- Allow for commercially available, proven technology that provides near-term greenhouse gas (GHG) reductions and criteria pollutant reductions to bridge the gap until Zero-Emission Vehicles (ZEVs) become more widely available.

As such, Metropolitan offers the following comments to clarify and improve the practical implementation of the ACF Draft regulation.

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.

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.

In order to meet reliability demands, Metropolitan owns and maintains a fleet of over 500 vehicles that are subject to the ACF Draft (i.e., Class 2B-3 medium-duty trucks to Class 8 tractors). Many of these vehicles are considered "specialty vehicles" that were specifically outfitted to meet Metropolitan's operational needs. While these specialty vehicles may not consistently travel long distances, they may be required to do so under certain circumstances and/or may be required to operate continuously for up to 24 hours at a project site under extreme conditions (e.g., inclement weather, rough terrain, remote locations).

General Comments

To allow Metropolitan and other public fleets to meet service and reliability mandates, it is critical that the performance capabilities—namely duty cycles—of new ZEVs are fully vetted before requiring them to be purchased. Metropolitan must maintain a 1:1 replacement ratio for new vehicles that also match existing duty cycles.

Additionally, having available infrastructure that is appropriate and accessible, especially in remote locations, is a vital success factor for public fleet compliance with the ACF Draft requirements. The January 26, 2018 Governor's Executive Order B-48-18 set a goal of having

250,000 vehicle charging stations and 200 hydrogen fueling stations installed throughout the state by 2025. Per the California Energy Commission (CEC) Zero Emission Vehicle and Infrastructure Statistics dashboard (last updated July 30, 2021), the State has installed 74,459 public and shared chargers and 52 hydrogen refueling stations. It is concerning that in the almost four years since the promulgation of the Executive Order, the state has not yet achieved 50% of the goal. This underscores the overall difficulty of ZE infrastructure installation, which is compounded by the size and scale of medium- and heavy-duty vehicles. To allow adequate time to develop and install the infrastructure as directed by the Executive Order, the ACF Draft public fleet purchase requirement implementation dates should be aligned with the State's infrastructure goals. In the event that viable ZEVs and associated infrastructure options are not readily available before the ACF Draft public fleet compliance dates become effective, it is imperative that ARB provide sufficient flexibility for purchasing options.

Specific Comments and Recommendations

Section 95693. Public Fleets Applicability, Definitions, and General Requirements

Addition of Definitions for "Commercial Availability" and "Specialty Fleet Vehicles"

Including definitions for "Commercial Availability" and "Specialty Fleet Vehicles" will assist public entities in identifying qualified ZEVs and/or alternative fueled vehicles that meet unique operational requirements and time constraints. During the September 9, 2021 ACF workshop, several stakeholders provided comments regarding the lack of commercially available ZEV options. The vague understanding of "commercial availability" can result in different regulatory interpretations of this term. For example, vehicle manufacturers may interpret the term to mean viable ZEVs that may be available within a given timeframe of three years or more, while public entities may interpret the term to mean a shorter timeframe such as six months to one year. Additionally, similar clarification is recommended for "Specialty Fleet Vehicles", as this category is integral to public fleet operations and should be recognized in the Draft ACF provisions.

Metropolitan offers the following definitions:

> "*Commercial Availability*" means a Zero-Emission Vehicle (ZEV) or Near-Zero Emission Vehicle (NZEV) that is commensurate with the purchaser's specifications and is available for delivery by vehicle manufacturers/vendors within 18 months from the time of purchase."
>
> "*Specialty Fleet Vehicles*" means 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, power take-off (PTO) equipment, augers, backhoes, cranes, water filtration, vacuum equipment, fumigation sprayers, and vehicles designated to deliver otherwise defined Specialty Fleet Vehicles.

It should be noted that the above proposed definition of "Specialty Fleet Vehicles" is consistent with the request made by other industry associations representing essential service providers.

Section 95693.1 Public Fleet ZEV Purchase Requirements

Expand the Category of NZEV to Include Best Available Control Technology (BACT) Fuel Options

Metropolitan appreciates that the ACF Draft allows NZEV purchases to count as ZEVs until 2035. This will provide public agencies with much needed purchasing options in vehicle categories where there may be a lack of commercially available ZEVs, particularly for specialty vehicles. However, to further attain near-term GHG and criteria pollutant reductions and to lower the numbers of the older, higher-emitting vehicles on the road, Metropolitan recommends that the ACF Draft provisions for NZEVs be expanded to include commercially available, proven BACT such as Low-NOx natural gas vehicles or conventional hybrids with electric power take-off (ePTO) devices. Allowing public agencies to utilize proven alternative technologies, while ZE technology advances, will achieve near-term emissions reductions and can result in less demand for vehicle exemptions and stimulate turnover of higher-emitting vehicles.

Incorporate a Safeguard Provision for when No ZEV or NZEV Bids are Received by a Public Agency

As written, Section 95693.1 does not address the situation that a public agency may receive zero bids for either a ZEV or NZEV that meets their specifications. To avoid operational impacts, Metropolitan recommends adding an additional provision allowing the purchase of non-ZEV or non-NZEV options when no responsive bids are received. In this fashion, public agencies such as Metropolitan will not need to defer vehicle purchases until such time as a ZEV or NZEV becomes available and potentially jeopardize their ability to properly and adequately maintain their systems or provide emergency response services.

Modify Purchasing Compliance Dates to Allow for Infrastructure Development and Government Budgeting Process

Per the ACF Draft, the first ZEV purchasing compliance date is January 1, 2024. However, the 2024 compliance date is a year ahead of the 2025 goal set by Executive Order B-48-18 to install 250,000 electric chargers and 200 retail hydrogen stations in California. Using the July 30, 2021 CEC dashboard statistics, the State has installed 74,459 public and shared chargers and 52 hydrogen refueling stations, of which 38% and 48%, respectively, are within Metropolitan's service area. Acknowledging a feasible infrastructure installation pace that can be successfully achieved, CARB should align the ZEV public purchasing requirement with the Governor's infrastructure installation goal of 2025. This timeframe will also allow for the medium- to heavy-duty ZEV market availability to mature, as required by the Advanced Clean Truck (ACT) Regulation which increases the required vehicle manufacturer percentage of annual sales that must be ZEVs each year.

In addition, it is important that ZEV purchasing compliance dates align with public agency budgeting processes. For example, many public agencies may already be budgeting for purchases over the next five-year period. The additional funding needed to purchase ZEVs and construct the required charging infrastructure may not be available through standard budgeting processes and may require lengthy procurement processes, including approvals through agency governing bodies.

In consideration of commercial availability of vehicles, infrastructure availability, and budgeting and procurement practices, Metropolitan recommends the following ACF Draft language:

(A) For a public agency whose jurisdiction is not solely in a designated low population county:
1. *Starting ~~January 1, 2024~~* [January 1 after the third year from the effective date of the regulation], *50 percent of the total number of new motor vehicle purchases in each calendar year must be ZEVs; and*
2. *Starting ~~January 1, 2027,~~* [January 1 after the sixth year from the effective date of the regulation], *100 percent of the total number of new motor vehicle purchases in each calendar year must be ZEVs.*

(B) For a public agency whose jurisdiction is solely in a designated low population county:
1. *Starting ~~January 1, 2027,~~* [January 1 after the sixth year from the effective date of the regulation], *100 percent of the total number of new motor vehicle purchases in each calendar year must be ZEVs.*

Section 95693.2 Public Fleet Exemptions

Metropolitan recommends that the ACF Draft public fleet Exemption for Emergency Response approach be modified. While the inclusion of an exemption process recognizes the challenging public fleet needs, as currently written, it is limiting and not attainable. As previously discussed, Metropolitan's capacity as an essential public service hinges on our ability to respond to emergencies. To respond to any type of water supply/distribution system emergency across its large service area, Metropolitan must have vehicles that can travel to the emergency site, perform the work, and quickly return water service without jeopardizing public safety. The exemption process must be supportive of this response.

Metropolitan recommends the following options to create a more feasible and realistic exemption application approach for emergency response vehicles:

- Remove the 75% and 25% requirement and allow public agencies the discretion to apply for an exemption request for any vehicle categorized as Emergency Response.

- Allow a public agency to receive an exemption from the ZEV purchase requirement set forth in section 95693.1 if <u>any two or more</u> of the following conditions are met:

~~1) More than 75 percent of that body type in the fleet are already ZEVs~~

1) Commercially Available ZEV/NZEV options are not able to replicate the performance of vehicles used for Emergency Response (i.e., duty cycles);

2) *The agency is able to demonstrate that the necessary publicly accessible charging or hydrogen fueling infrastructure or mobile fueling options are not readily available in the areas to be served in emergency response; or,*

3) *The agency has obtained a letter from the governing body that lists the number of vehicles to be purchased for emergency response with details about the vehicle type, and what areas of the country are typically served, and a statement that explains why available ZEVs are not suitable to be dispatched to serve those areas in emergency response.* The agency must keep records of the letter signed by governing body and make it available to CARB staff upon request.

~~*4) The agency must keep records of the letter signed by governing body and make it available to CARB staff upon request.*~~
Item 4 was removed and incorporated into item 3 as it should not be a standalone condition to apply for an exemption.

Thank you again for the opportunity to comment on the ACF Draft regulation. Metropolitan looks forward to working with ARB on this transformative issue and asks that ARB consider our comments prior to finalizing the official rulemaking draft. 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,

Mickey Chaudhuri, P.E.
Assistant Group Manager, Water System Operations

ATTACHMENT 2

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;

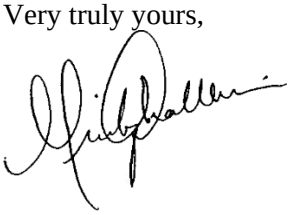
- Reclassify the "mutual aid assistance" exemption as an "emergency response" provision and revise the criteria to reflect the operational realities under which POUs, water agencies, and other essential public service providers operate; and,
- Expand the Infrastructure Construction Delay Extension to 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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