SMUD®

October 17, 2022

Tony Brasil, Branch Chief
Craig Duehring, Manager
Paul Arneja, Engineer
Mobile Source Control Division
California Air Resources Board
1001 I Street
Sacramento, CA 95812

Re: Sacramento Municipal Utility District's Comments on the Public Hearing to Consider Proposed Advanced Clean Fleets Regulation - State and Local Government Agency Fleet Requirements

Dear Mr. Brasil, Mr. Duehring, and Mr. Arneja:

Sacramento Municipal Utility District (SMUD) appreciates the opportunity to comment on the Proposed Advanced Clean Fleets (ACF) Regulation for State and Local Government Agency Fleet Requirements, released on August 30, 2022 ("Public Fleet Requirements"). We thank CARB for its continued efforts to engage utility stakeholders during this rulemaking process.

SMUD supports a comprehensive strategy to accelerate California's transition to zero-emission vehicles (ZEVs) and the overall objectives of the ACF. We recognize that transportation is the single largest source of the State's greenhouse gas (GHG) emissions and achieving a zero-emission truck and bus fleet by 2045, where feasible, is critical to meeting California's environmental goals. SMUD is working to expand incentives and programs for our commercial and fleet customers considering switching to electric vehicles (EVs), and we have received grant funding from the California Energy Commission (CEC) to develop a blueprint for medium- and heavy duty (MHD) ZEV infrastructure in the Sacramento region.

SMUD is also taking a proactive approach to electrifying its fleet and has a goal of removing emissions from the entire fleet by 2030. In early 2021, we placed orders for five all-electric Class 5 work trucks from Zeus Electric Chassis (delivery expected next year). We also have ordered four Ford Lightning trucks (delivery expected next year) and anticipate placing orders for up to 40 additional all-electric pickups, depending on allocations from the manufacturers. We have already fully electrified our sedan fleet and own 25 hybrid technology bucket trucks with battery-operated buckets and conventional drivetrains.

However, as an electric utility responsible for providing an essential public service, we continue to have serious practical concerns about the proposed rule as currently drafted. While we appreciate the inclusion of provisions intended to address ZEV unavailability, mutual aid, and daily usage needs, the eligibility

criteria are unsupported, unduly restrictive, and fail to adequately consider utilities' operational realities. As a result, we are deeply concerned that the proposed rule could hinder our ability to respond to emergencies and make it harder for us to achieve our own fleet electrification and clean energy goals.

Under the current proposal, we anticipate that SMUD would be forced to expand the size of our fleet to accommodate ZEVs unable to perform the full performance envelope of the needed duty cycle and seek to maintain existing fleet assets beyond the planned replacement cycle. This would not only come at significant cost to our customers, distracting from our ability to achieve our clean energy and transportation objectives, but could jeopardize our ability to respond safely and expeditiously after storms and other emergency events to repair infrastructure and restore power.

In light of this, we urge CARB to make the following changes to the Public Fleet Requirements:

- Revise the Mutual Aid Assistance exemption to address all forms of emergency response aid, including inside our service territory, and include practical eligibility criteria.
- Define "commercial availability" and specify how it will be assessed, including objective, reasonable, and verifiable criteria that consider both technical and market factors.
- Provide separate exemption process to address unique scenarios that cannot be captured by the simplifications in the proposed exemption categories.
- Allow public fleets to opt into the ZEV milestone pathway similar to the compliance option in the High Priority and Federal Fleets Requirements.
- Clarify the Daily Usage exemption and remove unnecessary restrictions.

We also recommend additional revisions to clarify or improve the proposed regulation.

We address each of the requested changes in the sections that follow. SMUD believes these recommendations will afford public fleets the needed flexibility to achieve the successful implementation of the ACF. SMUD also supports the comments of the California Municipal Utilities Association dated October 17, 2022, and the comments of CalETC dated October 17, 2022.

I. Revise Mutual Aid Assistance Exemption to address all forms of emergency response and include practical eligibility criteria.

As currently drafted, the Public Fleet Requirements fail to adequately consider and address the role of utilities as essential public service providers. We urge CARB to ensure the Public Fleet Requirements reflect both local emergency response and mutual aid operations, as well as the practical realities of those operations. We recommend that CARB either remove impractical requirements related to the 75%

ZEV threshold and revise the Mutual Aid Assistance exemption to address *all* emergency response , excluded vehicle body types, and mobile fueling. Alternatively, CARB could specify a new emergency response exemption for utilities providing essential public services.

As a provider of essential public services, SMUD relies on diverse fleet vehicles to maintain and operate generation, transmission, and distribution resources needed to provide the affordable, reliable electricity that is essential to public safety and supporting transportation electrification. Many of the vehicles that utilities depend upon to provide critical services are considered specialty vehicles and may be some of the last vehicles adapted to zero emission drivetrains given the limited market size and unique performance requirements.

In major storm or emergency situations, which are increasing in frequency and severity due to climate change, our vehicles are often dispatched for multiple days including in remote locations and mountainous terrain far from charging infrastructure. These vehicles must not only transport crews to the job, but also power auxiliary equipment needed to repair and replace infrastructure and serve as safe shelter for our crews. For example:

- Throughout December 2021 and January 2022, SMUD provided mutual aid assistance to PG&E crews in Placer and El Dorado Counties where extended power outages of 1-3 weeks duration, during record winter storms, resulted in a humanitarian crisis. Vehicles were deployed between 6:30 am and 11:00 pm and included Class 2 pickups, Class 5 service trucks, Class 5 40-foot aerials, Class 8 60-foot derricks and 47-foot derricks, and trailers.
- Likewise, in December 2021, record-breaking snow levels of 210 inches disrupted SMUD operations at our hydroelectric facilities in the Sierras. Snow removal and extreme weather is a consistent concern at upper elevations where SMUD's extensive hydroelectric facilities are located (e.g., Loon Lake, Ice House, etc.). To sustain uninterrupted service for our customers, SMUD deployed vehicle, including Class 2 pickups, Class 3 and Class 5 service trucks, and a Class 8 flatbed with plow around the clock to support our operations and remove snow throughout the winter onslaught.
- SMUD provided mutual aid, including 15vehicles (line foreman service bodies, aerials, towing trailers), to support power restoration in Puerto Rico after Hurricane Maria. The vehicles and crews were dispatched for 5 weeks.

SMUD appreciates that the Public Fleet Requirements recognize that ZEVs may not be suitable for mutual assistance operations vis-à-vis the inclusion of a Mutual Aid Assistance exemption in Section 2013.1 (e). However, the proposed exemption includes arbitrary and impractical eligibility criteria and the focus on operations outside a utility's service area misses an essential component of utilities' emergency response roles. Our concerns and recommendations are further detailed below.

A. The focus of the proposed language on operations outside of a utility's service area fails to recognize the critical role utility fleets play in local emergency response.

As noted above, utilities, particularly those with large service territories or whose territories include remote areas, must respond to emergencies within, as well as outside of, their service territories. SMUD is concerned that the Mutual Aid Assistance exemption focuses solely on response to declared emergencies outside a utility's service territory.

This focus is particularly concerning given that none of the other proposed exemptions adequately reflect local emergency response needs. For example, the Daily Usage exemption covers routine operations but does not capture critical but infrequent emergency response duty cycles. The Backup Vehicle provision cannot address this because SMUD does not maintain a separate fleet of vehicles exclusively for emergency response; moreover, vehicles dispatched for emergency response may necessarily be high mileage if they must travel long distances. Lastly, the ZEV Unavailability exemption does not account for duty cycle, towing, or payload needs.

More broadly, SMUD is concerned that the Initial Statement of Reasons (ISOR) lacks understanding and recognition of utility emergency response roles. For example, in limiting the definition of "emergency operations," the ISOR states that fleets "… routinely respond [to emergencies] within their normal service territories" and the intent is to "enable nimble response to major declared emergencies, *not to cover issues that fleets deal with on a daily basis*" (emphasis added).[1] This explanation fails to recognize that there are emergency circumstances in which utilities must dispatch vehicles that fall between "daily/routine operations" and "major declared emergencies" and in which utilities must be ready to respond.

Recommendation**:** As noted above, SMUD recommends revising the Mutual Aid Assistance exemption to incorporate local emergency response and provide flexibility for public agencies that provide essential public services. Alternatively, CARB could provide a separate emergency response exemption for public agencies that provide essential public services; SMUD supports CMUA's proposed language.

B. Emergency response and mutual aid exemption provisions must include practical eligibility requirements.

1. Requiring at least 75% of the fleet to already be ZEV fails to consider utility emergency response operations or challenges associated with ZEV availability.

[1] ACF Initial Statement of Reasons, Appendix H-1-9. (https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/apph1.pdf)

Section 2013.1 (e) specifies that fleet owners may apply for the Mutual Aid Assistance exemption if at least 75% of their (MHD) California fleet is comprised of ZEVs and section 2013 (m) caps the exemption at 25% of the fleet. The ISOR asserts the 75% criterion is necessary to ensure the exemption is not claimed when a high proportion of the fleet is internal combustion engine (ICE) vehicles and states that several utility fleets indicated they historically have deployed up to 20% of their fleet for mutual aid as a majority are still needed to serve their service areas.[2]

This reasoning contains several questionable assumptions:

- It fails to recognize that mutual aid operations vary by utility as well as by event. A single, one-size-fits-all cap is not reasonable given the diversity of public fleets in terms of size, resources, geography, and emergency exposure. This may pose greater challenges for public utilities with operations covering large and/or remote where infrastructure is not widely available.
- Establishing a 75% threshold as a *precondition* effectively ensures that most public fleets will not be able to access this exemption for at least a decade while their fleets transition to ZEVs under the purchase requirement structure. It assumes fleets will be able to either purchase ZEVs that are capable to meet emergency response duty cycles and/or extend the life of existing ICEVs. However, none of the other proposed exemptions effectively reflect emergency response needs or duty cycles. Moreover, maintaining ICEVs past planned replacement could result in performance and safety challenges.
- It assumes safety concerns are considerations for mutual assistance provided to other utilities only. It does not account for emergency response within the fleet's own service area. Consequently, it caps the percent of ICE vehicles only based on those anticipated to be dispatched for mutual aid.

<u>Recommendation:</u> SMUD recommends CARB revise the Mutual Aid Assistance exemption such that the agency's governing board can determine its individual mutual aid and emergency response needs through public action. One such example is through enactment of a resolution, in recognition of the diversity of public fleets and their public oversight structure. This suggested is similar to the exemption within section 2023.4 (e)(5) of the Innovative Clean Transit regulation, which depends on a resolution by the transit agency's governing board. SMUD offers the following redlines to illustrate our recommended changes:

[2] Ibid, Appendix H-1-48

Section 2013.1 (e)(5)

(e) Mutual Aid Assistance and Emergency Response. Fleet owners may apply for this exemption if they have a mutual aid agreement to send vehicles to assist other entities during a declared emergency event. Fleet owners may also apply if they, are public agency that provides electricity, water, wastewater, or gas service, and at least 75 percent of their California fleet is comprised of ZEVs, except as specified in 2013.1 (e)(5).

(5) Notwithstanding section 2013.1(e), a fleet owner that provides electric, water, wastewater, or gas service may qualify for this exemption with less than 75 percent of their California fleet comprised of ZEVs on a temporary basis if the governing body of the public agency finds, via resolution, at a duly noticed public meeting, that a lower threshold is necessary to maintain its emergency response capabilities.

(A) The public agency's governing body must consider the following factors:
1. Potential emergency exposure based on the public agency's service territory and infrastructure location
2. Capacity of existing ICEVs in the California fleet to respond to emergencies

(B) The duration of the waiver shall not exceed three years from the date of adoption. The governing body may make more than one finding.

Alternatively, SMUD offers our previous recommendations to phase in the ZEV threshold over time *and* concurrently provide an exemption process, subject to CARB oversight, in which public agencies may temporarily lower that threshold based on specific need. We suggest the following phase-in milestones to allow time for technology for heavy-duty ZEV specialty vehicles to evolve and for fleet owners to ramp up their ZEV acquisitions in a manner that would not constrain fleet operations and fleets' ability to respond to emergency events:

- 2029: 25% ZEV
- 2032: 50% ZEV
- 2035: 75% ZEV

Below are redlines illustrating this alternative option:

Section 2013.1 (e)(5)

(e) Mutual Aid Assistance and Emergency Response. Fleet owners may apply for this exemption if they have a mutual aid agreement to send vehicles to assist other entities during a declared emergency event or are public agency that provides electricity, water, wastewater, or gas service, and ~~at least 75 percent of~~ their California fleet is comprised of ZEVs as specified in 2013.1 (e)(5).

(5) To qualify for the mutual aid exemption, the California fleet must be comprised of ZEVs as follows:

(A) For applications submitted on or after January 1, 2029, at least 25 percent of the California fleet must be ZEVs.
(B) For applications submitted on or after January 1, 2032, at least 50 percent of the California fleet must be ZEVs
(C) For applications submitted on or after January 1, 2035, at least 75 percent of the California fleet must be ZEVs.

Notwithstanding paragraphs (A)-(C), fleet owners that provide electricity, gas, water, or wastewater service may apply to the Executive Officer to temporarily modify this threshold if the public agency reasonably expect it may need to deploy a greater percentage of the fleet to respond to emergencies and/or provide mutual aid. Supporting reasons for requesting a modification may include, but are not limited to, significant operations within high wildfire thread zones or remote areas that experience extreme weather events or have inadequate charging infrastructure.

2. *Vehicle exclusions are not justified based on the nature of utility operations.*

Section 2013.1 (e) excludes vehicles available as near zero-emission vehicles (NZEVs), and any vehicle with a gross vehicle weight rating (GVWR) less than 14,000 lbs. from the Mutual Aid Assistance exemption. SMUD is concerned that some of these exclusions are not supported and could limit public agencies' ability to manage mutual aid and emergency response operations.

The ISOR asserts that pickup trucks, buses, box trucks, vans, or any tractors, should be excluded because they are ubiquitous and can be easily rented if needed.[3] However, this statement fails to recognize that in response to emergencies, vehicles are dispatched *immediately*. Coordinating rentals would add time, cost, and *uncertainty* when response time in an emergency is critical. Moreover, the ISOR does not acknowledge circumstances where the vehicles'

[3] Ibid, Appendix H-1-47

homebase is in a remote area and equipment cannot be easily or expeditiously rented or transported.

The ISOR also claims that lighter vehicles can use light-duty vehicle charging stations and are likely to have access to public fueling anywhere by the time the exemption may be requested.[4] Again, this statement does not consider fleet operations in remote areas without ZEV fueling infrastructure, or emergency circumstances where there may be extensive or widespread damage to electricity infrastructure.

Recommendation: SMUD recommends that restrictions on vehicle configurations and weight classes be removed. Fleets should be allowed to determine which vehicles are necessary for mutual aid or emergency response within the broader parameters of the exemption.

3. Mobile refueling requirement is burdensome and fails to recognize that utility vehicles may be dispatched for days or weeks.

Section 2013.1 (e)(2) requires fleets to demonstrate, for each available ZEV or NZEV in the same and next higher weight class, that there are no compatible mobile fueling options that would fuel from 10 to 80% of the ZEV's rated capacity within one hour of fueling time.

SMUD is concerned that collecting information from all manufacturers of ZEVs in the same and next higher weight class, as well as from all mobile fueling providers with compatible options, is likely to be a burdensome process. Additionally, the proposed requirements do not contemplate the need for refueling multiple times in circumstances when vehicles are dispatched for days or weeks.

SMUD also believes the requirement to provide statements from vehicle manufacturers and/or authorized installers regarding the incompatibility of the vehicle body with a ZEV chassis may have been erroneously included. These statements do not pertain to mobile fueling and the reporting is required only for commercially available ZEVs and NZEVs.

Recommendation: SMUD recommends clarifying that the required assessment of mobile refueling options be based on responses to the fleet owner's public solicitation for the specific ZEV vehicle configuration that the fleet owner is seeking to purchase. Moreover, SMUD recommends providing fleet owners the option to qualify for the ZEV exemption even if a mobile fueling option meeting the specified criteria does not meet the utility's needs (e.g., refueling in the field for multiple days).

[4] Ibid, Appendix H-1-48

II. The ZEV Unavailability exemption must define "commercial availability" and include objective, reasonable criteria.

Section 2013.1 (d) specifies that the Executive Officer will maintain a list on CARB's website of vehicle configurations that may be purchased as ICEVs because ZEVs or NZEVs are not available (i.e., "Unavailability list"). SMUD appreciates the inclusion of a ZEV Unavailability exemption and recognition that that the ZEV market is still nascent, particularly for heavier-duty utility vehicles. A large proportion of our on-road fleet vehicles are Class 5 and heavier vehicles with mounted equipment like aerials, digger derricks, and cranes, requiring power takeoff to operate.

We provide the following examples to illustrate our point:

- SMUD must perform power generation maintenance, including transmission maintenance and construction at our hydroelectric facilities in the Sierras, in rural, mountainous regions (> 5,000 feet) where additional charging is unavailable and portable diesel refueling is generally required.
- SMUD relies on large equipment requiring sustained, high flow hydraulic systems operating over 8 hours per day (e.g., 100-foot aerials, 45-ton cranes, 15-ton digger derricks, etc.).
- SMUD depends on vehicles like cranes, digger derricks, 40–100-foot aerials, and Class 6-8 service trucks with gross combined weight rating (GCWR) of 60-000-80,000 pounds typically towing 20,000-40,000-pound trailer.

Many of the vehicles that utilities depend upon to provide critical services are considered specialty vehicles and may be some of the last vehicles adapted to zero emission drivetrains given the limited market size and unique performance requirements. However, as currently proposed, SMUD is concerned that the ZEV Unavailability exemption would be unworkable in practice because it lacks transparency, may be arbitrarily implemented without a definition of commercial availability or opportunity for stakeholder input, and establishes an unduly burdensome process to show vehicles are "unavailable." Our concerns and recommendations are detailed below.

A. "Commercial availability" must be clearly defined to avoid uncertainty for fleets and potentially arbitrary enforcement.

While commercial availability is foundational to the ZEV Unavailability exemption, the Public Fleet Requirements do not define the term; instead, its determination is left solely to the discretion of the CARB Executive Officer. Without established criteria, there is no accountability for CARB or for fleets, and no ability to predict how applications to list vehicles as unavailable will be evaluated. Moreover, without input from fleet owners and operators that must actually procure and operate the vehicles, it increases the likelihood that CARB's determination will fail to accurately reflect vehicle availability. SMUD is concerned that this approach is not only impractical and likely to cause confusion, but, without a clear definition and process for assessing commercial availability, it also runs the risk of arbitrary

implementation and/or underground regulations. It will also result in an inability to plan compliance.

The importance of including a clear definition and objective criteria for determining commercial availability, and thereby a predictable basis for inclusion or exclusion from the Unavailability list, is underscored by the conflicting evidence presented at the July 26 ACF Workgroup Meeting, where many of the vehicle configurations presented were considered by CARB to be "available," but have not been confirmed to meet fleets' unique duty cycles and performance requirements or to be available for purchase in a commercial setting.[5]

Recommendation: SMUD urges CARB to define "commercial availability" in the regulations and specify objective, realistic criteria, based on the input of fleet owners and operators that use the vehicles, that will be used to assess availability, as further detailed below.

B. Commercial availability must consider both technical and market factors affecting fleets' ability to procure ZEVs.

While the Public Fleet Requirements do not define commercial availability, the documentation requirements for listing a vehicle configuration as unavailable focus on *technical availability*, not market availability. For example, section 2013.1 (d)(4) would require fleets to demonstrate that a ZEV chassis in the same or next higher weight class cannot be equipped in the needed configuration by submitting either a signed statement from the manufacturer or a signed statement from each installer stating that the body cannot be configured without violating safety laws or standards. The ISOR states this requirement is necessary to confirm the configuration is not available from the ZEV manufacturer or to establish that no bodies can safely be installed on the available chassis.[6] The ISOR overstates the need for such confirmation, which would require fleets to divert resources to exhaustively prove a negative and overlooks the unintended consequences of this approach.

SMUD is concerned that the apparent focus on technical feasibility fails to adequately address a fleet's actual and practical ability to purchase ZEVs. Even if a ZEV can technically be configured, it will be impossible for fleets to comply with the purchase requirement if the manufacturer is not offering the configuration for sale in the marketplace, supply is inadequate, or other market factors like transaction size or even the price premium prevent fleets from procuring ZEVs in practice. The ISOR notes that, over time, CARB staff expects ZEV technology to mature and scale driving down upfront costs and improving operational flexibility, but there are no protections in place for public agencies that will be the first purchasers. This omission appears incongruous given that the ISOR also

[5] July 26, 2022, Public Workgroup on Draft ACF Regulation Provisions Staff Presentation Slides (https://ww2.arb.ca.gov/sites/default/files/2022-07/220726acfpres_ADA_0.pdf). See pages 54-55.
[6] Ibid, Appendix H-1-46.

recognizes that, due to purchasing practices and budget limitations, state and local governments may not always be able to purchase ZEVs consistently from year to year.[7]

Moreover, the proposed exemption documentation requirements would also set an unreasonably high barrier for public fleets to prove that a vehicle configuration does not, and cannot, exist. These proposals would undermine the ISOR's stated purpose of providing fleets the flexibility to replace older vehicles with lower-emitting ICEVs when ZEVs or NZEVs are not commercially available.[8]

As we have detailed in prior comments,[9] a robust availability evaluation framework is critical given the unique nature of the vehicles in utility fleets. While technology in the ZEV truck market is rapidly evolving, there are still significant gaps in the ability of specialized ZEV trucks to meet certain duty cycles and auxiliary functions required in the field and in emergency response situations. Utility fleet managers are responsible for assuring replacement vehicles can meet all aspects of the duty cycle and performance envelope, no matter how infrequent these fringe cases may arise.

Public agencies should not be penalized when a ZEV is not commercially available. The determination of whether a ZEV is commercially available must be based on, at minimum, objective and reasonable criteria for evaluating that a viable ZEV does/does not exist in the marketplace and that the ZEV is demonstrated, evaluated, and determined to support or satisfy the necessary performance requirements of the existing ICE vehicle to be replaced. Furthermore, to ensure the list is updated based on necessary duty cycle and other needs, stakeholder participation as well as timely resolution by CARB, is critical.

Recommendation: SMUD recommends that the evaluation framework for determining whether a ZEV is commercially available, or not, should incorporate, but not be limited to, the following criteria:

- ZEV configuration is available as either a complete OEM solution or chassis with authorized upfitted body from a minimum of three manufacturers and/or upfitters with at least two years' experience selling vehicles in California.
- The manufacturers and/or upfitters of each of the three models have placed into service at least 25 copies of that model and provided data demonstrating the duty cycle and effective range of the ZEV.
- The price premium without incentives does not exceed 133%, prior to incentive funding, of a comparable ICE model.

[7] Ibid, Appendix H-1-30.
[8] Ibid, Appendix H-1-44.
[9] See, for example, SMUD comments submitted June 23, 2022 (SMUD comments dated June 23, 2022 (https://www.arb.ca.gov/lists/com-attach/171-acf-comments-ws-AHNWPVwoUGdRCAFi.pdf); SMUD comments submitted August 12, 2022 (https://www.arb.ca.gov/lists/com-attach/194-acf-comments-ws-VyQBagZyAzQFXAZI.pdf); and Joint POU comments submitted June 16, 2022 (https://www.arb.ca.gov/lists/com-attach/170-acf-comments-ws-UTtROFM7U25WJAdY.pdf).

Section 2013 (b)
"Commercially available" vehicle configuration means the following:

(A) The vehicle configuration is available from at least three vehicle manufacturers and/or upfitters as a complete solution or chassis with authorized body upfit, at least 25 units of each model have been placed into service, and each manufacturer or upfitter has at least two years' experience selling vehicles in California.

(B) The manufacturer suggested retail price is no more than 33 percent greater than the average manufacturer suggested retail price for ICEVs of the same vehicle configuration, prior to any incentive funding.

The justification for each of these criteria is set forth in our comments dated June 23, 2022.[10] SMUD believes that these criteria will not prevent OEMs from having ample opportunity to prove out vehicle capability through early action credits and the flexible ZEV milestone pathway for high-priority fleets.

Alternatively, SMUD suggests a collaborative approach between CARB, the OEMs, and the fleet operators to determine vehicle availability, such as through public workshops or a review committee structure. At minimum, prior to CARB determining a vehicle configuration is "available," fleet owners and operators must have the opportunity to provide practical input on whether a viable ZEV exists in the marketplace and is demonstrated, evaluated, and determined to support or satisfy the necessary performance requirements of the existing ICE vehicle.

C. Proposed exclusions of certain body types and vehicles lighter than 14,000 GVWR are not justified.

As currently proposed, section 2013.1 (d) excludes pickup trucks, two-axle buses, vox trucks, vans, tractors and any vehicle with a GVWR less than 14,000 lbs. The ISOR states this is because these vehicles are already commercially available to purchase from several manufacturers in multiple configurations, and more have been announced to soon be available.[11] As noted above, however, this assumption is faulty. There are numerous factors affecting a fleet's ability to purchase ZEVs.

Recommendation: SMUD recommends removing body type and GVWR restrictions and applying the same definition and criteria for commercial availability to determine whether the configuration is available in a particular weight class.

[10] SMUD comments dated June 23, 2022 (https://www.arb.ca.gov/lists/com-attach/171-acf-comments-ws-AHNWPVwoUGdRCAFi.pdf).
[11] Ibid, Appendix H-1-45.

D. The ACF should look to an "Availability" list to avoid the unintended consequences inherent in the current "unavailability list" approach.

As currently proposed, the ZEV Unavailability exemption would identify only vehicle configurations that are *unavailable* as ZEVs or NZEVs. SMUD is concerned that an "unavailability" list may be very confusing for regulated entities. Furthermore, without a list of commercially available configurations and manufacturers, it may be very challenging for fleets to satisfy requirements to provide information for "each commercially available ZEV or NZEV complete vehicle or incomplete chassis… certified for sale in California," as in section 2013.1 (e)(2) of the Mutual Aid Assistance exemption provision.

Recommendation: SMUD recommends that CARB maintain a list of *available* ZEVs, based on supporting documentation provided by manufacturers and authorized installers, for each vehicle configuration and weight class. Such a construct would promote greater clarity and transparency regarding vehicle configurations that are demonstrated to be commercially available. It also shifts the onus to manufacturers and relieves fleets of the burden of proof.

III. Provide a separate exemption process to address unique scenarios that are not captured by the proposed exemptions.

SMUD appreciates that well-designed, standardized, objective criteria for ZEV Unavailability, Daily Usage, Mutual Aid Assistance, and other exemptions have the potential to streamline vehicle purchases for fleets and minimize the exemption workload for both CARB staff and fleets. However, by nature of the simplifications needed to create the standardized exemptions, their criteria cannot address every scenario when ZEVs may not be accessible to the public agency or suitable for the fleet's needs.

For example, some public fleet vehicles must navigate roads, alleys, and bridges that have strict weight limits, steep grades, and/or limited space for vehicles to enter and turn. A "commercially available" ZEV may not meet the practical weight or dimension constraints under which the vehicle must operate. Similarly, a ZEV bucket truck may be commercially available with a 40-foot aerial, but if the public agency needs an 80-foot aerial to access high transmission lines, it cannot perform the needed work.

This separate process could additionally help address public procurement considerations that may be fleet- and circumstance- specific and thus are not well captured in simplified criteria. For example, public agencies may not receive bids that meet their technical specifications, even if the ZEV is commercially available, or the lead time may be significantly longer. The ISOR even recognizes that state and local fleets typically have extensive budgeting, approval, and public bid processes to

follow when purchasing vehicles and may not have the same flexibility in procurement decisions that private industry does.[12]

SMUD strongly disagrees with the viewpoint that the ACF regulation cannot build in the flexibility to address complex scenarios. Fleets should not be forced to accept noncompliance and argue their case before CARB's enforcement division simply because their unique needs or circumstances do not fit within simplified exemption criteria. On the contrary, it is incumbent upon CARB to develop a regulation that is practical and achievable, as well as providing sufficient flexibility to address unique edge cases.

Recommendation: SMUD urges CARB to include a separate exemption process, subject to CARB oversight, to address edge cases and unique scenarios for purposes of mitigating potentially severe operational impacts when public fleets would otherwise purchase a "commercially available" ZEV.

Section 2013.1 (x)(1)
Notwithstanding section 2013.1 (d)(1)-(5), a fleet owner may apply to the Executive Officer for an exemption to purchase an ICEV instead of a commercially available ZEV or NZEV configurations under any of the following circumstances:

(A) Commercially available ZEVs or NZEVs cannot reliably meet the full duty cycles for which the fleet owner intends to use the vehicle and an ICEV can.

(B) Commercially available ZEVs or NZEVs do not have the required towing capacity or auxiliary equipment specifications and an ICEV does.

(C) Commercially available ZEVs or NZEVs exceed the weight or dimensional constraints for roads and bridges on which the vehicle must operate.

IV. Allow public fleets to opt into the ZEV milestone pathway similar to the compliance option in the High Priority and Federal Fleets Requirements.

SMUD has repeatedly recommended that the Public Fleet Requirements should include the ZEV milestone pathway as a compliance option for public fleets. The current one-size-fits all approach does not recognize the diversity of public agency fleets and their circumstances. Depending on a public fleet's size, age, operational requirements, turnover plans, early adoption activities, and budgetary and procurement practices, the ZEV milestone compliance option could be a more feasible approach for some public fleets – particularly for public fleets that are already working to achieve ZEV goals set by their governing body.

[12] Ibid, Appendix H-1-26.

For example, SMUD has a fleet electrification strategy that aims to remove emissions from our entire fleet by 2030. We believe this strategy is better aligned with the ZEV milestone pathway, which allows us flexibility to replace vehicles that may not yet be available while integrating proven and piloting new ZEV technology.

SMUD continues to believe that there are no downsides, but potentially significant flexibility benefits, to offering public fleets an opt-in alternative ZEV fleet milestone compliance pathway, in addition to the Vehicle Delivery Delay Extension, the Daily Mileage Extension, and other relevant allowances for meeting the required milestones (similar to that provided to high priority and federal fleets). As such, we once again encourage CARB to incorporate this alternative into the Public Fleet Requirements.

Recommendation: We recommend allowing public fleets to opt into the same ZEV milestone pathway requirements and exemptions to offered to high-priority fleets.

Section 2013 (q)
(q) A fleet owner that is a public agency must comply with the requirements of this section 2013 unless it voluntarily elects to comply with the alternative compliance requirements of section 2013.X. A public agency fleet owner may make such election by written notice signed by the responsible official and delivered to the Executive Officer within 180 days of the effective date of this regulation.

IV. Clarify the Daily Usage exemption and remove unnecessary restrictions.

SMUD appreciates the inclusion of a Daily Usage exemption and the recognition that ZEVs may not be suitable for specific duty cycles. However, SMUD is concerned the exemption may be overly restrictive and complex to implement. We offer the following comments and recommendations below.

A. The daily usage exemption should not require the purchase of a ZEV for the energy usage calculations.

SMUD appreciates the option to assess daily usage based on mileage *or* energy usage. Many of SMUD's fleet vehicles include power takeoff equipment that requires significant engine hours but relatively low miles. However, to report energy use needs for vehicles that operate truck mounted or integrated equipment while stationary, section 2013.1 (b)(3) and (b)(6) appear to require measured ZEV energy use data from ZEVs of the same configuration already operated on similarly daily assignments in the fleet's service.

An exemption process for purchasing a ZEV should not require the purchase of a ZEV, particularly if the purpose of the reporting is to show that the ZEV cannot meet the required duty cycle.

Recommendation: We recommend including a method to estimate the corresponding battery size needed to operate ICE vehicles of the same configuration based on fuel usage and relative energy density. For example, SMUD estimates, based on average fuel use, our digger derricks would require, at minimum, a 440-kWh battery.

B. Restrictions on pickups, vehicles with a GVWR less than 14,000 lbs., and specified energy capacities are not justified for utility use cases.

The Daily Usage exemption, as currently drafted, excludes certain vehicle configuration, weight classes and energy capacities. The ISOR states that lower GVWR vehicles can use light-duty refueling networks, which are more widespread and publicly available, to justify the exclusion of light-duty vehicles from the Daily Usage exemption. However, this fails to recognize use cases with extended duration, high mileage needs in remote areas where infrastructure is not widely available.

The ISOR also states that it is "necessary to apply limitations for when ZEVs are commercially available with rated energy capacities that would meet most fleet needs."[13] However, this undermines the purpose of the Daily Usage exemption, which is "necessary to address situations where replacement ZEVs are commercially available ZEV can meet the daily mileage or operation [sic] hour needs of the fleet."[14]

Recommendation: We recommend that the Daily Usage exemption be revised to include pickup trucks and lighter vehicles and remove the proposed energy capacity thresholds.

C. *Daily usage does not capture emergency duty cycles, so separate exemption addressing utility emergency response is needed.*

As noted previously, SMUD does not maintain a fleet of backup vehicles that respond only to emergencies. The same vehicles that perform routine operations can be dispatched to respond to emergency situations.

Emergency duty cycles are more demanding than routine usage. For example, in storm situations (either heat, cold, wind or rain) and where multiple consecutive outages may frequently occur, our crews regularly work 24/7 shifts, and our trucks must serve as safe shelter from the elements. Additionally, SMUD emergency vehicles may travel for consecutive shifts over multiple days. Any time a vehicle needs to double as a shelter in inclement weather, the vehicle's power source must be reliable, readily available, and quickly replenished. Much of SMUD's core fleet also double as office space for the vehicle operator. These vehicles are essential to safeguard the safety of our crews and ensure grid reliability.

[13] Ibid, Appendix H-1-40

[14] Ibid, Appendix H-1-39.

Recommendation: Because emergency events are infrequent, they will not be captured in the routine monthly operations addressed in the Daily Mileage exemption. As such, SMUD again urges CARB to revise the Mutual Aid Assistance exemption to incorporate utility emergency response needs or include a separate exemption for public agencies that provide essential public services.

V. Additional recommendations to the Public Fleets Requirements.

SMUD offers the following additional recommendations in the spirit of clarifying or otherwise improving the proposed ACF Public Fleet Requirements.

A. Defer start date of purchase requirement for specialty vehicles until 2030.

SMUD recommends deferring the ZEV purchase requirement for specialty vehicles to 2030. SMUD, one of the earliest and broadest EV adopters, does not anticipate being able to purchase 100% ZEVs in 2027 due to the specialized nature of our fleet vehicles, their duty cycles, and the technology available today. The challenges associated with specialty vehicles requiring power takeoff are recognized in the ISOR for the High-Priority Fleets rule, which states: "These vehicles present the most challenges for electrification…. Specialty vehicles are produced in small volumes, often on custom chassis, and may have significant power needs while stationary which can significantly increase the need for energy storage. Recognizing these issues, the proposed regulation delays the phase-in start date for these vehicles to 2030."[15]

This structure would allow time for ZEV technology to evolve, particularly for configurations that require power takeoff or mounted equipment. It would also allow for ZEV manufacturers to scale up production, for the costs to come down, and for fleet owners to ramp up their ZEV acquisitions in a manner that would not constrain fleet operations and fleets' ability to respond to emergency events.

Crucially, this would also provide time for fleet operators to become familiar with ZEVs and allow for additional workforce training to ensure that there are sufficient maintenance crews able to safely service and repair and entire fleet of specialized vehicles, which in turn will promote the long-term success of the rule. It would also provide incentives for fleets that are able to pilot vehicles earlier through the early action credit mechanism and reduce the need for exemption requests for vehicles that are not yet available or cannot meet fleets' daily or emergency operational needs.

B. Clarify that NZEVs include ICEVs that are capable of zero-emission power takeoff or any vehicle eligible as part of California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP).

[15] Ibid, Appendix H-2-54

SMUD recommends that the definition of NZEV in section 2013 (b) be expanded to include ICEVs with electrified functions. This would help ensure that fleets can still purchase a commercially available vehicle that achieves significant emissions reductions if a ZEV is not available.

C. Address discrepancy regarding use of NZEV flexibility.

SMUD notes a discrepancy in the rule regarding the use of NZEV flexibility that is provided until 2035. As written, public fleets must comply with the NZEV Unavailability exemption before they can purchase an NZEV. However, high-priority fleets can purchase NZEVs without restriction.

We strongly recommend the rule allow the purchase of NZEVs without restriction, by both public and high-priority fleets through 2035. NZEVs play an important role in bridging technology between ICE vehicles and ZEs, particularly in the early years of the transition to full fleet electrification.

D. Support for early action credit mechanism.

We appreciate staff's inclusion of a credit mechanism for early or excess ZEV additions in the Public Fleet Requirements. SMUD has had an active electric transportation program since 1990 and has been a leader in statewide electric vehicle (EV) policy development since that time.

E. Revise start date for annual reporting requirements.

As currently proposed, the purchase requirement would start for most public agencies in 2024, meaning the first compliance determinations would be based on reports submitted in 2025. There is no justification provided for why annual reporting starts a year early, as the information necessary to assess compliance will be reported the following year. SMUD recommends that CARB defer the annual reporting start date to one year after the purchase requirement begins.

F. Streamline annual compliance reporting.

As we have shared in previous comment filings, SMUD recommends streamlining compliance reporting by eliminating proposed requirements that public fleets file periodic reports in addition to the required annual compliance reporting. We fully support the annual public fleet compliance reporting requirement proposed by CARB, to be submitted every April 1st. However, intermittent submittals "within 30 calendar days" whenever a vehicle is added or removed from the fleet are needless, repetitive, and overly burdensome.

Several of SMUD's vehicles and aerials are custom-built to meet SMUD's unique needs. Procurement and delivery of these vehicles may occur several times throughout the year and are subject to unforeseen delays that are beyond our control such as manufacturer material shortages, staffing constraints, shipping

interruptions, etc. On any given year, the "30 calendar days" reporting requirement could entail multiple report submittals, which is disruptive to operations.

We recommend that any mid-year fleet vehicle additions and removals or other mid-year fleet activities be incorporated into the annual compliance reporting that is due on April 1st of each year.

G. Clarify requirements for the infrastructure construction delay exemption.

Currently, the Infrastructure Construction Delay exemption is limited to a one-year extension. Limiting the extension to one-year is unrealistic and fleets may not be able to meet this requirement, often for reasons outside of their control. Infrastructure delays may not be the result of a single, discrete event. There are several reasons why infrastructure may be delayed for longer than a year, beyond the executed contract/application date, including supply chain disruptions and shortages, complex utility infrastructure upgrades, local jurisdictional permitting and agency land reviews, and environmental remediation.

To render the provision workable, SMUD recommends several revisions to the infrastructure construction delay exemption for public fleets:

i. Revise the delivery extension period to match the length of the expected delay, which could be either shorter or longer than one year.
ii. Provide the Executive Officer discretion to consider granting a longer extension based on the fleet showing good cause for their unique situation.

H. Remove requirement to hire compliant fleets and exclude ZEVs and NZEVs acquired with public funding.

CARB should remove unnecessary provisions regarding fleet verifications for hired fleets and exclusion of ZEV and NZEV acquired with "public funding."

Conclusion

SMUD appreciates the opportunity to provide these comments in advance of the Public Hearing to Consider the Proposed Advanced Clean Fleets (ACF) Regulation for State and Local Government Agency Fleet Requirements. We thank CARB for its continued efforts to engage utility stakeholders during this rulemaking process.

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