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California Air Resources Board

Section Manager, ZE Forklift Regulation

Transportation and Toxics Division

1001 I Street

Sacramento, CA 95814

RE: COMMENTS ON DRAFT TEXT AND PRELIMINARY COST DOCUMENT FOR PROPOSED ZERO-EMISSION FORKLIFT FLEET REQUIREMENTS REGULATION

The California Manufacturers & Technology Association (CMTA) respectfully submits the following comments on the California Air Resources Board's (CARB) Draft Regulatory Language for the agency's proposed Zero-Emission Forklift (ZEF) Fleet Requirements Regulation (Regulation). For manufacturers and our affiliated suppliers, forklifts are an indispensable tool. The vehicle assists manufacturers in achieving higher operational efficiency levels while protecting employee health and workplace safety. California's manufacturers own, lease, and operate forklifts for various applications, and we also represent the forklift manufacturing industry at large. While we certainly appreciate the technological innovations of the forklift manufacturing industry and their commitment to minimizing emissions, our comments will primarily focus on the impacts this Regulation will have on industrial facilities within California.

CMTA is the statewide trade association dedicated to supporting and enhancing a strong business climate for California's 30,000 manufacturing, processing, and technology-based companies. For more than a century, CMTA has worked with the state government to develop balanced laws, effective regulations, and sound public policies to stimulate economic growth and create new jobs while safeguarding California's precious environmental resources. Today, CMTA represents more than 400 businesses from the entire manufacturing community—an economic sector that generates approximately \$300 billion annually and employs more than 1.2 million Californians.

CMTA and our respective members have been at the forefront of the global business community in adopting and advocating for technologies that help reduce or eliminate greenhouse gases from the atmosphere. These technologies also include those that target carbon emissions during transportation. California's business and industry partners have consistently responded to the call for reducing carbon emissions by investing significant human and financial capital to help California meet its climate policies while maintaining its position as the world's fifth-largest economy. These comments will focus on specific regulatory modifications and address elements contained in the Initial Statement of Reasons (ISOR).

Proposed Regulation - Fleet Phase-Out Provisions for Fleet Operators and Rental Agencies (§3006)

CMTA still fundamentally disagrees with the proposed phase-out requirements of the Regulation. While the Regulation has improved from earlier iterations, CMTA requests a model year/calendar year cap on the number of forklifts replaced based on the phase-out schedule.

For example, a CMTA member company currently operates forklifts with model-year dates of 2018 and earlier. As a large fleet, the Regulation would require the immediate phase-out of more than 25 forklifts beginning in 2028. Most of these facilities operate 24 hours a day, which presents a significant issue if these facilities are required to transition to all-electric forklift fleets and do so economically. Site evaluations are being conducted concurrently with the regulatory process to adequately determine and assess the needs of those companies within scope. Due to the capital costs of electric forklifts and supporting infrastructure, CMTA requests a cap on the number of forklifts that a fleet operator must replace in a given calendar year. The cap would only apply to business entities operating forklifts as part of their operation, not business selling or renting forklifts to another.

Through various internal evaluations, our membership has conveyed that an all-electric conversion will drive additional costs not fully accounted for in the Regulation. A lack of space for ZEF charging stations has created a need to purchase additional ZEFs to offset the limited charging capacity. Further analyses have indicated that replacement batteries are incredibly heavy, and to avoid safety concerns, the batteries would need to be charged in the forklifts rather than removed. Given the required 8-16 hours of downtime and the inability to remove the batteries from the forklifts, companies are considering increasing their fleet size to maintain regular operations. Some facilities would need two charging stations for every three forklifts to take advantage of intermittent daily charging and satisfy the full-charge needs. The Regulation assumes a 1:1 replacement ratio of large-spark ignition (LSI) forklifts to an electric model. However, California manufacturers and those representatives planning to comply with the Regulation have indicated significant replacement challenges for their operations.

CMTA would appreciate further consideration of a phase-out cap to assist California companies facing compliance hardships in 2028.

Proposed Regulation - Exemptions, Extensions (§3007)

We respectfully urge CARB to clarify further the exemptions and extensions provided in §3007 of the Regulation. CMTA appreciates the flexibility provided by the infrastructure delay extension, the infrastructure site electrification delay extension, and the technical infeasibility extension, but we seek clarification on these sections.

Infrastructure Delay Extensions

The infrastructure-related extensions do not provide enough consideration for facilities not owned by a fleet operator. Through CMTA's membership outreach, we have confirmed that numerous facilities will need to increase the square footage of an existing building to accommodate the need for charging infrastructure and storage. For facilities not owned by the fleet operator, expanding an existing facility would require renegotiating the lease agreement with the property owner or landlord. This consideration is not explicitly referenced within the infrastructure delay extension and should be included.

Further, CMTA has been made aware that certain local jurisdictions have been exceptionally problematic in providing the necessary flexibility for an entity to expand its facility to accommodate business growth and/or projects designed to improve environmental sustainability. Delays affiliated with the permitting process from local entities have been, and continue to be, a hindrance to compliance.

Therefore, CARB should coordinate with the appropriate local jurisdictions to provide a standardized roadmap that businesses can follow to comply with this Regulation.

Infrastructure Site Electrification Delay Extension

CMTA appreciates our collaborative relationships with California's utilities. Site electrification delays, or the unavailability of new electricity supplies are becoming a common problem. California's utilities have a statutory obligation to serve their customers, articulated in Public Utilities Code §451. The concern raised by our respective membership is that the servicing utility may face significant delays in providing the needed energy supply. Permitting, utility design, and utility construction of new infrastructure to serve a facility will face considerable challenges. We are aware that certain energization projects may take 18 months to 3 years or more to complete. While the utilities are obligated to serve, it does not mean that service will occur expeditiously.

The challenge with the current proposal is that it presumes adequate energy is available to support any deployment of ZEFs. The eligibility criteria require an entity to "deploy the maximum numbers of ZEFs that can be supported by the electric utility provider." In some instances, due to constraints, the maximum may be zero ZEFs. Yet, the Regulation is unclear whether that scenario would grant an extension. Further, the Regulation requires a fleet operator with multiple sites to relocate forklifts to the extent possible to maximize compliance across all sites. This requirement is unduly burdensome and will increase emissions from transporting forklifts to other facilities.

ISOR – Comments on the Environmental Analysis

CMTA agrees with the California Energy Commission's (CEC) assessment that electric vehicles are only a fraction of the state's energy demands. However, for California to achieve its greenhouse gas reduction goals, there is nothing gradual about the state needing to accomplish a "record-breaking" deployment rate to triple its current electricity grid capacity. As has been stated by the CEC:

California will need to sustain its expansion of clean electricity generation capacity at a record-breaking rate for the next 25 years. On average, the state may need to build up to 6 gigawatts (GW) of new renewable and storage resources annually. By comparison over the last decade, the state has built on average 1 GW of utility solar and 300 megawatts (MW) of wind per year. Over the next three years, electricity providers regulated by the CPUC will add another 8 GW of clean energy resources.¹

It is critical to accurately characterize the studies referenced in this section of ISOR, and equally appropriate to highlight all relevant findings. The Pacific Northwest National Laboratory analysis from 2020 is a case in point. While the projections for 2028 resource adequacy appear to be sufficient for 24 million EVs under normal system, weather, and water conditions, each of these variables has contributed to reliability challenges in California. The reality of climate change is one of warming temperatures, more frequent and severe droughts, and an increase in the risk of wildfire. There is a new normal which is characterized by extreme weather shifts and events that will continue to challenge grid operations. Another significant finding in this report is:

¹ California Energy Commission, *California Releases Report Charting Path to 100 Percent Clean Electricity*.
<https://www.energy.ca.gov/news/2021-03/california-releases-report-charting-path-100-percent-clean-electricity>

[...]additional generation for charging EVs is likely to be provided by natural gas combined cycle plants and combustion turbines predominantly throughout the WECC (85%–89% of all new generation).²

EV proliferation is only one element in California's cumulative emission reduction strategy, which does not present reliability problems by itself. However, collectively with other electrification policies, the Regulation further adds demands on an electricity grid that has already demonstrated insufficiencies. The broader western grid's ability to accommodate additional demands will come from using fossil fuels, which also conflicts with California's climate policies. While California has and will continue to demonstrate leadership in addressing climate change, the analyses must provide a comprehensive assessment that also considers the underlying challenges and potential policy conflicts.

ISOR – Comments on the Crossover Funding Programs

It is unclear why the ISOR contains references to complimentary incentives for zero-emission infrastructure that are generally not applicable to this Regulation. While it is clear that programs such as Carl Moyer, CORE, and elements of the Community Air Protection Program provide financial incentives to ease the transition to ZEF, Table 5 references numerous investor-owned utility EV charging programs that are not eligible for ZEF.

CMTA is aware that specific programs are available for forklifts and industrial customers, such as Southern California Edison's (SCE) Charge Ready Transport program and San Diego Gas & Electric's (SDG&E) Power Your Drive program. However, Assembly Bill 1082/1083 for EV charging infrastructure at California schools, parks and beaches certainly has no relevance to the Regulation. Similarly, SCE's Charge Ready Pilot program is available to commercial, multi-family, and public sector properties, and it is not entirely clear that programs offered by Pacific Gas and Electric (PG&E) are eligible for ZEF conversion. As CARB knows, different transportation electrification incentives and programs have various eligibility requirements. While CMTA supports incentive programs that provide additional opportunities for entities to reduce their respective emissions, limiting factors include unassured funding, vehicle eligibility, and customer class.

CARB should remove those programs irrelevant to the Regulation and provide adequate assurance that any programs listed are available to ZEF fleet operators.

Conclusion

CMTA appreciates CARB's consideration of our comments on the proposed Regulation, and we look forward to further revisions to the regulatory language and ISOR. By providing the needed clarity, and properly characterizing elements of the ISOR, the Zero Emission Forklift Regulation can become much more practical and accommodating to the needs of our diverse manufacturing industries.

Respectfully,



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² Kintner-Meyer, M. et al., Electric Vehicles at Scale – Phase I Analysis: High EV Adoption Impacts on the Western U.S. Power Grid, Pacific Northwest National Laboratory, July 2020 (web link: https://www.pnnl.gov/sites/default/files/media/file/EV-AT-SCALE_1_IMPACTS_final.pdf), p. vi.