



March 15, 2023

California Air Resources Board
Low Carbon Fuel Standard Program
1001 I St. Sacramento, CA 95814

Re: Potential Future Changes to the Low Carbon Fuel Standard Program (LCFS)

Zeem Solutions (Zeem) appreciates the opportunity to provide comments on the potential future changes to LCFS to support fleets, independent owner-operators, and the parties that serve them. Zeem applauds California Air Resources Board (CARB) for their work on LCFS and fully supports the continuation of the program.

Zeem provides long-term leasing, servicing, maintenance, parking, charging, and energy storage at our shared depot facilities for light, medium, and heavy-duty fleet vehicles. We open our charging infrastructure to all fleets on a contract-charging basis. Our mission is to transform the way fleets operate by providing an affordable solution for zero emission transportation that improves air quality within our communities. Zeem enables small fleets that have previously been unable to access support, especially those in underrepresented communities, to accelerate the adoption of zero-emission transportation as well help California meet its zero-emission vehicle (ZEV) and climate goals.

Medium- and Heavy-Duty ZEV Refueling Infrastructure

As discussed in the recent workgroup, infrastructure that serves light, medium, and heavy-duty vehicles should be eligible for capacity credits. Light-duty vehicles drive economies of scale for medium- and heavy-duty fleets. Zeem Solutions maximizes the utilization of chargers by opening up our infrastructure to all classes of fleet vehicles. One recommendation on how to include this in the LCFS program is to categorize stations as LD or MHD based on their predominant use.

Carbon Intensity & Ratchet/Acceleration Mechanism

Zeem supports stronger carbon reduction targets to combat the deflation of credit prices and ensure investment in the zero-emission vehicle industry. LCFS is a crucial program to support medium and heavy duty zero emission truck depots such as our Inglewood depot. The LCFS program has significantly more credits than deficits which is contributing to a rapidly growing credit bank. This is a clear signal for CARB to increase carbon reduction targets for technologies and fuels that carry health and safety risks, damage ecosystems, and include high lifecycle costs and emissions. Given this, we recommend a more aggressive 2030 percent CI reduction target than the alternatives proposed in the workshop. Additionally, we support a ratcheting mechanism that can respond quickly to LCFS market changes and recommend that the mechanism only works to increase the CI intensity reduction requirements.

Energy Efficiency Ratio (EER)

As mentioned in our previous comment letter, the current EER data groups all Class 4-8 electric vehicles in one category. This approach deflates credit generation for vehicle classes with the



most efficient EERs and inflates credit generation for vehicle classes with less efficient EERs. Zeem suggests:

- Reframe electric vehicle (EV) ERR with Class 4-6 vehicles in one category and Classes 7-8 vehicles in a second category.
- Data to support these new EER categories already exists; many fleets have been operating Class 4-6 vehicles and demonstrated higher EERs than LCFS awards. For example, [GreenPower's EV Star Cargo \(Class 4\)](#) gets 48 MPGe and [Lightning E Motors' Transit Passenger Van](#) gets 61 MPGe. [The DOE has calculated the miles per gallon for delivery trucks](#) to be 6.5 and shuttles as 7.1 so the EER for this vehicle would be 7.4 and 8.7 (MPGe/6.5 or 7.1) respectively. However, the current categorization means these vehicles are considered to have a significantly lower EER of 5.
- This simple change ensures that electrifying medium-duty vehicles is economically feasible for fleets to operate. Medium-duty electrification is arguably one of the fastest growing parts of the industry, with last-mile delivery anchoring the segment. It is critical to make sure that LCFS properly incentivizes using electric vehicles, especially in communities hardest hit by pollution.

Thank you for the consideration of our comments. We look forward to continuing to work with CARB staff in the future to improve air quality through cleaner transportation.

Sincerely,

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