

**DOCKETED**

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*Comment Received From: Zeem Solutions  
Submitted On: 2/8/2025  
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**Re Request for Information Medium- and Heavy-Duty Zero-Emission Vehicle Public Charging**

*Additional submitted attachment is included below.*



February 7, 2025

California Energy Commission  
Docket Unit, MS-4  
Docket No. 19-TRAN-02  
715 P Street  
Sacramento, CA 95814-5512

**Re: Request for Information: Medium- and Heavy-Duty Zero-Emission Vehicle Public Charging**

Zeem Solutions (Zeem) appreciates the opportunity to provide comments to the CEC on charging infrastructure for medium and heavy duty (MHD) vehicles and applaud the CEC's continued commitment to supporting MHD charging infrastructure and engaging with stakeholders to better understand industry needs.

About Zeem

Zeem operates shared charging depots with controlled access that are open to multiple fleets. Zeem has a track record of success in the commercial fleet charging infrastructure space with our flagship depot adjacent to LAX airport, which is home to 78 DCFC, 53 AC ports, and a 7.5 MW interconnection. At this site in Inglewood, CA we have dispensed over 5 million kWh of electricity year to date and are performing almost 1,000 charge sessions per day. Our depots are located near seaports, airports, inland ports, warehousing & distribution, and population centers. The customer base and vehicle composition are representative of the market as well as the transportation asset that the depot is located near. For example, our LAX-adjacent depot serves a diverse mix of customers including rideshare, rental, air freight, passenger shuttles, public fleets, and Class 8 fleets. In addition to our Inglewood site, we have depots coming online in Long Beach, CA, Seatac, WA, Newark, NJ, and at fleet hubs across the country.

Benefits of Shared Charging

The shared charging model enables fleets to transition seamlessly by providing guaranteed access to charging with monitored and maintained chargers so fleets can focus on their core business: delivering goods from point A to point B. Monitored and controlled access into secure facilities safeguard valuable cargo and prevent vandalism and theft associated with public charging. A long waiting line or inoperable charger is an inconvenience for the general public, but a profit killer for commercial fleets. While fleets of all sizes benefit from shared charging, it works especially well for small fleets due to capital constraints, available land, and the expertise to construct and maintain commercial charging infrastructure at their location.

Shared charging also improves economics. Assets with high upfront costs, like charging stations, need high utilization to recover the cost of the upfront investment. Several public charging stations have utilization below 1% which is a poor use of public dollars. In contrast, shared sites like Zeem's reach upwards of 30% utilization which is growing month over month.



Additionally, if each fleet builds their own private infrastructure, it will go underutilized. Managed and scheduled charging services drive up utilization and uptime which drives economies of scale for fleets, utilities, and shared charging providers. EVs are cheaper than diesel for some use cases when looking at total cost of ownership (TCO), and shared charging further improves this TCO by eliminating upfront cost of infrastructure. There is a threat of stranded assets and wasted public funding if all funding for MHD only goes to sites with uncontrolled access that do not adequately serve fleet's needs.

Shared charging also alleviates energization challenges. Most sites do not have sufficient power capacity to meet the demands required to make this transition. Aggregating demand at strategic shared locations reduces the number of grid upgrade requests making the process more streamlined for the utilities. Shared charging providers have the expertise and scale to deploy innovative solutions such as onsite generation and storage which alleviate grid constraints. Shared providers can make a small interconnect behave like a large interconnect while keeping peak demand low through managed charging and these innovative solutions.

Shared Charging serves the public good in multiple ways. By driving electrification of MHD vehicles it alleviates negative health and environmental impacts of internal combustion vehicles. It creates skilled jobs such as depot coordinators or technicians who are trained to operate chargers, maintain chargers, and maintain vehicles. Shared charging providers can create workforce development programs to use sites as "clean energy classrooms". Finally, it is a better use of public investment since they serve more fleets and more vehicles.

### Responses to Questions

The section above is in response to various RFI questions. The section below includes direct responses to specific questions.

*3. Is a reservation system for use of public chargers needed to meet the needs of the trucking industry?*

Yes, fleets need guaranteed access to charging to prevent interruptions to their business.

*4. What reservation systems exist that could allow use by more than one trucking company?*

Zeem does not have specific time slot reservations fleets can make, we contract to a level of service with our customers. We guarantee that fleets' vehicles are charged and available at the time they request (typically at the beginning of their duty cycle) or do top-off charges throughout the day. If a driver is waiting for their vehicle to charge, they have access to our drivers lounge facility with bathrooms and basic amenities. Our depot attendants coordinate the charging schedule behind the scenes to ensure operational efficiency.

*5. Does a "Trucking-as-a-Service" (Taas) model in which trucks are leased and guaranteed chargers by a site operator provide enough public opportunities for trucks that are not leased through the site operator?*



Zeem leases trucks to fleets in all-in-one packages that include parking, charging, service, and maintenance for one monthly fee OR we provide contract charging for customer-owned vehicles. Our contracts with fleets vary widely between the turn-key and charging-only option with agreements tailored to the fleets' unique needs and duty cycle. We provide technical assistance and fleet consultation services to all our customers to ensure they are informed and confident in their ZEV transition strategy.

### Conclusion

The transition to zero-emissions fleets is happening now and companies like Zeem are providing the critical infrastructure to realize the promise of how a decarbonized transportation sector will benefit communities, especially those that are overly burdened by harmful emissions. We applaud the leadership shown by the state of California and the CEC in supporting this transition through the consideration of shared charging.

Sincerely,

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### Further Reading

CALSTART report: Shared Charging Sites: Accelerating the ZEV Market and Delivering Public Benefits: <https://calstart.org/shared-charging/>

Shared Charging for e-Trucks: Smart Freight Centre: [https://smart-freight-centre-media.s3.amazonaws.com/documents/Shared\\_Charging\\_for\\_e-Trucks.pdf](https://smart-freight-centre-media.s3.amazonaws.com/documents/Shared_Charging_for_e-Trucks.pdf)