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# **CALSTART Comments on Proposed EV Charging Infrastructure Reliability Regulation**

Additional submitted attachment is included below.



#### CALSTART, Inc.

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August 12, 2025

To: California Energy Commission

RE: EV Charging Infrastructure Reliability, Docket: 22-EVI-04

CALSTART, headquartered in California, is a globally renowned organization dedicated to the advancement of zero emission vehicle and infrastructure technology. CALSTART has worked for 30+ years to accelerate the commercialization and deployment of advanced technologies and solutions. Through policy development, incentive program administration, and first-of-its-kind deployment partnerships, CALSTART drives the market toward clean transportation technologies to transform the transportation sector and reduce greenhouse gas and criteria pollutant emissions.

CALSTART is the administrator for block grant incentives on behalf of the California Energy Commission, including EnergIIZE Commercial Vehicles, Communities in Charge, and Zero Emission School Bus Infrastructure (ZESBI). EnergIIZE provides incentives for charging and hydrogen refueling infrastructure for medium- and heavy-duty (MDHD) commercial vehicles and has awarded over 340 MDHD projects. Communities in Charge provides incentives for Level 1 and Level 2 charging infrastructure for light duty vehicles and has awarded over 600 projects, a large proportion of which are for multifamily housing. ZESBI provides incentives for zero emission infrastructure for school bus fleets.

To align the design and requirements of these incentives with the draft regulation, we would like to offer the below recommendations.

#### **Establishing Thresholds in Defining DCFC**

Section 3121 (13) defines "Direct current fast charger (DCFC)" as "a charger that enables rapid charging by delivering direct-current (DC) electricity to an EV's battery". Within the Staff Report, in Chapter 2 Background, there is additional description showing that most commercial DCFC ports operate at 50-350 kW.

Minimum and maximum thresholds would help clarify "rapid charging". The regulation may otherwise be unclear for low powered DC charging, which can supply similar or faster charging than Level 2 but wouldn't be considered fast charging in the market, or for



Megawatt Charging (MCS), which is a newer technology standard. Across funding programs, the definition of DCFC can otherwise vary – with minimum thresholds usually between 50-100kW. MCS is not typically included in definitions of DCFC. EnergIIZE has seen substantial interest in low powered DC charging. This equipment is particularly useful where high powered charging is not possible or needed, or for output levels similar to Level 2 but where DC charging is desired over AC due to fleet vehicle compatibility, such as school bus fleets. This clarification would also enable funding programs to more easily identify which funding recipients the regulation would cover.

CALSTART recommends establishing minimum and maximum thresholds in the regulatory language. CALSTART recommends inclusion of low powered DC charging in inventory reporting.

### **Clarification for Electric Off-Road Equipment**

Section 3121 (16) defines "Electric Vehicle (EV)" as "a vehicle that is otherwise partially or fully powered on electric power received from an external power source". The regulation also excludes golf carts, electric bicycles, and other micromobility devices.

Section 3123 (b)(2)(N)(2) also includes a list of primary vehicle types, including light duty, medium duty, and heavy duty according to gross vehicle weight ratings (GVWR).

Off-road equipment is not classified into gross vehicle weight ratings, which is typically used for differentiating on-road vehicles. Funding for charging infrastructure for off-road equipment has been available under EnergIIZE and the California CORE voucher program. Examples of electric off-road equipment available in the market can be found in the eligible equipment catalog in CORE, which differentiates size of equipment by its lift capacity and includes port cargo-handling equipment, agricultural equipment, commercial harbor craft, transport refrigeration units, mobile power units, and other similar off-road equipment. Shared chargers can serve off-road equipment fleets in EnergIIZE, such as for equipment located at a port which is not accessible to the public but is accessible to fleets.

To provide greater clarity, CALSTART would recommend excluding offroad equipment from the definition of "Electric Vehicle" similar to micromobility or separately defining "Electric off-road equipment" and specifying that off-road equipment could qualify under the Fleet Charger exemption.

## **Consideration for Shared Charging Use Cases**

Section 3121 (20) and (40) defines "fleet charger" as "a charger that is not publicly available... and is solely used to charge electric vehicles



registered to the charging station operator" (§ 3121 (20)) and defines "publicly available" charger as "available to, and accessible by, the public for any period of time" (§ 3121 (40)). In addition to fleet charging and publicly available charging, EnergIIZE provides funding for shared charging and charging as a service use cases, in which chargers may be shared by two or more fleets and/or owned by a third party that provides privately available charging to a fleet. In cases where private fleets are sharing charging infrastructure, this provides a benefit to small fleets and independent owner operators that may not have access to space to install charging and can increase equitable access to charging for fleets. For transit agencies, sharing charging among other transit agencies enables them to electrify more routes where it may not otherwise be feasible. In these fleet sharing agreements, the charging infrastructure would not otherwise be available to the public. Further information about CALSTART's research on shared charging sites and their benefit to fleets is available here.

Section 3123 (b)(2)(S) and (T) includes examples of payment method and pricing information to include in Inventory Reports. For shared fleet charging and charging as a service, payment can often be different than for conventional passenger vehicles. Payment methods can include fleet fuel cards that use RFID or may be structured under fuel supply/purchase agreements or subscription models.

CALSTART recommends including these fleet charging structures in the regulation definitions and adding clarity on whether they would be exempt from reporting and reliability standards.

#### **Temporary and Mobile Charging for Fleets**

Section 3121 (49) defines "temporary charger" as "a charger that is designed to be portable and available for use intermittently, is not attached at a location, and is not available for use at a single lot or parcel, or an adjacent lot or parcel, for more than 30 days in a calendar year."

Mobile charging provides needed electricity supply where there is a lack of capacity or space, where there are permitting challenges, where there are funding barriers for large-scale infrastructure investments, and where charging supply needs to meet vehicles in the field, such as for agricultural electric equipment. These can be important solutions bridging the gap for fleet electrification and enabling more fleets to electrify. Further information about CALSTART's mobile charging research can be found HERE.

For these fleet applications, it is not clear if mobile charging, when in use by fleets temporarily, would qualify under the fleet exemption as they would not be solely dedicated to vehicles registered to the Charging Station Operator. Ownership structures for mobile charging



could include rental, leasing, or provision by a vehicle manufacturer or utility. Funding for mobile power units has been provided by California CORE and in state-funded pilot programs.

CALSTART recommends consideration of mobile charging in the fleet exemption for periods of time where they are in use by a fleet.

## **Shared Charging at Multi-Unit Dwellings**

Section 3121 (28) defines "multifamily dwelling" as "real property that is improved with, or consisting of, one or more buildings containing more than one dwelling unit that is intended for human habitation, excluding single family residences.

Section 3121 (39) defines "Private residential charger" as a "charger used solely for private use by residents of a residential real property containing four or fewer dwelling units, or any charger used solely for private use by residents of a single unit of a residential real property containing more than four dwelling units for which one or more of the residents of that unit would be the exclusive charging station operator(s) or site host(s) of the charger.

Section 3121 (40) defines "Publicly available" and excludes (B) "a charger and associated parking spaces reserved exclusively to residents, tenants, visitors, or employees of: a private residence or common interest development; or a residential building adjacent to a private residence".

California Civil Code Section 4100 defines "common interest development" as "a community apartment project, a condominium project, a planned development, a stock cooperative".

Across these definitions, it appears that most charging arrangements at multi-unit dwellings would be exempt from requirements of "publicly available" chargers and that there is no requirement for the chargers to be located at the common interest development. Common interest developments that share a common parking or charging location may not neatly fit into these definitions.

CALSTART recommends consideration for chargers that are not located at a common interest development but would otherwise qualify under the "publicly available" definition, including whether the charger is intended for use by residents, tenants, visitors, or employees of one or more common interest developments.

CALSTART would also recommend clarifying if mixed used common interest developments would fall under the same exclusions.



## Conclusion

CALSTART applauds the effort of the California Energy Commission to draft this third staff report on EV charging infrastructure reliability. We respectfully request that you consider the above recommendations. It is essential that California has a reliable EV charging network, as it is vital to the state's transition to zero emission vehicles and towards achieving the state's climate goals.

Thank you for your time and attention.

Sincerely,

Darryl Little Jr. State Policy Director CALSTART, Inc.

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