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## **EV Realty Comments - MHD Public Charging**

*Additional submitted attachment is included below.*

February 7, 2025

California Energy Commission  
715 P Street  
Sacramento, CA 95814  
Submitted electronically to Docket# 19-TRAN-02

**Re: EV Realty Comments on Medium- and Heavy-Duty Zero-Emission Vehicle Public Charging**

Dear California Energy Commission Staff,

EV Realty appreciates the opportunity to provide this response to the Request for Information on Medium- and Heavy-Duty (MHD) Zero-Emission Vehicle Public Charging. EV Realty would like to thank the California Energy Commission (CEC) staff for the work to date and the commitment to soliciting feedback in advance of solicitation development. Given the state's ambitious goals and relatively limited funding, it is essential to "get this right" and maximize the impact of these investments as we work to accelerate deployment of MHD EV charging infrastructure in strategic locations around the state.

EV Realty develops, owns, and operates multi-fleet EV charging hubs for commercial fleets. Our charging hubs provide critical charging solutions for fleets that may not be willing or able to deploy their own charging infrastructure due to grid constraints, landlord restrictions, resource limitations, or other operational considerations. We site charging in grid-optimized locations that mitigate the need for costly and time-consuming grid upgrades. This business model aligns well with California state policy priorities by accelerating electrification and reducing the overall costs associated with this transition.

The questions CEC has posed around access controls, fleet needs, and site design are vitally important to the growth of this market. While it may be natural to think about the future of charging resembling first-come, first-served truck stops, the fueling ecosystem required for electric truck differs from the diesel refueling network in terms of market penetration and fueling times. These fundamental differences call for a different approach that gives fleet operators the certainty they need to go electric, particularly in the early years of the market.

Rather than attempting to answer each individual question, we are providing higher-level feedback on the issue of managed vs. unmanaged site access and the many compelling reasons to allow flexibility and let the market develop with a variety of solutions. The ultimate goal should be to accelerate the market and realize the public benefits of widespread freight electrification.

**Managed access provides fleets the operational certainty they need**

There has been extensive discussion throughout the stakeholder community around public access requirements – many of which were originally developed for light duty retail stations – and the degree to which they should apply to medium- and heavy-duty truck charging sites. At the most basic level, this is a discussion about managed vs unmanaged access. First-come, first-served truck stop-style sites have unmanaged access. Sites with managed access can take many forms, ranging from shared sites serving multiple fleets (including smaller fleets and owner-operators) to behind-the-fence sites for a single fleet

(important, but largely out of scope this RFI). All of these will be needed, and CEC's goal at this early stage should be to support the overall ecosystem.

Our discussions with fleet customers of all sizes have demonstrated a preference for access controls, security, and certainty around the ability to charge. Fleets simply want to know they will be able to charge when they arrive, they want sites to be secure, and they appreciate the certainty and potential cost reductions provided by pre-negotiated contract terms. As a developer, we are designing sites with managed access in response to this input.

Question #2 asks how CEC should “plan for the state’s future MDHD charging needs to both accommodate fleets that will need access to chargers while en route to a destination (similar to the diesel truck stop model where the ports are fully publicly accessible first-come-first-served) vs. fleets that need certainty that charging will be available and accessible when it comes time to charge (the reservation system model)?” Arguably all fleets will need certainty around the ability to charge, whether this is at a domicile location, a frequent destination, or a remote corridor charger. The need for operational certainty is particularly acute at this early stage of the market with a charging network that is still developing, in stark contrast to the much more widespread diesel fueling network.

### **CEC should allow shared sites with managed access in funding opportunities**

EV Realty firmly believes the primary goal should be to accelerate electrification, and this will require a comprehensive charging ecosystem that evolves to meet fleet needs. Different locations and markets will call for different solutions ranging from 100% managed to 100% unmanaged access. Managed access will be particularly important in and near freight hubs as some fleets will use offsite hubs as domicile charging, underscoring the need for access controls and security. Maximizing flexibility in CEC funding opportunities – particularly at this early stage of the market – should help achieve the overarching goal of widespread electrification. We recommend against program requirements that preclude the use of reservation systems and/or other access controls that give fleets the certainty they need to confidently plan and operate.

The RFI draws a strict distinction between “depot (private) and en route (public) charging.” This may introduce some confusion to this very important discussion. First, this is arguably an oversimplification that attempts to bucket charging into distinct categories that may not always fit. For example, many multi-fleet shared depot sites are designed to serve as en-route charging for some trucks and overnight or domicile charging for others and it's not clear how such a site might be categorized in the context of the current RFI. Remote corridor charging for long haul applications may be the easiest to firmly define as en route, but much of the charging in and around freight hubs will be less clear-cut, highlighting the need for flexibility in CEC programs. Furthermore, the framing above suggests upfront that depot sites are private and en route sites are public. There are likely to be many exceptions to this and many sites that do not fit neatly into either category.

### **Shared sites with managed access have public benefits**

The goal of CEC investments in truck charging should be public benefits, and this does not necessarily require unmanaged public access. The way to realize widespread public benefits is to accelerate electrification. Fleets are unlikely to make the switch to electric vehicles without charging solutions that

are cost-effective, convenient, and easily integrated into their operations. Facilities with controlled access, reserved stalls, and backend payment through pre-negotiated contracts are designed specifically to deliver on cost, convenience, and simplicity.

Industry players in the shared charging space will naturally find solutions that allow use by more than one company. EV Realty and other developers of shared charging hubs are highly incentivized to design workable solutions that maximize our potential customer base, meaning we need to ensure solutions for shared, multi-fleet hubs are broadly accessible and not limited to a single company.

EV Realty understands concerns about smaller fleets potentially being left behind in this transition, but we believe the focus on unrestricted public access requirements as the key to small fleet electrification is misguided. There is nothing inherent in access controls that creates barriers for smaller fleets. In fact, it has been our experience to date that smaller fleets are more likely to need the services we provide as they are less likely to be able to tackle the charging challenge on their own. EV Realty has no desire to exclude potential customers of any size.

The California Transportation Commission's SB 671 Clean Freight Corridor Efficiency Assessment also highlights the value of "shared depot facilities," particularly in the near term:

*As multiple fleets and independent owner-operators will be able to use a shared depot facility, these sites could be considered publicly accessible...Contracting with a third-party fueling provider can sometimes be more cost effective for fleets than developing their own zero-emission depot. If fleets can save money on infrastructure, it will allow them to invest more in zero-emission trucks.<sup>1</sup>*

Shared charging hubs help address the "pain points" slowing adoption of medium- and heavy-duty commercial EVs. This transition will have a wide range of benefits, ranging from GHG reductions to local air quality benefits. Shared hubs with managed access have the added benefit of aggregating load, boosting utilization, and helping to put downward pressure on electricity rates. None of these public benefits are contingent on unrestricted public access.

Recent papers by both CALSTART and the Smart Freight Centre outline the many potential benefits of shared sites with managed access. For example, the Smart Freight Centre compared private, shared, and public sites in terms of utilization, flexibility, and grid constraints, concluding that "in comparison to public and private charging, shared charging is a concept which provides a cost optimal, less resource intensive, relatively quicker deployment strategy for the satisfaction of charging infrastructure needs. Shared charging offers additional benefit in areas of high grid congestion."<sup>2</sup> Similarly, CALSTART calls for funding of shared sites with access controls, noting "shared multi-use sites may have the most potential to scale infrastructure availability quickly, serving the public need for rapid spread of widespread charging."<sup>3</sup>

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<sup>1</sup> SB 671 Clean Freight Corridor Efficiency Assessment. California Transportation Commission, December 6, 2023. Page 38. Available online at <https://catc.ca.gov/-/media/ctc-media/documents/programs/sb671/sb671-final-clean-freight-corridor-efficiency-assessment-dor.pdf>

<sup>2</sup> Shared Charging for e-Trucks. Smart Freight Centre. August 2024, page 5. [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)

<sup>3</sup> Shared Charging Sites: Accelerating the ZEV Market and Delivering Public Benefits. Michael Joseph, CALSTART, November 2024. <https://calstart.org/shared-charging/>

## **Ideal solutions for access management will vary across sites and over time**

Managed access and “reservation systems” can take many forms, and different sites call for different solutions. We caution against attempting to specify the optimal site configuration or trying to determine what percentage of chargers should be fully public with unmanaged access vs shared with some form of management. The market will need all of the above with a mix of fully public, fully private, and shared sites. Sites that are near major freight hubs may be designed differently than sites along remote corridors. Moreover, the market will evolve as vehicle and charger populations grow. Sites developed to meet the market today may need to make adjustments in the future.

The term “reservation system,” while not defined in this RFI, can be interpreted in many different ways. This could be a simple time-based slot akin to a restaurant reservation, but that is not the only option. In practice, some managed access sites may have leased stalls, others may have valet-like services, and others may have a mix of access management strategies. Many will feature contracts with pre-negotiated pricing and backend payment, reducing cost and complexity for both fleets and developers.

Given the variety of potential solutions and the variation across sites, we recommend thinking broadly about access management. Developers and their fleet customers are bringing various solutions to market that are tailored for specific situations and site types. Attempting to design or require the optimal reservation system at this early stage of the market risks needlessly adding cost and complexity to site design, potentially resulting in a set of well-intentioned requirements that work for some situations and not others.

## **CEC’s role is growing more important as California leads this transition**

We are at a pivotal time for electrification. The state has set ambitious goals through Executive Order N-79-20,<sup>4</sup> groundbreaking regulations and industry agreements from the Air Resources Board,<sup>5</sup> and forward-looking analysis and planning from CEC. With growing policy uncertainty and pullbacks at the federal level, California’s leadership is increasingly important.

CEC’s investments in truck charging infrastructure have the potential to accelerate the buildout of a network that enables widespread electrification. This means encouraging private investment and ensuring that charging is deployed where it is needed most. In the near-term, charging is needed in and around freight hubs to enable the local, regional, and short haul applications most primed to electrify.<sup>6</sup> Looking ahead, CEC will also need to ensure that charging is deployed along key freight corridors, including in rural areas serving long haul trucks. There is no compelling reason to preclude access

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<sup>4</sup> Executive Order N-79-20 creates a goal for the State that “100 percent of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks.”

<https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>

<sup>5</sup> The Advanced Clean Trucks regulation calls for rapid electrification of trucks in the state.

(<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>) The Clean Truck Partnership reinforces these goals with manufacturer commitments ([https://ww2.arb.ca.gov/sites/default/files/2023-07/Final%20Agreement%20between%20CARB%20and%20EMA%202023\\_06\\_27.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-07/Final%20Agreement%20between%20CARB%20and%20EMA%202023_06_27.pdf))

<sup>6</sup> This strategy, starting with freight hubs and then moving out to connecting corridors, is detailed in the National Zero Emission Freight Corridor Strategy. Joint Office of Energy and Transportation. March 2024, updated September 2024. Available online at <https://driveelectric.gov/files/zef-corridor-strategy.pdf>

controls and reservation systems at any of these locations. Developers are strongly incentivized to maximize utilization, and will not be looking to turn down would-be customers, particularly at this early stage of the market.

CEC's Draft 2024 Zero-Emission Vehicle Infrastructure Plan rightly notes that "there are many uncertainties about what a mature MDHD charging system will look like, so it is difficult to prioritize one charging type over another." This simple fact highlights the need to maximize near-term flexibility in CEC funding programs, particularly for charging sites with the ability to serve multiple fleets in and around the state's vitally important freight hubs.

EV Realty recognizes that there are situations where minimum specifications are warranted to future-proof sites and maximize the impact of state investments. EV Realty also recognizes the value of public charging and we do see a role for these sites as the market matures. However, we encourage CEC to enable flexibility and innovation so that market participants can come forward with solutions tailored to specific needs and locations.

EV Realty appreciates the opportunity to comment on this important topic and look forward to working with CEC on the rollout of truck charging infrastructure in the state.

Sincerely,

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