

DOCKETED

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2024 NEVI Deployment Plan Update - Gage Zero Comments

Additional submitted attachment is included below.



May 24, 2024

California Energy Commission
Clean Transportation Program
715 P Street
Sacramento, CA 95814

RE: 2024 NEVI Deployment Plan Update

Dear Commissioner Monahan and Clean Transportation Program Staff,

Thank you for your leadership in accelerating the development and deployment of zero-emissions vehicles and related infrastructure throughout the State of California. The Clean Transportation Program plays a critical role in achieving the state's ambitious climate goals and supporting California's sustainable, long-term economic development.

In a recently held workshop ahead of the 2024 National Electric Vehicle Infrastructure (NEVI) Program's upcoming second solicitation, the California Energy Commission (CEC) solicited public responses on program guidelines. Our company, Gage Zero LLC (Gage Zero), is writing in response to the questions relevant to the medium- and heavy-duty truck charging sector.

Gage Zero is a women-led team of clean energy and transportation experts with more than \$10 billion in combined infrastructure and transportation experience who have come together to develop, own, and operate reliable, multi-fleet electric truck charging sites nationwide, including in California. These multi-fleet charging hubs will be conveniently located for customers and eliminate any upfront costs for fleets related to the build-out of charging infrastructure – which is a key barrier to electrification. Gage Zero's multi-fleet charging hub model supports the state's Advanced Clean Trucks (ACT) Rule by (a) allowing fleets to rapidly electrify without having to expend capital to construct the necessary charging infrastructure, and (b) allows for opportunity charging to support the electrification of fleets of all sizes and use cases. As of the submission of this response, Gage Zero has announced its first electric truck charging sites in Fontana, CA and Alliance, Texas, with plans to expand in other regions in the immediate future.

The key question posed by the CEC is: **“Should medium- and heavy-duty truck charging become the next goal for NEVI funding in California? If so, how should future solicitations factor in federal requirements on connector and charger sizes?”**

Our team at Gage Zero believes that Governor Newsom's EO-N-79-20 that first set the state's target for 100% electrification of fleets by 2045, the California Air Resources Board (CARB) ACT Rule, the upcoming CARB Advanced Clean Fleets (ACF) Rule, and the current state of medium- and heavy-duty truck charging infrastructure all predicate utilizing upcoming NEVI funding towards future medium- and heavy-duty truck charging projects. According to the CEC's 2nd AB 2127 Report, 5,500 public and 109,000 depot chargers will be required to support 155,000 zero-emission trucks, and future NEVI funding could rapidly accelerate the ability to meet this deployment target.



Gage Zero would like to offer three important updates to the program requirements that would best support the State's electrification goals, including, and especially, as concerns the ACT and ACF Rules.

1. Adjust 1-mi from corridor siting requirement to at least 5-10 mi.

We recognize that there has been a focus in the light-duty passenger vehicle sector on locating charging within a mile of a major corridor. However, it is important to acknowledge the differences in customer needs and site specifications when it comes to medium- and heavy-duty trucks. Light-duty passenger vehicles charging along corridors requires quick access on and off freeways and a much lower amount of overall power at the site. A one-mile requirement, as required in the federal NEVI program as well as previous LDV corridor charging programs funded by the CEC Clean Transportation Program, is therefore more suitable for light-duty charging. For commercial trucks, the operational needs of fleets and the grid constraints inherent in multi-megawatt sites call for more flexibility.

Since the release of the NEVI Program, the U.S. Joint Office of Energy and Transportation released a National Zero-Emission Freight Corridor Strategy intended to drive alignment on infrastructure deployment. The "Strategy identifies the greatest opportunities to support early introduction of ZE-MHDVs, promoting cost savings for commercial fleets, cleaner air for communities, and strategic investments for infrastructure companies and electric utilities." Phase one focuses on building out the charging ecosystem in key freight hubs, while future phases branch out along key connecting corridors. Additional siting flexibility would allow the industry to better align with this national strategy and, ultimately, accelerate widespread electrification with the greatest benefits accruing to those regions suffering most from diesel pollution today. The local air quality benefits will be driven by the pace and scale of electrification in the area, regardless of the exact locations of the chargers.

2. Allow for NEVI funding to be utilized towards multi-fleet charging hubs, which serve both dedicated fleet charging and opportunity charging.

Currently, NEVI funding for medium- and heavy-duty electric truck sites must be used for charging stations serving public (aka opportunity) charging. However, this is limiting because the economics of developing a large-scale, multi-fleet medium- and heavy-duty truck charging site require some amount of known (i.e. contracted) revenue in order to get built. Thus, NEVI funding would be much more likely be utilized for medium- and heavy-duty truck charging sites if the funds could be used for sites that serve both contracted and non-contracted (i.e. opportunity) fleets. Further, for components of cost that support the site as a whole – e.g. utility interconnection cost, underground work, construction labor – it would be difficult to break out what proportion of these costs were for contracted vs. non-contracted customers, and those proportions would likely change over time in any case. Hence, it would be most beneficial for the development of medium- and heavy-duty truck charging sites if NEVI funding could be utilized for all costs associated with developing, building, and operating sites serving both contracted and non-contracted fleets, regardless of what proportion of those costs are for which type of fleet.



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3. Adjust power requirement from “minimum of 4 x 150 kW CCS connectors” to a per-site total amount of power (600 kW), to allow for construction of sites that serve fleets of all sizes and their particular needs.

Most (if not all) multi-fleet charging hubs require MWs of power for the total demand of fleet customers, but the exact power level required by each fleet customer is predicated by their particular use-case. For example, Level 2 overnight charging can be utilized by vehicles that are not on the road 24/7 and can help to bring down fueling costs for the fleet operator. Contrarily, some fleets may require much more rapid refueling that would require chargers of 350 kW or higher, even (in the future) MW-level chargers. The decision about how many chargers of which kW charging speed(s) should be left to the site developer to optimize based upon the customers and use-cases expected at each charging site.

We thank CEC leadership and the Clean Transportation Program staff for the opportunity to provide comments towards utilizing future cycles of NEVI funding towards medium and heavy-duty charging projects and invite a further discussion on any of the points we have stated above. Gage Zero looks forward to working with the State of California to rapidly accelerate the electrification of fleet transportation statewide.

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Gage Zero