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on MD-HD ZEV Infrastructure Funding Allocation Workshop

Additional submitted attachment is included below.

WattEV

3/17/2022

Spencer Kelley
California Energy Commission
715 P Street,
Sacramento CA, 95814

Re: WattEV Comments on MD/HD ZEV Infrastructure Funding Allocation Workshop

To whom it may concern,

WattEV would like to thank the California Energy Commission (CEC) for the opportunity to provide comments on the FY 2021/2022 MD/HD funding plan for MD/HD ZEV infrastructure projects. The CEC has consistently provided an opportunity for stakeholder engagement and feedback to shape and refine programs to ensure they are meeting their intended purposes – a process we appreciate and respect.

About WattEV
WattEV is a California-headquartered small business with plans to revolutionize the transportation industry through large scale deployments of sustainably powered, affordable, and conveniently accessible charging infrastructure to support fleets of battery electric heavy-duty vehicles. The first phase of WattEV's plan centers around the development of large, public charging stations strategically located along popular transportation corridors to support heavy-duty electric trucks. In California, there are currently three charging stations under development in Bakersfield, Gardena, and San Bernardino, with additional sites throughout California in the pipeline.

All charging stations will be equipped with high-powered direct current fast charger (DCFC) systems with interoperable open charge point protocol (OCPP)-compliant energy management software. All sites will initially start with Combined Charging System (CCS) chargers rated for 360kW compatible with current generation of battery electric trucks and will be upgraded in 2023 with Megawatt Charging System (MCS) chargers rated at 1MW. This innovative design enables the sites to be immediately operational using the currently available CCS technology, yet also allows for seamless upgrading to the more advanced MCS technology as soon as it is commercially viable and without additional capital expenditure.

In addition to establishing this series of public charging stations, WattEV plans to own and operate their own fleet of up to 12,000 heavy-duty electric trucks as part of their "Truck-as-a-Service" (TaaS) program. This business platform aims to eliminate the economic burden and risk associated with transitioning to electric heavy-duty vehicles, especially for those smaller fleets and independent contractors with limited capital. The TaaS program is a truck guarantee program that provides state-of-the-art vehicles, reliable maintenance support, and convenient access to charging all at a total cost of ownership (TCO) on par with diesel. In this business model, fleets and truck drivers can utilize WattEV's vehicles and easily access chargers without incurring the high initial costs of purchasing electric trucks or installing private infrastructure. Prices for the program are based on either daily usage and miles driven or through a fixed price given per scheduled route.

WattEV's strategic placement of charging hubs and deployment of its TaaS fleet is especially designed to target regional trucking between warehouses and port areas. Multiple locations have been secured in

the Los Angeles area both in and around the ports in order to provide a mechanism for more regional, short haul fleets to transition to electrification. WattEV sees the trucking routes between the ports and inland warehousing locations as a serious opportunity for MD/HD Zero Emission Vehicle (ZEV) adoption and as such believes that should be a focus of the CEC when amending these funding programs.

Please see below for WattEV's comments to the California Energy Commission's MD/HD ZEV Infrastructure Projects as well as answers to the questions posed in the workshop.

Truck Parking EV Charging and Hydrogen Refueling Program

- WattEV recommends that private entities be eligible to apply for this program in order to widen the possibility of qualified applicants.
- We would recommend setting up a tiering structure for small lots and then large lots with small lots capped at $3 million (50% cost share) and larger lots capped at $10 million (50% cost share).
- The best way to integrate truck parking, charging, and refueling with a freight corridor would be to strategically locate these charging locations along major U.S. highways and shipping corridors to allow for ease of access. Or adjacent to large freight facilities. Additionally, WattEV's truck stop approach of providing charging, parking, and driver amenities provides an opportunity to seamlessly integrate into existing freight corridors by replacing the role that conventional truck stops currently play.
- The San Joaquin Valley along the US-99 and I-5 highways should be targeted for these funds given the large amount of freight transport going through this region daily. The Ports of Los Angeles and Long Beach should also be targeted for funding given the drayage and short-range regional hauling taking place between these locations and the numerous warehouse facilities in the inland empire.

Warehouse and Regional Trucking Program

- WattEV believes that the best way to provide refueling/charging options for warehouse and regional fleets is to locate publicly accessible charging facilities near warehouse facilities as well as along their usual routes to and from the ports.
- WattEV does not believe that solely funding depot charging/home-base charging is sufficient to satisfy the current and future demand of ZEV regional fleets. Public charging opportunities will be necessary in order to offset some of the costs that fleets will need to incur as they make the transition to zero emission. By funding public charging facilities, you are allowing regional fleets to make their initial investments in vehicles and utilize publicly available options while they slowly build up their infrastructure capabilities. This also allows flexibility for fleets in case capacity or hardware issues arise at one of their facilities thus preventing them from charging their vehicles with their own infrastructure.
- Southern California should be targeted for funding with a particular emphasis on the areas around the ports of Los Angeles and Long Beach as well as the Inland Empire given its numerous warehouse facilities. Many of these short-range regional fleets travel between the ports and inland empire warehouses representing a huge opportunity ZEV fleet adoption and infrastructure utilization.
- Publicly accessible charging infrastructure resolves the security risk concerns presented by sharing infrastructure between fleets on private campuses.
- We highly recommend tiering the funding between behind the fence charging and publicly accessible with funding based upon the volume of expected demand.

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Innovative EV Charging and Hydrogen Refueling Technologies

- BESTFIT was a critical funding program to help introduce new concepts into charging for medium and heavy-duty vehicles. As the industry continues to evolve, the Energy Commission's continued investment in pushing the boundaries of what is possible and encouraging technological innovation is and will remain critical. This is especially critical given the nascent state of the market for medium and heavy duty and the forthcoming introduction of the Megawatt Charging Standard upgrades.
- The initial approach on concept papers is a fantastic entry way to whittle down the pool and ensure that what applicants are submitting is hitting the mark for the Energy Commission's goals and objectives. However, there should be more of a connection between the concept paper and the full application, allowing the full application to be less of a labor-intensive effort.
- There should be a funding tiering to allow for small and innovative projects at less than $2 million and then larger, more transformative projects at $5 million.
- More funding should be placed in medium-and-heavy-duty than light duty. Light duty is a more mature market.

Mobility-as-a-service Models

- Trucking-as-a-service (TaaS) is a critical business model that allows fleets of all sizes to easily transition to ZEV MD/HD trucks. It takes away the upfront capital and operational risks in regard to reliability and cost management. WattEV recommends that this TaaS model be a focus of this funding so that more information can be gathered, and improvements can be made to this service as a whole. This is a huge growth opportunity.
- In order to target the drayage sector, WattEV recommends directing funding to regions surrounding the ports of Los Angeles and Long Beach. By focusing funding around the ports, it will allow this TaaS business model to be directly available to independent owner operators (IOO) working in the ports.
- TaaS needs funding support for infrastructure and vehicle purchases (bundled together, ideally). A novel concept that would help support wider deployment would be a mile guarantee program. This would help cover the shortfall of fleet operators and underwrites risk.
- TaaS is an industry that is poised for substantial growth, and companies such as WattEV are making large inroads in a space that was traditionally held by dedicated fleet operators and large financing firms.
- The ideal project approach would be a bundled service offering that could allow for infrastructure, vehicle replacement, and other project components.

Large Scale Ultra-Fast Charging Stations

- 10 ultra-fast charging sites constitute a large-scale ultra-fast charging site.
- For Medium and Heavy-Duty public access, the industry accepted minimum for ultra-fast charging is 350kW.
- The solicitation should fund each site at a minimum of $2 million and a maximum of $5 million.
- It would be extremely worthwhile to coordinate project funding with the EPIC division of the Energy Commission as these sites will need critical electric capacity and could benefit from sophisticated load management technologies.

WattEV would like to thank the CEC once again for providing this opportunity for comments and participation from the community in developing these essential funding programs. We are eager to work with you and your team to accelerate the deployment of MD/HD charging infrastructure throughout California. To that end, if you would like to discuss any of the recommendations and comments made above, please contact me at syoussefzadeh@wattev.com.

Sincerely,

Salim Youssefzadeh
CEO
WattEV