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Response of Voltera to CEC-Specific CFI Grant Program

Voltera appreciates the opportunity to provide this â€œResponse of Voltera Power LLC (â€œVolteraâ€) to Docket #24-EVI-01. RFI Considerations for the CEC Zero-Emission M/HD Drayage Infrastructure Application for the U.S. DOT CFI Program.â€

Please reach out to me with any questions or for clarification regarding this correspondence.

Additional submitted attachment is included below.

voltera

June 28, 2024

Sarah Sweet, Federal Liaison
California Energy Commission
Docket Unit, MS 4
Re: Docket No. 24-EVI-01
715 P Street
Sacramento, CA 95814-5512

Re: Response of Voltera Power LLC ("Voltera") to Docket #24-EVI-01. RFI Considerations for the CEC Zero-Emission M/HD Drayage Infrastructure Application for the U.S. DOT CFI Program

Filed electronically in Docket # 24-EVI-01

Sarah Sweet,

Voltera appreciates the opportunity to provide perspective to the California Energy Commission (CEC) to inform port-focused project development. Voltera applauds the Commission's continued leadership and initiatives focused on enabling funding to support medium- and heavy-duty charging in California. Voltera appreciates this focus in the context of the U.S. Department of Transportation — Federal Highway Administration's Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program) and the balance between a port emphasis and the ongoing I-5 electrification vision of California, Oregon, and Washington.

Voltera offers feedback to express our interest in supporting the Energy Commission's initiative. Please see our response to direct questions posed by the CEC:

1. Please disclose your business type and vehicle class, if applicable. Are you a driver, fleet operator, truck stop operator, charging and/or hydrogen fueling provider, installer, manufacturer, utility, public agency, or other? Are you part of a small, veteran-owned, woman-owned, or minority-owned business?

Voltera is a for-profit corporation. We design, build, operate, and maintain infrastructure for fleets and branded charging networks — many of which are challenged in the current market to find viable off-premises charging sites. Voltera solves these challenges by siting, investing in, developing, owning, and operating the infrastructure that enables customers to transition to zero emission vehicles (ZEVs) at speed and succeed with them at scale.

Voltera provides a charging infrastructure as a service (ClaaS) model. ClaaS is a turnkey solution that includes site identification and acquisition, site development, hardware deployment,

operations, and maintenance. With plans to invest significant capital and a team with deep experience deploying charging assets, proven critical infrastructure expertise and key strategic partners, Voltera is well positioned to help address the EV infrastructure challenge and enable scaled zero-emission transportation. Voltera's customers span from rideshare to drayage fleets to branded charging networks, and our business strategy seeks to accelerate the transition to ZEVs by addressing infrastructure challenges inhibiting the adoption of ZEVs — notably including those affecting drayage trucks.

Voltera is optimistic that the prospective funding secured by the CEC through the CFI solicitation will align with these initiatives. Voltera's current initiatives in California include:

- Goods movement: earlier this year Voltera announced the opening of its first Class 8 drayage charging depot in the Los Angeles region, near the Ports of Los Angeles and Long Beach. The project is Voltera's first scaled truck site with 65 installed high-powered DC fast chargers (DCFC).[1] More recently Voltera announced plans for additional facilities near the Ports of Savannah, and Long Beach and Los Angeles, with support from the Federal Highway Administration and the South Coast Air Quality Management District.[2]

- People movement: Voltera has purchased and is developing multiple properties in California to support light-duty (LD) rideshare electrification, including in the San Francisco and Los Angeles regions.

  Wider Acquisition: Voltera is expanding nationally. In February, Voltera announced the acquisition of 19 ZEV infrastructure development sites since August 2022, bringing Voltera's portfolio to 21 sites, representing over $150 million of private investment in ZEV infrastructure real estate and over 115 megawatts (MW) of planned charging capacity, with projects across California, Arizona, Texas, Georgia, and Florida.[3]

- Regulatory: Voltera is actively engaged in regulatory proceedings in California, with a focus on speeding the development of charging infrastructure. We are a party to Rulemaking 23-12-008, Order Instituting Rulemaking Regarding Transportation Electrification (TE) Policy and Infrastructure, before the California Public Utility Commission (CPUC), which is intended to address future utility TE programs. Voltera is also engaged as a party in Rulemaking 24-01-018, the Order Instituting Rulemaking to

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[1] "Einride opens largest charging station for heavy-duty EVs, powered by Voltera;" Website Access: https://electrek.co/2024/03/21/einride-opens-largest-charging-station-for-heavy-duty-evs-powered-by-voltera/

[2] Website Access: https://www.volterapower.com/post/voltera-secures-9-6m-federal-grant-to-electrify-major-us-ports-savannah-los-angeles-and-long-beach

[3] Reference: Voltera Solutions, EV Charging and Infrastructure Services. Website Access: https://www.volterapower.com/solutions

Establish Energization Timelines, where we provide feedback with respect to site energization experiences. Voltera is a registered California Low Carbon Fuel Standard (LCFS) program credit generator and has actively engaged in the California LCFS rulemaking.

2. The purpose of this RFI is to help inform the CEC's application to the Federal Highway Administration (FHWA) for federal funding. If awarded, the CEC will release a competitive grant funding solicitation to provide funding to end recipients who would develop and construct the zero-emission MDHD infrastructure. Would you consider applying for CFI grant funding for site development if the CEC is awarded funding?

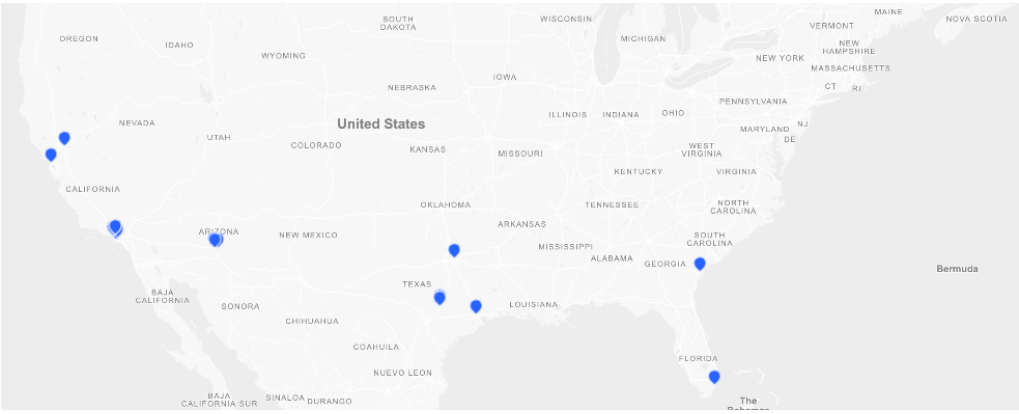
Yes, and Voltera is keen to partner with the Energy Commission. Notably, outside of supporting branded networks, Voltera's business has thus far been focused on fleet charging with dedicated access. Although Voltera is unlikely to take on utilization risk, we have been ideating on creative strategies to enable fleets, public sector entities, and more to benefit from Voltera's capital access, and to enable benefit from incentive access for similar stakeholders. Voltera will be pleased to endorse the Energy Commission's application and engage with CEC to maximize the application's competitiveness. Notably, Voltera's has sites and is likely to acquire additional sites that would help deliver CEC's aim. For example, Voltera has site(s) aligned with both the Ports of Oakland Corridor Segment Group and the Stockton Corridor Group as identified within the RFI. Voltera would also note properties in the Los Angles region that are located near the Ports of Los Angeles and Long Beach Corridor Segment Group, as identified within this RFI.

3. Do you already operate or plan to use zero-emission MDHD vehicles in the next five years? Please use a 1-5 rating scale where 1= least likely and 5= most likely. Please add additional information regarding your (planned) use of zero-emission MDHD vehicles as desired.

Voltera has built and is operating (and is currently building) EV charging infrastructure to support zero-emission battery electric MDHD vehicles. As discussed earlier, Voltera opened its first Class 8 drayage charging depot in the Los Angeles region, with an official launch in April. The project is Voltera's first scaled truck site with 65 installed high-powered DCFCs.[4] Voltera is actively in review of a national portfolio and envisions the opportunity to focus attention to support the Tri-State Partnership's application. The following map provides a proximate snapshot of the properties that Voltera has acquired to date.

[4] "Einride opens largest charging station for heavy-duty EVs, powered by Voltera;" Website Access: https://electrek.co/2024/03/21/einride-opens-largest-charging-station-for-heavy-duty-evs-powered-by-voltera/

Figure 3: Voltera's acquired properties



4. For 2024-2027, what would you like to see as the priority for zero emission infrastructure? Hydrogen or electric? Or a mix of both? To meet Advanced Clean Fleet (ACF) requirements, are you considering battery electric or hydrogen trucks? When/where would you prefer to recharge/refuel? E.g.: Depot charging vs. on-route, during loading/unloading, overnight or as needed. Do you have a preference for the power level or speed of charging infrastructure? E.g. 150kW, 250kW, 350kW or 1MW. What would meet your needs and why?

Voltera envisions that the path to a clean transportation future will be forged by a diverse array of vehicles, which particularly including battery electric trucks. To encourage market diversity for the M/HD ZE truck sector — all of which is nascent — Voltera encourages the Energy Commission (to the extent possible) to remain agnostic as to fleet purpose prioritization under the CFI program. Relatedly, recognizing the nascency of the market, Voltera encourages the Commission to remain flexible in terms of the types of infrastructure that will be deployed, and how it will function. Voltera sees the value from different customer segments for a diverse array of use cases (e.g., the value of depot charging, on-route charging, charging during loading/unloading sessions, overnight charging, etc.). Here, Voltera encourages the Commission to continue to request feedback from the industry on what types of resources they need to help develop these and other market segments.

That said, there is a clear need to support fleets that are mandated to electrify, and in this regard Voltera encourages the Energy Commission to prioritize support to infrastructure that can enable fleet stakeholders subject to such mandates in the M/HD sectors. With such mandates in place, it is mission critical to rapidly accelerate infrastructure deployment in a manner that achieves state

objectives. For the M/HD sectors, Innovative Clean Transit (ICT),[5] Advanced Clean Trucks (ACT)[6] and Advanced Clean Fleets (ACF)[7] regulations have established clear ZEV deployment targets. Voltera believes that CFI can serve as an important resource to help enable stakeholders to achieve the goals and comply with the mandates of the ICT, ACT, and ACF regulations. Moreover, to encourage accelerated adoption consistent with fleet customer needs, Voltera would encourage the Commission to remain agnostic as to the charging requirements under future solicitations (although we recognize that it will be highly likely that the Commission creates a minimum charging threshold for EVSE around 150kW or above.

To embolden market diversification and to not overly restrict site investments, Voltera encourages the Energy Commission to provide flexibility with regards to power levels and the required number of charging ports. This approach will help enable infrastructure providers to deliver a variety of solutions to meet market needs, and closely aligns with state policies to promote transportation electrification projects that minimize costs while maximize benefits. Specifically, Voltera encourages the Energy Commission to enable infrastructure developers to provide a variety of solutions to meet market needs, which may or may not translate to specific power levels (min. or max.) and charging port numbers (again, min. or max.).

That said, as Voltera builds infrastructure consistent with a diverse array of customer needs, we continue to notice a key pattern in terms of the types and levels of services that are demanded by customers. Specifically, nearly all of Voltera's M/HD projects exceed 10MWs. Relatedly, based on our engagement with our customers thus far, Voltera believes that our customers will increasingly need projects to be energized at sizes in excess of 10MWs.

Are you willing to provide a non-binding letter of commitment for the CEC's application stating that your organization would utilize EV charging and/or hydrogen fueling infrastructure located within five miles of the AFCs found in the "Corridor Segment" below? If so, please see the attached letter of commitment template. Letters of commitment may be sent to Sarah Sweet, Federal Liaison at sarah.sweet@energy.ca.gov.

Yes. Accordingly, we have filed our letter of support in Appendix A of this document.

5. For EV charging and hydrogen fueling providers, describe:

a. Your organization's business model for public charging and/or hydrogen fueling offerings.

While Voltera's business model for fleets is not public and is tailored to support a diverse array of fleet customers, we envision a model enabling multiple fleet customers to enter into agreements

[5] Website Access: https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit/about
[6] Website Access: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet
[7] Website Access: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-fleets-regulation-summary

that would ultimately allow for multiple fleets to utilize a single site, particularly in the M/HD sectors. While Voltera provides a ClaaS model, we stress that many of our projects are designated for specific fleet customers who have specific operational needs and demands, and as such are not recognized as public charging. Here, Voltera encourages the Energy Commission to evaluate various pathways to invest in "shared" infrastructure utilized by multiple fleets but not more broadly open to the public. Voltera is optimistic that FHWA may evolve the definition of public access for the CFI program in such a way as to enable this. Open to the public is a well-meant requirement but often can have the unintended consequence of inhibiting private investment where utilization risk cannot adequately be overcome by incentive support, or arguably worse, potentially enabling unsustainable private investment where the business case even augmented by incentive support cannot sustain itself. Relatedly, Voltera provides key feedback with respect to how the Energy Commission may want to further evaluate how to support "shared" fleet configurations.

Public, private, and shared access

Voltera encourages the Energy Commission to evaluate if there are pathways to innovatively invest in infrastructure that can be accessed by M/HD fleets, through provisions that support private or shared access. Here, Voltera encourages the Energy Commission to maintain flexible access requirements where feasible within the FHWA program framework. Voltera further recommends that the Energy Commission consider structuring its CFI response to support "shared" fleet projects, through "shared infrastructure" to the extent permitted. This approach will be especially useful for the M/HD sectors, which are fundamentally different than light duty fleets, and need significant support to meet the charging needs of trucks and other commercial vehicles. Truck fleets have relied heavily on both public and private refueling historically. Despite the historic reliance on public fueling and recognizing the economic challenges with ZEV infrastructure investment and development, Voltera believes that the Energy Commission can significantly improve commercial vehicle access and business ZEV adoption by ensuring funding access for projects seeking to directly serve those vehicles and businesses.

b. Mechanisms your organization might leverage to provide affordable charging and fueling services to drayage fleet operators.

Voltera's turn-key solution is structured to minimize the impact on fleet customers by taking on the challenges associated with designing, building, operating, and maintaining infrastructure. With respect to affordability, Voltera's services are presented as a simple and single monthly fee for the customer with multiple options regarding energy costs. Whenever feasible, Voltera leverages grants and other incentives to help pay down the cost of construction. For example, Voltera is a party within the LCFS program and accrues credits on behalf of Voltera and our customers.

c. The scope of services, facilities and amenities provided at your recharging/refueling locations.

As much as feasible, Voltera builds sites specific to customer needs, which to date has included specific amenities to support fleet operations. Generally, our sites focus on the construction of chargers, but in addition to that we can provide a diverse array of services, from property beautification (e.g., landscaping, others), to technology integration strategies (e.g., solar, battery storage, etc.). For example, our Lynwood location includes a break room, bathroom, office space, and other amenities to support the property's operational needs. Voltera encourages the Energy Commission to work with stakeholders to assemble a list of amenities that it seeks for projects as part of the application, including and not limited to the amenities noted.

d. The anticipated site size, parking configuration (e.g., pull-through), total number of charging stalls capable of simultaneous charging, and total number of truck parking spaces that are not dedicated to charging or refueling.

Voltera does explore the prospect of operating a portion (or ratio) of a site in exclusive support to a customer (or customers), with other designated areas for public charging. Voltera does not have a specific percentage preference for pull-in or pull through parking. We also do not have a set percentage of vehicle classes targeted for our sites, as we build sites specific to customer needs, demand, and operational requirements.

e. How your organization approaches right-sizing infrastructure for near-term market demand and future-proofs infrastructure to be responsive to evolving needs.

Voltera's right sizing strategy consists of two main components: 1) building to meet a customer's current and future needs, and 2) technology Integration. During the negotiation process with the customer, Voltera develops both a near-term and long-term strategy with our customers. In some scenarios, Voltera will build excess EVSE at a site, with the intention on energizing these chargers at a later time (as fleet demand increases). This allows for Voltera to meet immediate customer demand while planning ahead.

With respect to technology, Voltera manages the entire EVSE network and backend on behalf of the customer. This management consists of both backend software management as well as resource management at the site location [e.g., on site distributed energy resources (DERs)]. Voltera has the ability through our software to "throttle" charging sessions during high demand events and has the backend software to manage a diverse array of charging scenarios. Voltera evaluates the financial benefits of DER integration for our customers, including potential enrollment in demand response programs. This is another method that we use for the purpose on ensuring that we are right-sizing infrastructure. Here, we ensure that the property does not exceed its load, which (in a number of ways) could be costly for the customer.

6. What distance should separate stations to support zero-emission drayage truck activities around California ports? Provide a description of a typical route or use case considered when making this

recommendation. Describe the vehicle class and vocation if it differs from the information provided in question 1.

Voltera is an infrastructure and real estate company, and observes that there is very little M/HD charging throughout the state, as evidenced in the National Zero-Emission Medium-and Heavy-Duty Infrastructure Map recently published by CALSTART.[8] As such, to encourage early-stage deployment that rapidly places first-stage infrastructure into use, Voltera would encourage the Energy Commission to not unduly constrain site development by placing arbitrary distance limitations. Relatedly, the Energy Commission may want to gather additional information with respect to the typical route or use-cases. Here, Voltera encourages the Energy Commission to review the various "heat maps" that have been archived within the EPRI EVs2Scale mapping tools (as well as other similar resources), which can provide a proxy for M/HD fleet travel patterns and help inform the Energy Commission's application.[9]

In addition, Voltera provides feedback on how our business model is driven by locational preference and demand from our fleet customers. Specifically, our Lynwood site is located in proximity to the Ports of Los Angeles and Port of Long Beach, allowing for our customer to leverage the location to support trucks serving both ports. Indeed, locating infrastructure near the ports—in this case equidistant to both —was a priority, and we encourage the Energy Commission to evaluate methods of prioritizing support to the ports, widely.

7. If possible, provide any general cost estimates for MDHD charging and/or hydrogen fueling stations you have designed, built, or have experience with, including charger power levels and number of stations installed. Please provide a range of public cost-share as a percentage of the total project cost necessary to support more public charging stations to serve zero-emission trucks along drayage corridors. For example, should the publicly funded cost share be 50% CEC/federal and 50% private/other?

There are many factors that impact the cost of our turn-key offering. As discussed, Voltera's ClaaS model consists of site identification and acquisition, site development, hardware deployment, operations, and maintenance. Since our model involves the purchase or rental of land, cost factors include and are not limited to the condition and existence of existing buildings on site, size and condition of the property, neighborhood appeal, zoning permissions and restrictions, and the health of the overall real estate market. With respect to site development,

[8] National Zero-Emission Medium-and Heavy-Duty Infrastructure Map; Website Access: https://calstart.org/mhd-infrastructure-map/

[9] EPRI's EVs2Scale2030™ initiative is a three-year commitment focused on leveraging industry scale to galvanize not only the utility industry, but to align all critical market stakeholders as electric vehicle goals increasingly target 50 percent new vehicle sales by 2030; Website Access: https://msites.epri.com/evs2scale2030

there are a diverse array of direct costs, including engineering, project controls, construction, and commissioning. There are also a number of time-oriented factors that impact cost, such as AHJ and utility coordination, utility/interconnection fees, permit coordination and costs, and development fees (for construction). Voltera also bears a series of indirect costs, including legal services, insurance, and the like.

Voltera acknowledges the role of a public cost-share as a percentage of the total project cost, as it demonstrates that the private sector partner is willing to put "skin in the game" in order to access government funding. Here, Voltera is realistic and would seek to enable the competitiveness of the Energy Commission's application, balanced with Voltera's experience with customers' needs and navigation of private capital access. While we do not speak to a specific percentage at this time, Voltera welcomes the opportunity to discuss how our capital can support CEC's initiatives.

8. Use the maps in the "Corridor Segments" section to identify areas where you expect to need zero-emission truck infrastructure in the next three years (2024-2027). These Corridors have been selected to align with the National Zero-Emission Freight Corridor Strategy, the California Transportation Commission's SB 671 Clean Freight Assessment and to complement California, Washington and Oregon's Tri-state application.[10]

Voltera would be happy to share more information with CEC about Voltera's existing and envisioned sites.

9. If you represent a utility:

a. Please use the maps in the "Corridor Segments" section to identify locations that have or will have a capacity for 5 MW or more in the next five years. These will not be considered utility recommendations or guarantees of available capacity. This information may be considered for future funding opportunities.

b. Please share your policy regarding capacity build-out for futureproofing. E.g., if conduit is installed for the future installation of megawatt charging, would you offer transformer capacity to support the anticipated future load to include megawatt charging?

Voltera is not a utility. However, to improve information sharing between stakeholders with respect to site capacity, Voltera would encourage the Energy Commission to consider publishing in an appropriate manner, the information gathered specifically in response to this question.

Conclusion

Voltera is pleased for the opportunity to share our ClaaS model with the Energy Commission. We have shared a high level of our statewide and nationwide growth strategy, as well as high level detail of our California properties. We encourage the Energy Commission to:

- Develop an application response that prioritizes market diversity for the M/HD ZEV sector
- Evaluate potential pathways to innovatively invest in M/HD fleet infrastructure access, through provisions that support hybrid sites
- Provide flexibility with regards to power levels and the required number of charging ports
- Prepare to evaluate large sized projects in excess of 10MWs
- Not unduly constrain site development by placing arbitrary distance limitations
- Assemble a list of amenities that the Energy Commission seeks to include in projects supported by the application, including and not limited to the facilities noted in Voltera's response, and
- Aggregate and publish information gathered via Question 9 related to utility energy capacity

As strategic, and to best support the M/HD sector and create a highly competitive application, Voltera encourages CEC to incorporate these recommendations. Please see our attached letter of support (in Appendix A), reach out to me with any questions or for clarification regarding this correspondence.

Thank you,

Paul D. Hernandez
Sr. Policy Manager, Government & Utility Relations
phernandez@volterapower.com
(510) 926-1923

See the next page: ***Appendix A****, for Voltera's Letter of Support*

voltera

June 28, 2024

The Honorable Pete Buttigieg
Secretary of the United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Subject: Letter of Commitment of Voltera Power LLC for the California Energy Commission's Medium- and Heavy-Duty Drayage Infrastructure Project under the Charging and Fueling Infrastructure Discretionary Grant Program Opportunity 693JJ324NF00017

Dear Secretary Buttigieg,

On behalf of Voltera Power LLC ("Voltera"), I am writing to express our commitment and support for the California Energy Commission's (CEC) proposed project to install charging and/or hydrogen fueling stations to support zero-emission medium- and heavy-duty (MDHD) drayage trucks at California ports utilizing funding from the Charging and Fueling Infrastructure program.

Voltera is committed to contributing to the success of this initiative. Should CEC be awarded funding or other resources, Voltera commits to evaluating our property pipeline for potential enrollment into programs that are developed by the CEC through solicitation. This may include and would not be limited to exploring how Voltera can bring matching resources forward in support of the Energy Commission's initiative.

Through such a public-private partnership, we believe that Voltera's contribution will significantly enhance the project's impact and help to ensure the successful deployment and use of zero-emission MDHD vehicle charging and fueling infrastructure. We have identified multiple sites that may be suitable for this infrastructure, in both the Sacramento and Los Angeles regions.

We are confident that these locations will see significant usage and will be instrumental in supporting the drayage activity at the ports of Los Angeles, Long Beach, Oakland, and Stockton. Voltera strongly supports the CEC's vision for the FY 2024 Charging and Fueling Infrastructure (CFI) application and our organization is prepared to collaborate closely with the CEC and other stakeholders to achieve a publicly accessible network of M/HD hubs that reflects the National Zero-Emission Freight Corridor Strategy. Please reach out to me with any questions or for clarification regarding this support letter.

Thank you,

Paul D. Hernandez
Sr. Policy Manager, Government & Utility Relations
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(510) 926-1923