DOCKETED	
Docket Number:	24-EVI-01
Project Title:	U.S. Department of Transportation's Charging and Fueling Infrastructure Grant Program
TN #:	256392
Document Title:	Nick Dedmon Comments - 24-EVI-01 RFI Ideas and Considerations for Tri-State USDOT CFI
Description:	N/A
Filer:	System
Organization:	Nick Dedmon
Submitter Role:	Public
Submission Date:	5/15/2024 1:18:37 PM
Docketed Date:	5/15/2024

Comment Received From: Nick Dedmon
Submitted On: 5/15/2024
Docket Number: 24-EVI-01

24-EVI-01 RFI Ideas and Considerations for Tri-State USDOT CFI

Additional submitted attachment is included below.

ELECTROLINK
CHARGERS

May 15, 2024

California Energy Commission

715 P Street

Sacramento, CA 95815

RE: Docket No. 24-EVI-01 U.S. Department of Transportation's Charging and Fueling Infrastructure Grant Program

Dear California Energy Commissioners,

Please see our responses to the requested feedback in accordance with the questions asked in the RFI:

1. Company Background

Electrolink™, a division of Verde Investment Partners, Inc., is a forward-thinking company committed to addressing e-transportation infrastructure issues. Verde Investment Partners, Inc. is a veteran-owned business. To support Electrolink's e-Mobility infrastructure vision, their sister company, VerdeWatts, LLC, proudly introduces the EnerSync Power Hub—a groundbreaking alternative to traditional fossil fuel stations, designed to redefine transportation fueling infrastructure. This innovative system integrates solar panels, battery storage, and EV charging, utilizing Electrolink EV Chargers and its proprietary Swift Swap™ battery swapping support for e-Bikes. These initiatives are part of Electrolink™'s broader goal to empower individual vehicle owners with convenient locations to quickly recharge with clean energy.

The EnerSync Power Hub™ can operate on-grid or off-grid. It can capitalize on Time of Use (TOU) utility tariffs by storing energy in its battery storage unit during cheaper, off-peak hours while also using onsite solar panels to augment grid power. The EnerSync™ system's dual energy sourcing ensures enhanced sustainability, while its robust battery storage

system provides operational continuity during grid interruptions. This multi-faceted approach not only provides flexibility and resilience but also supports the transition to a more sustainable and reliable energy infrastructure.

2. Grant Funding Application

We are very interested in applying for CFI grant funding to further our mission of expanding the EV charging infrastructure. The funding would enable us to accelerate the deployment of our EnerSync Power Hubs and public Level 3 charging stations across key locations, enhancing accessibility and convenience for EV drivers. This financial support would be instrumental in overcoming initial capital expenditure barriers, ensuring wider adoption and faster rollout of necessary infrastructure.

3. N/A

4. Future Infrastructure Needs

We anticipate that public Level 3 charging infrastructure will be the most critical component needed in the next three years to support the transition to electric vehicles (EVs). Level 3 charging, also known as DC fast charging, is essential for reducing charging times and providing the convenience necessary for broad public acceptance of EVs.

The expansion of public Level 3 charging infrastructure addresses several key challenges. First, it supports drivers who do not have access to home charging, such as those living in apartment complexes or densely populated urban areas. Second, it provides the necessary infrastructure for long-distance travel, ensuring that EV drivers can recharge quickly and conveniently on long trips. Finally, increasing the availability of public Level 3 chargers boosts driver confidence, addressing range anxiety and making the transition to EVs more attractive.

5. Installation Guidelines

Public Level 3 charging stations should be installed in clusters of 5 to 10 chargers per site, with each charger capable of charging two vehicles simultaneously. This approach maximizes the availability of charging points, reduces wait times, and ensures that charging infrastructure can handle high demand.

Our goal is to install 10 chargers at each location, but we often face constraints related to available parking spaces and the need for electrical service upgrades. The implementation of new building codes that mandate 10% of parking spaces in new developments be designated for EV charging will significantly enhance the deployment of both overnight and DC fast charging infrastructure. These codes will ensure that new buildings are future-proofed for the growing number of EVs, facilitating easier access to charging for all drivers.

6. Parking Lot Configuration

We recommend that 10% of parking lots be designated for EV charging parking spots. These spots can be configured in various ways, depending on the layout of the parking lot. For instance, in parking structures, chargers can be strategically placed to maximize space and accessibility. This flexibility in design ensures that EV charging infrastructure can be integrated into different types of parking facilities, making it easier for drivers to find and use charging stations.

7. N/A

8. Facility Amenities

Charging facilities that offer additional amenities such as restrooms, coffee shops, and quick-service food options tend to see higher utilization rates. These amenities not only provide convenience for drivers but also generate additional revenue for the facility owners. By offering a pleasant and functional environment, charging stations can attract more users and encourage longer stays, benefiting both EV drivers and local businesses.

9. Cost Estimation

The cost of a 120kW dual-port charger is approximately $62,000. Installation costs can range from $25,000 to $35,000 per charger, depending on site-specific factors such as electrical upgrades, permitting, and construction requirements. These costs reflect the investment needed to ensure that the charging infrastructure is reliable, efficient, and meets the needs of EV drivers.

ELECTROLINK
CHARGERS

10. Site Selection Criteria

We identify potential locations for public Level 3 charging stations based on several criteria: proximity to freeways, availability of ample parking, and presence of quick-service amenities nearby. Locations that offer these features are ideal candidates for charging stations because they provide easy access for drivers, sufficient space for multiple chargers, and additional services that enhance the overall user experience. By strategically selecting sites that meet these criteria, we can ensure that our charging stations are well-utilized and contribute to the broader adoption of electric vehicles.

Sincerely,

Nick Dedmon

Nick Dedmon

President

Electrolink™