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## **TeraWatt Comments on CEC IEPR Interconnection Workshop**

*Additional submitted attachment is included below.*



49 Stevenson Street, Suite 600  
San Francisco, California 94105  
[www.terawattinfrastructure.com](http://www.terawattinfrastructure.com)

May 30, 2022

California Energy Commission  
Docket Number 23-IEPR-05  
715 P Street  
Sacramento, CA 95814

**Re: Docket No. 23-IEPR-05— TeraWatt Infrastructure Comments on the May 9, 2023  
Commissioner Workshop on Clean Energy Interconnection – Electric Distribution Grid**

TeraWatt Infrastructure, Inc. (TeraWatt) appreciates the opportunity to submit comments on the California Energy Commission's (CEC) Electric Distribution Grid Workshop. TeraWatt is a project developer and owner of high-powered EV charging infrastructure for light, medium and heavy duty commercial fleets.

**Overview**

TeraWatt applauds the CEC for its' focus within the IEPR process on identifying key issues with the current distribution system interconnection process in California. Recent regulatory actions, such as the approval of the Advanced Clean Fleet (ACF) regulation by the California Air Resources Board (CARB), along with other regional initiatives like the WAIRE program instituted by the South Coast Air Quality Management District (SCAQMD), are creating strong market demand for high-powered EV charging infrastructure development to serve the rapid scale-up of medium- and heavy-duty (MHD) electric vehicles. These infrastructure build-outs are larger in scale, from both a location and site energy capacity standpoint (ranging anywhere from 2MW-50MW+), than what is typically built for light-duty EV charging infrastructure. Along with local permitting, interconnection timelines can represent the most significant factor in impeding the acceleration of the build out of this infrastructure that is required to meet state and local regulatory requirements.

With that in mind, TeraWatt provides the following recommendations to the Commission to accelerate energization timelines for large-scale commercial EV fleet charging deployments:

1. Increase state agency collaboration

Given that much of the near-term demand for commercial fleet EV charging infrastructure is driven by regulatory requirements on vehicle adoption, there needs to be strong, and formal, coordination between the CPUC, CEC, CARB and CalSTA. TeraWatt acknowledges that there was a recent joint agency MOU signed with the intent of increasing collaboration. This needs to be a public process that allows for stakeholder engagement, and aligns the various state policy objectives and timelines of SB 350, SB671, ACF, ACT, etc.

2. Improve hosting capacity maps

In order for private sector developers to make investments in site acquisition as well as infrastructure, there needs to be more actionable information available through the utilities' hosting capacity maps. These maps should be updated on a monthly basis (as a minimum) with accurate hosting capacity by distribution circuit segments and substations. These maps should also provide information on the current application queue, including capacity requested. These enhancements would significantly improve the real estate investment decisions of developers, and ultimately provide benefits back to the grid by avoiding distribution circuits that are already oversubscribed.

3. Further define and streamline the utility interconnection process

The current interconnection process and timeline for EV charging infrastructure can differ substantially in the state, depending on the utility. This can cause market confusion and delays with development teams building similar projects across the state but having to navigate across multiple, sometimes undefined requirements. To the extent possible, utilities across the CA (especially the investor-owned utilities) should coordinate on a set of standardized requirements and the necessary supporting documentation that are clearly defined for all projects within a specified category. This should be reflected in utility service-level agreements (SLAs) and power assessment, design, and construction costs.

Additionally, the utilities can further streamline the interconnection process by allowing for parallel activities to coincide during the application process, including: design, construction scheduling, and utility power equipment cut sheet reviews. These activities are often required to be sequential under the interconnection process, but can occur in parallel from a development standpoint, and this misalignment can add unnecessary delays and costs to projects.

Finally, the utilities should explore additional options to improve the validity of projects within the interconnection queue and help to streamline the total number of requests. This can include allowing customers to secure power with a design/construction

deposit. Also, to enable load growth at one location, allow for multiple services, and different voltages (e.g., primary and secondary distribution and/or sub-transmission).

4. Increase dedicated utility staffing and coordination

Given the significant scale-up in infrastructure deployment expected to meet state policy requirements and market demand for EVs, utilities need to have dedicated and trained EV project management, engineering planning and design teams that are adequately staffed to support the current and forecasted workload. Additionally, these dedicated teams should increase coordination between utility business teams and programmatic processes for Rule 21, NEM 3.0, and Rule 15, 16, and 29 to better support load management activities for EV charging facilities.

5. Update utility incentive mechanisms to better align with fleet charging market

While the utilities have existing incentive mechanisms in place to support bringing down the upfront cost associated with interconnection for EV charging infrastructure, many of these incentive offerings need to be expanded or adjusted to account for the different business models that serve commercial fleets.

This should include expanding Rule 29/45 for EV charging infrastructure to cover all or a defined percentage of Rule 15 costs. Additionally, these rules should be modified to allow customers the option to self-perform the installation work and be reimbursed as long as they meet all established requirements around labor and safety.

Finally, utility make-ready programs for fleet charging infrastructure need to be updated to account for third-party charging depot operators. Currently, these programs tie eligibility to vehicle procurement, and therefore restrict program participation to only those fleets who both own/lease vehicles as well as are deploying their own infrastructure. There is a strong need in the market to support the development of commercial fleet charging infrastructure that will serve multiple fleets, and operators of that infrastructure are independent from the buying/leasing of fleet vehicles.

**Conclusion**

TeraWatt appreciates the work of the Energy Commission to identify and address opportunities to improve the distribution interconnection process, and looks forward to continuing to stay engaged and support the process as it moves forward.

Sincerely,



Anthony Harrison

Head of Policy and Communications

TeraWatt Infrastructure

[anthony@terawattinfrastructure.com](mailto:anthony@terawattinfrastructure.com)