

**DOCKETED**

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*Comment Received From: Michael Sarrassat  
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## **Workplace charging and V2G grid balance**

Dear CEC,

Please take these thoughts into account when designing the structure of CALeVIP in San Diego.

As a longtime member and host of the Electric Vehicle Association of San Diego (EVAoSD) and prior "EV Expert" in the closeout of SANDAG's Plug-in San Diego project, I may have a few insightful details for you to consider when structuring CALeVIP for San Diego.

Please reference the California electricity production "Duck Curve" for the reasoning for all on my comments.

First, San Diego is unique that we have one utility servicing a relatively small and wealthy area of California. Because of our healthy economy, we San Diegans have invested a lot in solar production, so much that during the summertime the utility will have to reduce the amount of solar production feeding into the grid. As a longtime EV+Solar owner, I think this is crazy. For me, if we are overproducing renewable energy during the summer season between 10am and 2pm, then those hours should be called "charge your EV for free" times. The problem is that my battery on wheels (EV) is not located at my house, it is located at my workplace parking lot. Please, please, please emphasize Level-2 workplace charging.

Second, the Duck Curve has its greatest demand shift when everyone arrives home after 5pm when solar production has reduced or stopped. This causes a great strain on the utility (SDGE) to ramp up Peaker Plants to compensate. This is where Vehicle-to-Grid (V2G) is an excellent opportunity for us, especially Low-to-Moderate Income (LMI) individuals living in multi-unit-dwellings (MUDs), to then feed back to the grid some of the electrons we soaked up during the day. However, currently only the CHAdeMO DC Fast Chargers (DCFCs) are capable of V2G. At \$30k each, most MUDs will not be installing numerous CHAdeMO chargers. AC-Level 2 V2G offers an inexpensive bidirectional charging solution and something most of the major Electric Vehicle Supply Equipment (EVSE) producers are starting to offer (ChargePoint, eMotorwerks, Enel, Nuvve). Please, please, please design CALeVIP in SD to offer incentives for MUDs offering bidirectional Level-2 charging.

Lastly, Tesla, Electrify America, and EVgo, are all pushing heavy on DCFC. The problem is how and when will DCFC be used? Think about it. When do you fill up your gas car? It is when you get off work, exactly at the worst time for the grid, between 5-7pm. Please, please, please do not invest in DCFC. I believe workplace charging and MUD peak demand discharging (and recharging later at night) is the best way to service the LMI community while also keeping the best interest of the public utility ratepayers in mind.

Thank you,