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Xeal Energy Comments on EV Charging Infrastructure Reliability

Comment Letter Attached.

Additional submitted attachment is included below.

May 14, 2024

California Energy Commission
715 P Street
Sacramento, CA 95815

RE: Docket No. 22-EVI-04 Electric Vehicle Charging Infrastructure Reliability

Dear California Energy Commissioners and Staff,

Xeal Energy (Xeal) appreciates the opportunity to provide our input and support for the California Energy Commission's (CEC) rulemaking to establish uptime recordkeeping and reporting standards for electric vehicle (EV) chargers and charging stations. Specifically, Xeal strongly supports the development of uptime reliability standards that will lead to strong consumer confidence and greater EV charging investment and adoption.

Xeal has developed the next generation of EV chargers to help address the issue of reliability. Xeal was founded by a group of individuals who were also frustrated with no-charge events and sought solutions to this problem. Xeal's charging infrastructure does not rely on a central point of internet connectivity, which causes most of the charging reliability issues today. Instead, users are provided unique and encrypted tokens that authorize, activate, and transact charging sessions without internet service directly between the charger and phone. All the smart computing is done onsite and during this interaction. This means chargers can operate anywhere – including parking garages and communities with limited internet connection and enable a near 100% uptime and frictionless user experience.

Primarily focused on supporting multifamily housing and commercial real estate owners and operators, our partners manage these smart EV charging stations remotely through Xeal's dashboard, providing real-time data on charging sessions, energy management, utilization, and revenue share. Our driver app employs token-based technology for EV drivers to gain reliable access to charging stations without relying on cellular or garage IT infrastructure. Our chargers require zero connection to the backend, therefore there is no "loss of connectivity" because it is always present between the driver's phone and the charger through our secure, short-range communication protocol.

Within the second draft staff support, we generally support the definition of "networked" charger and interpret this definition to include Xeal's approach as it is a "charger (that can) receive or send commands or messages remotely from or to a charging network provider or is otherwise connected to a central management system, such as by using OCPP 2.0.1, for the purposes of charger management and data reporting."

Our key concerns are a few of the specifics of the proposed reporting requirements for networked chargers:

• *Networked chargers installed before January 1, 2026, are required to report each quarter the operative status of the charger on a 15-minute interval.*
• *Networked chargers installed on or after January 1, 2026, are required to report every 15 minutes operative status and certain protocol data units using OCPP 2.0.1 or a subsequent version of OCPP.*

Xeal is a charging network provider and charging station operator that operates a digital communication network that remotely manages the charger. Like conventional "networked" chargers, Xeal uses communication capabilities to communicate directly with drivers, share real-time station status, broadcast station locations, collect and store data, and manage payments. With Xeal's network technology, a full health report is sent from the charger to a driver's phone every time a charge is started and completed. This is the monitoring event that provides network data for both the charger in use and all the chargers at the property on the Xeal network. Xeal's technology is also able to perform user authentication, over-the-air updates, access control, and can conduct these processes 4x faster than traditionally networked chargers because the computing power required for smart functions directly to the site – between the phone and the charger – and does not rely on central points of failure such as a wireless data network.

We would like to clarify the proposed "15-minute interval" and "required to report every 15 minutes operative status" requirements. Xeal's backend is updated in real time with the charger health and station usage information. Xeal's session data is recorded at 15-minute intervals with the backend server updating session information within 5 minutes of a session's conclusion – and respectfully request that this data reporting meets the timing of the reporting requirements.

In addition, the proposed definition of "networked" charger includes "connected to a central management system, such as by using OCPP 2.0.1" yet the proposed reporting requirements will require OCPP 2.0.1 or a subsequent version of OCPP. This proposed requirement will stall innovation and deployment of smart chargers that solve the reliability problem, while forcing networks to use the greatest failure point of an EVSE: a constant connection to the internet. This requirement would be counter to the goals and purpose of the reliability regulations. We respectfully request using similar "such as" language in the proposed definition for "networked" charger or expanding the definition to also allow "BLE, NFC, ISO 15118 for local network communication within the charger and in conjunction with cellular or Wi-Fi or LORA or ethernet based portable gateways" to provide the same protocol data units.

Xeal appreciates the opportunity to support and provide input on CEC's rulemaking to establish uptime recordkeeping and reporting standards for electric vehicle chargers and charging stations. We look forward to continuing to work with the CEC and other stakeholders to support the deployment, access, and reliability of light-duty charging infrastructure.

Sincerely,

Michael A. Smith

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Head of Deployments and Policy
Xeal