Incorporating Charging Success Rate (SCAR) and Visit Success Metrics into Reliability Standards

Dear Commissioners,

We appreciate the CEC's leadership in setting a 97% uptime standard and expanding reporting requirements for publicly and ratepayer-funded DC fast charging infrastructure. This is a critical step toward ensuring California's charging network is reliable, accessible, and seamless for all EV drivers.

However, we are concerned that "uptime" alone does not fully capture the driver experience or the true performance of a charging network.

OPERATIONAL UPTIME VS. CHARGING SUCCESS RATE

Uptime is typically reported by networks based on whether a charger is online and communicating with the network's backend Charge Station Management System.

This approach often overlooks issues that prevent successful charging such as:
- Physical damage to connectors or screens
- Software glitches or payment system errors
- Poor or confusing UI/UX that causes drivers to abandon attempts
- Access restrictions or incorrect open hours for the site host

These failures collectively contribute to what many EV drivers refer to as "charging anxiety" -- the fear that a charging visit will be unsuccessful. Just because a charge point is online or "up" does not guarantee it's usable. In fact, ChargeMate has observed actual charging success rates below 80% for some of the same charging networks who report >98% operational uptime.

RECOMMENDATION: ADOPT CHARGE-X DEFINITIONS OF SCAR AND VISIT SUCCESS RATE

We recommend that the CEC:
- Adopt the ChargeX definition of Successful Charge Attempt Rate (SCAR) -- measuring the percentage of initiated charging sessions that deliver energy successfully.
- Adopt the ChargeX definition of Visit Success Rate -- measuring the percentage of charging site visits that result in a successful charge, accounting for multiple tries by the same driver.
- Require reporting of these metrics alongside uptime to better reflect real-world reliability and user experience.

INDEPENDENT MEASUREMENT AND VERIFICATION

To ensure trust and consistency:
- We recommend that SCAR and Visit Success Rate be measured and audited by independent third parties.
- ChargeMate is prepared to serve in this role, aggregating and validating data from multiple networks to provide transparent, standardized reporting to the CEC and the public.

WHY THIS MATTERS

By supplementing uptime with SCAR and Visit Success Rate, the CEC can:
- Better reflect the actual charging experience for California's drivers.
- Identify and address common points of failure missed by uptime reporting alone.
- Increase public confidence in the charging network, reducing charging anxiety and supporting EV adoption.

We urge the Commission to incorporate these metrics into the final rule making to ensure California's reliability standards align with real-world charging outcomes, not just network status indicators.

Thank you for the opportunity to comment, and for your continued leadership in building a world-class EV charging ecosystem that all Californians can depend on!

Sincerely,

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