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Electrify America Comments on Reliability Workshop

Additional submitted attachment is included below.



April 1, 2022

Hannon Rasool
California Energy Commission
Docket Unit, MS-4
Docket No. 21-TRAN-03
715 P Street
Sacramento, California 95814

RE: Comments on Electric Vehicle Charging Infrastructure Reliability Workshop

Dear Mr. Rasool:

Electrify America appreciates the opportunity to comment on the March 11, 2022, workshop on Electric Vehicle Charging Infrastructure Reliability. Reliability is critical to the customer experience, and therefore acceptance and adoption of electric vehicles (EVs). We urge the California Energy Commission (CEC) to look at the issue holistically and avoid taking a simple approach based on any single metric.

Electrify America operates the nation's largest network of DC fast chargers, with over 924 chargers at 217 locations in California alone, and more than 3,100 chargers at over 700 locations nationally. Electrify America has made significant investments to ensure the reliability of its network and is proud to have recently received the Electric Vehicle Charging Infrastructure *Best in Test* Award for a second consecutive year.¹

As EVs enter the mass market and the State plans for achieving 100 percent zero emission vehicle sales, it is increasingly important to focus on infrastructure reliability. Drivers must be able to rely on the availability of charging stations, just like they would conventional gasoline stations.

Electrify America has found that a charging network provider's reliability-related capabilities are the key determining factor on whether aggressive reliability targets and continuous reliability can be accomplished. For example, Electrify America can achieve our reliability targets only because we have established 24/7 network diagnostics and engineering support, a laboratory to conduct thousands of hours of vehicle interoperability testing annually, a fleet of roaming test drivers, a domestic parts inventory to rapidly respond to hardware issues, and because all of our stations support multiple payment options, including credit card readers and "plug-and-charge" technology. Each of these capabilities is critical to network operations and customer experience. These capabilities ensure that chargers don't just provide a network signal to the backend, indicating that they are "up" or online, but also that drivers using the site can successfully receive a charge for their vehicles.

¹ <https://media.electrifyamerica.com/en-us/releases/167>



For EV charging, some reliability metrics do not tell the whole story regarding customer experience. For example, “uptime” may indicate whether a station is online and communicating with the backend, but it does not indicate whether a driver using the site is successfully able to charge. Furthermore, measuring uptime at the charger level instead of the station site level results in devaluing the reliability benefits of having multiple chargers at a site. EV charging providers track different performance metrics applicable to their technology and operations goals, and from Electrify America’s perspective, reliability means that customers are able to consistently charge, successfully at expected speeds, and with as little hassle as possible. Ensuring this outcome requires designing a charging network around more than station uptime.

From an administrative perspective, there is also a potentially significant additional burden from creating new metrics and generating new reports, especially for non-CEC funded public chargers in California. CEC should clarify that it will not impose new reporting regulations likely to increase station soft costs, and will limit any new reliability-related reporting obligations to CEC-funded stations.

Electrify America supports CEC focusing on reliability as an important element of its grant programs. Rather than setting arbitrary benchmarks for uptime or other parameters, however, CEC should consider the role technical capabilities play in ensuring that chargers are not only online, but that customers successfully receive a charge at expected speeds. CEC should consider requiring a broad set of technical capabilities as a condition of receiving grant funding in order to advance this outcome.

Thank you for the opportunity to comment on this workshop. If you have any questions, please do not hesitate to reach out to me or Ryan McCarthy with the Weideman Group (ryan@weidemangroup.com).

Sincerely,

Matthew Nelson
Director of Government Affairs
Electrify America