Comments on CARB EVSE Standards Technology Review

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Cool the Earth
February 24, 2022

The CARB EVSE Standards Technology Review (CARB Technology Review) contains very important findings about and recommendations for the functioning of currently installed EVSE in California. Information obtained from EV drivers spotlights the less than optimal reliability of existing EVSE. While many current EV drivers charge at their home, for EV adoption to be widespread and equitable, accessible public charging must be seamless.

Findings

The CARB Technology Review reports that 40 percent of EV drivers contacted the EVSP via phone because there was a problem obtaining a charge. Seventy percent of those callers said the stations were inoperable, e.g. the station didn't work, a connector was broken or a charging stopped mid-session. An additional 20 percent indicated the payment system did not function.

In contrast to EV drivers' reports of inoperable stations, the 4 of 11 EVSP that responded to the CARB survey reported national uptime of 95-98 percent. As CARB states "The data from the two surveys suggest there may be a disconnect between what drivers are experiencing and what the EVSPs are reporting."

These are alarming findings. Both the extent of inoperable charging experienced by drivers and the EVSPs reporting nearly total uptime. Public funds supported the installation of these EV charging stations. EVSE, particularly when supported with public funds, simply must operate reliably at all times.

Recommendations

We support the recommendation to develop a public website to convey key network metrics and progress (an "EVSE access dashboard"). Data from EVSPs on network up and down time statistics, and other issues for the dashboard must be verified by a third party. The "disconnect" between EV drivers' reports of inoperability and the EVSP self reported uptime demonstrate the need for independent verification. This dashboard must be available in real time.

We support the recommendation for conducting a research study or pilot project to evaluate how people, particularly low-income residents, pay for transportation services, including public EV charging. Public charging is more expensive than charging at home. If low-income residents have no other option than public DC Fast charging, how can they be provided discounts. DC Fast charging vendors should provide a discounted pricing system for those who are at poverty level and receive discounted electricity at home. One possible solution is a "credit card" with low cost charging rates or a specified amount of free charging per year.

We strongly support CARB continuing to evaluate barriers to charging for all EV drivers with periodic updates to the Board, and especially barriers to charging for under and unbanked current and future drivers of EVs. California has the opportunity to lead the nation in getting drivers into EVs. To do that

swiftly and effectively requires continually assessing what impediments exist. A robust, fully functioning EVSE ecosystem is essential for this transition.

Finally we endorse CARB's recommendation to "develop metrics and a process for tracking station up/down time." Charging station down time is a barrier to public charging. Accurate and real time data about up and down time is essential for driver confidence in public charging infrastructure. Again we urge the requirement for rapid third party verification of uptime.