

DOCKETED

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FreeWire Technologies Comments, June 28th Technical Workshop

Additional submitted attachment is included below.

July 3, 2018

Docket Number: 17-EVI-01 -Via e-file

Brian Fauble
Energy Commission Specialist II
California Energy Commission
1516 Ninth Street, MS-6 Sacramento,
CA 95814-5512

RE: Comments of FreeWire Technologies on June 28th Technical Workshop

Dear Mr. Fauble,

FreeWire Technologies is a technology company based in California that specializes in mobile and networked energy storage and EV charging solutions. We offers these comments in response to the June 28th Technical Workshop.

As a general matter, FreeWire believes that battery-backed EV charging will trigger a fundamental shift in refueling behavior. Mobile charging can deliver on demand charging, resulting in the need to make any special trips to a centralized refueling station to cut back. Drivers can request charging where they are, or where they are going, reducing range anxiety and spurring the adoption of EVs. Heavily-utilized mobile solutions can be implemented simply and quickly. Instead of having cars queuing up for charging spots, often parked longer than needed, a mobile solution can be brought to

the vehicle, complete the charge, and move to the next without asset downtime and recharge on off hours. In many instances, a mobile solution is not only more efficient, but more cost effective than upgrading utility infrastructure. It provides the added benefit of removing precious parking spaces or the need to upgrade older building infrastructure which can kill the economics of a project. Simply put, mobile charging provides unique and complementary benefits and should receive public agency support.

For this reason, FreeWire applauds the Energy Commission for considering opening incentives to mobile battery charging solutions and encourages it to include them as soon as possible. FreeWire has reviewed the incentives that exist for fixed charging infrastructure and believes they should apply equally, with minimal new qualification, to customers selecting mobile solutions to provide greater public benefit from lower cost installations and to limit distortions to the EV charge equipment market.

Future L2 Charge Requirements:

FreeWire intends to include adopted communication standards into its product such as ISO15118, OPCC and OpenADR. It is not a small matter for a new company to incorporate new technology or protocols into its product. FreeWire requests that the CEC provides adequate time for smaller companies to adopt such protocols, and only after the protocols have been fully vetted with clear specifications determined.

Mobile Charge Solutions and Eligible DCFC sites:

It appears the Commission's requirements are designed to address two concerns: 1) making sure mobile units stay at the application location and are not moved, and 2) that mobile solutions are well utilized. Mobile units operate similarly to fixed stations in that they can be placed behind bollards, temporarily affixed to a location, or limited by geo-fencing. Consequently, mobile units can operate as a "self-service," just like fixed stations, and do not necessarily need an attendant. Requiring an attendant for mobile

solutions creates a bias, and there is no similar requirement for fixed stations or even a utilization standard that will be applied to fixed charging stations. If the Commission wants to enforce a utilization standard, it should apply it irrespective of the charge solution technology. FreeWire requests that the Commission either apply a utilization requirement to all charging solutions eligible for incentives or remove the attendant requirement for mobile solutions.

Lastly, the Commission should consider increasing the incentive amounts for mobile charging solutions. First, there are hundreds of million of dollars of incentives already available in California for fixed charging, and to FreeWire's knowledge, little to none of it is being offered for mobile solutions. Second, in many instances mobile solutions provide greater benefits than fixed infrastructure, saving rate payers in-front of the meter upgrade costs, more readily serving hard to reach segments such as multi-unit dwellings, and naturally assisting in peak shaving and load shifting by reducing the coincident demand of EV charging. For these reasons, the Commission should increase the incentives for mobile charge solutions in recognition of the inherent public benefits to move a small step toward equalizing the aggregate incentives for EV charging technologies.

Sincerely,

Ethan Sprague

Director EV Charging

FreeWire Technologies