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greenlots
A Member of the Shell Group

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Docket No. 19-TRAN-02
-Via e-file-

California Energy Commission
Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Post Workshop Comments of Greenlots on Draft Solicitation Concept for Interoperability Testing Events

Dear Commissioners and Staff,

Greenlots submits these comments in response to the California Energy Commission's ("CEC" or "the Commission") concept presented by staff at the workshop held on January 19, 2021 regarding a draft solicitation for interoperability testing events.

Greenlots is a leading provider of electric vehicle ("EV") charging software and services committed to accelerating transportation electrification in California, and a wholly owned subsidiary of Shell New Energies. The Greenlots network supports a significant percentage of the DC fast charging infrastructure in North America, and an increasing amount of Level 2 infrastructure. Greenlots' smart charging solutions are built around an open standards-based focus on future-proofing while helping site hosts, utilities, and grid operators manage dynamic EV charging loads and respond to local and system conditions.

The Energy Commission has long been a global leader in supporting transportation electrification and identifying key areas of research, technology development, and deployment needed to accelerate adoption and help scale the market of EV charging products and services. As the Commission has recognized, there is a significant need to support an open, interoperable, and standards-based charging technology and user ecosystem if we are to accelerate EV adoption across all weight classes.

Greenlots supports this interoperability testing events concept as a compliment to the ViGIL concept presented last year. This concept, focusing on supporting product development and standards implementation in a collaborative, informal setting, stands to provide additional value to organizations developing interoperable charging products and solutions, while enhancing industry collaboration. This complements the focus of ViGIL well, allowing ViGIL to focus on interoperability and validation testing for final-stage products, supporting certification and release of advanced products and solutions into the market.

Greenlots notes the cost and logistical challenges articulated by several commenters at the workshop, and agrees these challenges deserve careful consideration. Indeed, shipping a medium or heavy duty EV to an event can be a significant cost, and the awardee would need to carefully consider how these costs may be mitigated to encourage maximum participation by a diversity of participants. We also note that for many in the market, being able to test and interface with just a few other products in such a setting would deliver significant value. Greenlots agrees that a co-located conference component would enhance collaboration and support thought leadership around EV charging ecosystem interoperability and advance capabilities.

Given that many of the concept details and specifics come with various uncertainties, as demonstrated by staff's questions presented at the workshop (e.g. related to the conference and testing event format and delivery), Greenlots suggests requirements around stakeholder feedback gathering following the first event, and flexibility for the grant awardee to make changes as needed to improve subsequent events, building on the feedback and lessons learned.

Finally and directly related, Greenlots strongly encourages the Commission to deliver certainty to the marketplace surrounding future standard and/or protocol requirements associated with Commission-funded programs. Over the past several years, the Commission has proposed at multiple workshops future technology requirements for the CALeVIP program, but largely has not taken action to adopt its own recommendations.[1] Now is the time for the Commission to seize the moment to implement the technology requirements it has contemplated over the years that are needed to help move and coalesce the market around greater adoption of standardization and driver-friendly technologies. This will both provide certainty to the market, allowing it time to develop products and services around these requirements, while also driving demand and value for the interoperability testing related concepts the Commission is looking to fund. These two elements must go hand-in-hand.

As articulated many times to this Commission before, Greenlots firmly believes that the adoption of open protocols and standards is essential to support transportation electrification, grow the market for EVs, enhance the driver/customer experience, integrate with the electricity system, and lower the cost of ownership of both EVs and EV charging infrastructure. Indeed, the proliferation of open protocols and standards provides a platform and ecosystem for innovation and customer choice that is critical in guarding against stranded assets and protecting the prudency of public investments. Accordingly, the Commission should take necessary steps to support standardization in both VGI communication and hardware-software communication, as it has proposed to do at past workshops, and as it intends to support through grants targeting interoperability testing, including the instant proposal.

[1] These include past workshops on CALeVIP equipment technology requirements held on June 28, 2018, and November 18, 2019, the CALeVIP Projects Roadmap workshop held on October 4, 2018, and the CALeVIP 2021 Incentive Projects Planning workshop, held on October 23, 2019

By determining and setting a requirement early, and giving the market time to adapt its products to meet the requirements, the Commission can use its position to support clear state goals, improve the driver experience, and support an interoperable EV charging marketplace. When considering the interoperability standardization leading global markets are coalescing around, this should include requiring third-party OCPP certification for any Commission-funded charging infrastructure, in addition to ISO/IEC 15118, "plug and charge" functionality, and any needed hardware changes to support these capabilities that are critical for vehicle-grid integration. Doing so would also drive demand and value for these testing events and ensure their focus and success.

Greenlots supports this interoperability testing events concept, and believes it would meaningfully support interoperability testing, product development, standards implementation, collaboration, and knowledge sharing, while promoting a more competitive market for advanced transportation electrification products and services. Greenlots appreciates the Commission's consideration of these comments, its ongoing efforts to support transportation electrification and advanced mobility, and looks forward to the road ahead.

Sincerely,

Erick Karlen
Sr. Advisor, Policy & Market Development