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Tesla Comments ViGIL

Additional submitted attachment is included below.

May 27, 2020

California Energy Commission Re: Docket No: 19-TRAN-02 1516 Ninth Street Sacramento, CA 95814

RE: Staff Solicitation Scoping Workshop - Pre-Solicitation Concept for Vehicle-Grid Innovation Lab (ViGIL)

Dear Energy Commission Staff:

Tesla appreciates the opportunity to provide feedback on the draft solicitation concept for the Vehicle-Grid Innovation Lab (ViGIL) that was presented by staff during the May 13, 2020 workshop. As highlighted at the workshop, staff is evaluating a grant funding opportunity (GFO) to provide up to \$3 million for the ViGIL with the goal to "provide local testing capacity and accelerated throughput for near-term commercial charging technologies in order to help build a competitive market for charging equipment and their testing."¹ Additional goals as outlined by staff include bringing more advanced and smarter solutions to the market, reducing the cost of charging and providing a hub for EV and EV charging knowledge building and convening, among other items.

Tesla appreciates staff's consideration of this issue and shares similar goals as outlined above and discussed during the workshop including the EV charging equipment goals for convenience, cost control and customer choice², yet is concerned that some of the elements of the current draft solicitation concept could inadvertently inhibit innovation and increase costs. In particular, some of the standards under consideration merit further discussion including the intended use case and application for each and why these are being considered mandatory standards for testing purposes.

I. Mandatory and Optional Standards

The draft concept includes both mandatory standards for funding of ISO 15118, Open Charge Point Protocol (OCPP), and Section 3.40 of the NIST 2020 Handbook 44, as well as optional standards of Open Automated Demand Response 2.0b, and ENERGYSTAR. Based on the information provided, it is unclear whether or not requiring the ability to test the first three standards then implies that these will be required across any projects funded via the Clean Transportation Programs and for all charging use cases and applications. Furthermore, it is unclear whether availability of local testing is actually inhibiting adoption of these standards or whether not having these standards widely adopted is a primary barrier to EV infrastructure deployment and EV adoption. Generally, Tesla believes in setting the objectives and market mechanisms to achieve policy goals, rather than prescribing the technical means. Setting policy objectives and market mechanisms enables the market to determine the best technologies and approaches to achieving the objectives, and in this case, the best EV to electric vehicle supply equipment (EVSE) communications. Finally, some of the standards highlighted above, such as ISO 15118, are still being developed and not yet finalized, and there are still outstanding challenges to address such as security protocols. Therefore, to the extent the standards testing capability requirement is setting precedent for making the standard's capability a requirement for all projects funded under the Clean Transportation Program, Tesla is not supportive.

² Workshop slide 13.



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¹ Notice of Staff Workshop, May 1, 2020, p.2.

Similarly, it is unclear why the testing requirement for compliance with Section 3.4 of NIST Handbook 44 is included. CA is the first state to adopt a version of Handbook 44 Section 3.4 and the national standard is still a tentative code. For Level 2, compliance in CA will begin January 1, 2021 for all new public Level 2 stations so it is unclear how testing this standard at the ViGIL in the near-term will be helpful. For DCFC, compliance will begin January 1, 2023 for stations built on or after that date, so there may be value for this use case. Regardless, charging providers will need to pursue type evaluation program testing at the state or national level. Such an evaluation appears more appropriate for the CA Department of Food and Agriculture (CDFA) Division of Measurement Standards (DMS) to retain primary authority on these testing requirements, unless staff has confirmed that there are additional funding needs in this area for CDFA to carry out the functions under the current regulation.

II. ViGIL Testing Lab

Tesla takes no position on whether or not it is necessary to create a ViGIL testing facility at this point as there are several outstanding elements that should be discussed further before any requirements are codified. This includes more details about and the rationale behind why such a CEC facility is necessary and what market gap is being addressed besides the notion that this responds to the needs expressed in the November 18, 2019 workshop on CALeVIP Future Equipment Requirements.³ At the same time, it is unclear how ViGIL would interact with existing standards development organizations and nationally recognized testing laboratories (NRTL). Lastly, it would be helpful to understand whether or not stakeholders actually find value in having access to this type of testing facility for various charging use cases and how these standards in practice would drive innovation, reduce costs and accelerate EV adoption in the light, medium- and heavy-duty sector. Given medium and heavy-duty standards discussions for EV charging infrastructure are still in the early development phase, it may be premature to incorporate these vehicle sectors.

Tesla appreciates the opportunity to provide feedback on proposed solicitation for the ViGIL and the standards outlined for consideration above. Additional conversations between stakeholders and staff are appropriate at this point to better understand the intent and potential impact of this proposal in helping spur EV infrastructure deployment and meeting California's climate and transportation electrification goals.

Sincerely,

Francesca Wahl Charging Policy Manager, Business Development and Policy

³ Workshop slide 14.