

DOCKETED

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EVCA Comments on ViGIL Solicitation

Additional submitted attachment is included below.



Electric Vehicle Charging Association
INNOVATION FOR CLEAN MOBILITY

May 29, 2020

Ms. Patricia Monahan,
Commissioner, Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Re: EVCA Comments on ViGIL Draft Solicitation Concept

Dear Commissioner Monahan,

We sincerely appreciate the Commission's continued leadership to support the electric vehicle charging industry. The Clean Transportation Program is a landmark program that has been critical to the growth and success of this industry over the last ten years. While there may be value in the development of the Vehicle Grid Integration Lab, EVCA members note that many of the standards that the Energy Commission is hoping to test under ViGIL are premature. Further, EVCA members worry that ViGIL would encourage additional complexities in future Energy Commission programs like CALeVIP which would increase costs. If ViGIL is to move forward, however, below are suggestions on how to strengthen this solicitation concept to ensure it provides the most value to the charging industry and consumers, and is flexible given evolutions in technology and market realities.

I. EVCA supports ISO 15118, but there are still many unknowns and mandating this requirement is premature.

EVCA strongly believes that ISO 15118 will provide convenience to consumers and create additional charging options and services, thus helping them optimize their charging behaviors and promoting innovation, competition and customer choice in the marketplace. EVCA believes these are positive forces that will facilitate growth in the EV charging industry. However, there are currently too many unknowns with ISO 15118 implementation and thus mandating this standard for the ViGIL solicitation would be premature. There is no existing infrastructure in place to implement the protocol, including established testing and certification methods. There is no testing procedure for this standard and due to continued industry work on improving the standard to address security risks and other issues, it is unlikely that a testing procedure could be

established to fit the timelines of this solicitation. Additional standard development is vital to address critical gaps in security and functionality.

Furthermore, the success of implementing ISO 15118 is not contingent upon the EV charging industry alone. Auto manufacturers (OEMs) will need to implement this protocol as well, and EVCA members currently do not have a clear sense of which OEMs are implementing which version of this protocol, nor do we know when they expect design and implementation of the protocol to be finished. We would note, however, that few cars on the road today support 15118, and there will always need to be secondary communications pathways for things like authentication. These unknowns create significant uncertainty in the marketplace, and thus affects how fast EVSPs can implement this requirement effectively. Rather than merely mandating this standard through solicitations, EVCA encourages the CEC to work with the OEMs and EVSPs to discuss realistic implementation timelines. However, the CEC will also need to ensure that this process would not require companies to disclose confidential business information.

II. We support the inclusion of an open, standards-based network communication protocol to prevent asset stranding.

We support open, standards-based network communication protocols, such as the Open Charge Point Protocol (OCPP). This promotes inclusivity in the marketplace by allowing various vendors to participate and promote new business models and products. This ultimately gives customers more options for services, which will further stimulate innovation and competition in the marketplace. However, the industry has yet to widely implement version 2.0.1. Every network to hardware relationship is different and requires specific technical arrangements and added extensions to make everything work together. We urge the CEC to use minimum reliability and operational requirements to prevent stranded assets and ensure this investment is successful, rather than attempting to prescribe how charging hardware and network vendors communicate or develop their business models.

III. EVCA supports consistency with NIST regulations.

We do not want to submit charging networks to additional testing.

The draft solicitation's requirement for allowing the "selection of variable unit prices using equipment communicating with the EVSE system" potentially implies that network providers must submit their network to additional to verify this. While EVCA strongly supports alignment and consistency with the Division of Measurement Standards' NIST regulations for EV charging stations which go into effect in 2021 for Level 2 and 2023 for DCFC, we do not believe this regulation requires network testing,

nor do we think it is appropriate or productive to submit charging networks to additional testing through this solicitation.

Charging companies need to use dedicated test environments when testing new charger models – this protects the rest of the network from rogue chargers that could potentially shut the entire network down. However, not all charging station providers have dedicated test environments, and therefore this requirement creates cost implications at a time in the industry when its resources have been heavily impacted by recession. Furthermore, this also introduces questions about how a network provider would even submit its network to additional testing from the Commission. We would appreciate further clarification from the Commission on what it intends with this requirement.

We support V2G applications but it may be too soon to require this.

Like with ISO 15118 and OCPP, EVCA supports the application of vehicle-to-grid technologies to allow for directional flow. We believe this technology will allow for additional services that provide benefits to the grid and customers alike, allowing for greater application of EV charging technologies. However, we have yet to see an application or technology for this to be certified and finalized; mandating this capability, including requirements for a specific standard is premature.

IV. ViGIL should require the testing of standard use cases.

We strongly believe in creating a uniform customer experience that ensures reliability and availability of charging stations in the field. We believe the value of this solicitation would be immensely increased if the awardee must also focus on supporting a standard set of use cases that reflect the everyday driver or the site host experience. These include:

- Starting a session via a mobile application or RFID – testing this use case from initiation to charging session end;
- Starting a session via a credit card – testing this use case from initiation to charging session end and;
- Understanding how a station behaves when it gets reset, and under what circumstances it has to be reset.

Each of these common use cases need further documentation to better enable standardizing the customer experience.

V. EVCA is concerned this solicitation creates additional certification requirements.

Furthermore, EVCA is concerned that this proposal goes beyond funding testing capabilities and into the process of certifying equipment by requiring that products “publish their specification sheets after successful testing” *and* demonstrate four policy objectives: interoperability, competition and customer choice, cost control, and convenience. While it is clear that the test results would be sent to a certification body to make the actual certification, this added step of positing results and demonstrating policy objectives is creating a certification process in and of itself. Vendors will be expected to prove that they meet these policy objectives and specifications, and post it online, in order to win business or qualify for a state funding program even when many of the products proposed by ViGIL are not ready for market or in some cases, aren’t even standards yet. This will add new costs and requirements on the industry beyond those required (if any requirement exists) by a certification or rulemaking body.

For example, by enabling testing of ISO 15118, which currently does not exist, ViGIL could create a new testing requirement that could force companies to prove certification to compete in the state. Then that product would also need to show why meeting ISO 15118 certification enables “interoperability” which presumes that ISO 15118 is even available on multiple vehicles and a standard that promotes this policy concept. While this may be the intent of this funding proposal, EVCA believes this goes well beyond the goals of the California Energy Commission and has negative implications for the market.

Thank you for your consideration,

A handwritten signature in blue ink, appearing to read 'A. Cherkaoui', with a large, sweeping underline.

Abdellah Cherkaoui
Chair
Electric Vehicle Charging Association