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EVCA Comments on CALeVIP Future Equipment Technology Workshop

Additional submitted attachment is included below.

Electric Vehicle Charging Association
INNOVATION FOR CLEAN MOBILITY

January 3, 2020

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

Re: Proposed Changes to CALeVIP Program Requirements,

Dear Commissioner Monahan,

The Electric Vehicle Charging Association (EVCA) applauds the Energy Commission's leadership in accelerating investments in electric vehicle charging stations to meet California's ambitious state goals through critical state programs such as the California Electric Vehicle Infrastructure Project (CALeVIP). In furtherance of continued partnership with the Commission in support of CALeVIP, EVCA submits the following comments for your review regarding the Commission's proposed changes to EV charging equipment requirements within CALeVIP.

EVCA is a non-profit trade association representing twelve electric vehicle service providers (EVSPs), software and equipment manufacturers, and installation and maintenance providers. Our members include American Building Management, Blink Charging, BTCPower, ChargePoint, Clean Fuel Connection, Cruise Automation, Envision Solar, EVBox, EV Connect, EVgo, FLO, Noodoe, and Volta. EVCA's mission is to advance the goal of a clean transportation system in which the market forces of innovation, competition, and consumer choice drive the adoption of EVs and deployment of charging infrastructure.

1. Mandating an Energy Star Standard for DCFC is premature.

EVCA commends the Energy Commission for its interest in improving the energy efficiency of DCFCs, and for inviting the U.S. Environmental Protection Agency (EPA) to present on the Energy Star certification process, which is still under development. Several EVCA members are involved in this process at the federal level and note that an Energy Star mandate of January 2021 would be premature, especially since the certification process still has a long way to go and has many unknowns. EPA has yet to finalize its testing procedure, let alone an actual energy efficiency standard. EPA proposes to release the first draft of the energy efficiency standard during the summer of 2020, which will be followed by a public comment and stakeholder proceeding which could reasonably extend into 2021. When the final efficiency standards are

eventually released, it will take significant time and effort for electric vehicle service providers to learn and implement the new standard across their offerings and product range. If changes are required to their equipment, companies will need time to redesign stations and obtain safety and Energy Star certification prior to being able to sell their stations. We strongly suggest waiting until the U.S. EPA releases the final energy efficiency standard and then conducting another workshop at the CEC to further discuss the development – and realistic timelines – for implementing this standard, and whether implementing this standard is appropriate at all, as well as if it will lead to increased costs of the CALeVIP program.

2. **EVCA supports aligning payment technology requirements with the SB 454 Open Access Act timeline.**

The Air Resources Board's (ARB) Electric Vehicle Charging Station Open Access Act sets various payment technology requirements for public stations. Starting January 1, 2022, and July 1, 2023, respectively, all new DCFCs and Level 2 stations will be required to be outfitted with a credit card reader. EVCA supports CALeVIP aligning these requirements with ARB's proposed timelines, and urge they be subject to any applicable conditions (e.g. a rollout period or exceptions) that may be adopted by ARB to lessen cost impacts and provide time for compliance by industry participants. This will ensure predictability and consistency of requirements that streamlines compliance for EVSPs.

We also want to note that we believe there will be potential issues with the labeling requirements as ARB's regulation is being implemented. Depending on the credit card processing vendor used by EVSEs, charging stations can lose pricing flexibility, which is in conflict with ARB's price labeling requirements. This could also create issues for utilities' ability to implement grid management programs and time of use rates.

3. **EVCA supports the alignment of meter technology requirements with the Division of Measurement Standard's NIST regulations.**

The Division of Measurement Standards (DMS) is instituting accuracy requirements for EV charging stations starting January 2021 and January 2023 for Level 2 stations and DCFCs respectively. While DMS has yet to issue final regulations, EVCA supports aligning the final DMS requirements with CALeVIP once a final statement of reasons is issued by DMS. Much like with ARB's payment technology mandate, aligning requirements will ensure predictability and streamline compliance for EVSPs. EVCA thanks the CEC for its close coordination with DMS to ensure such alignment.

Furthermore, DMS metering accuracy requirements only apply to commercial sales of charging and specifically exempts the use of EVSE meters from measuring wholesale electricity and residential load at the household level. The Public Utilities Commission currently has a proceeding (R. 18-12-006) that proposes a submetering protocol for EV charging stations. EVCA supports the use of EVSE submeters to measure residential load and to support demand response and energy storage programs at the California Independent System Operator.

Increasing the use of EVSE submetering capabilities has multiple benefits. First, it can support smart load management by EV drivers that helps reduce costs and provide grid

benefits. Second, more flexible load management through the use of submeters can enable EVSPs to utilize more flexible utility tariffs and demand response programs that generate revenue and further reduce costs to the consumer. Third, it can enable separation of utility bills between EVSP and host, enabling using a host's existing electrical service and eliminating the need for a separate service while also keeping electrical billing between the EVSP and host separated. Overall, this can help facilitate more charging station deployment enabling charging stations to provide more valuable services.

4. **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.

As noted by many parties at the November 25 workshop, 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.

5. **EVCA supports ISO 15118, but there are still many unknowns and the proposed timeline for requiring this 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, similar to our comments above related to Energy Star, there are currently too many unknowns with ISO 15118 implementation and thus mandating this standard for CALeVIP 2021 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 by Q3 of 2020 as proposed in the CEC's presentation. 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 authenticatiaon. These unknowns create significant uncertainty in the marketplace, and thus affects how fast EVSPs can implement this requirement effectively. If the Commission asks EVSP's to self-certify some form of ISO 15118 compliance before the protocol, OEM applications and testing rules and certification are finalized, it would be asking EVSP's to claim compliance with an undefined target, which substantially increases the risk of station owner dissatisfaction in the future, and may expose EVSP's to unnecessary reputational and even legal risk, if stations are sold on the basis of ISO 15118 compliance prior to changes in the way ISO 15118 is implemented or tested.

Like with Energy Star, EVCA strongly encourages the Commission to continue the conversation on how it can drive innovation through future industry stakeholder meetings and workshops. EVCA encourages the CEC to include the OEMs 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.

6. **EVCA does not support a mandate of a specific transceiver chip (i.e. GreenPHY) to implement ISO 15118.**

Slide 52 of the Commission's presentation presents two kinds of circuit chips that could support ISO 15118 implementation down the road. We strongly urge the Commission not to mandate a specific chip technology. EVSPs should have flexibility to determine which technologies work best for their products, which helps support innovation and competition in the marketplace, especially given that this industry continues to quickly evolve. Furthermore, mandating one kind of a chip does not necessarily futureproof charging stations to enable ISO 15118 implementation in the future. Because there are so many unknowns with how ISO 15118 implementation will unfold, certain hardware to support 15118 may no longer be viable or relevant in the future. Specifying a particular chip is likely to result in unnecessary costs to EVSPs for an ineffective product.

7. **Prematurely requiring many of these technological standards, many of which are still under development, may lock out smaller market participants and limit choice in vendors for CALeVIP.**

If the Commission were to require many of these technological innovations too soon, it would lock out many companies from participating in CALeVIP and thus skewing incentives to a smaller group of suppliers. This will greatly affect the marketplace by giving an unfair advantage to other companies that are farther along in implementing these standards.

Moreover, network providers are already limited in hardware choices, especially for DCFCs and high-power DCFCs. One of the benefits of CALeVIP is how easy it has been for new suppliers to be added to the equipment list. The Energy Commission should be careful to balance its desire for cutting edge technologies with this reality, recognizing that it may have unintended consequences of limiting its eligible vendor list to a few

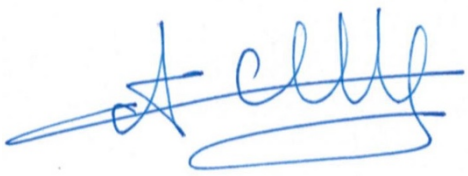
possible companies. This may both increase costs and lead to slower deployments if there are fewer choices in supply.

Lastly, technology is changing rapidly, and imposing these select requirements too early may prevent manufacturers from evolving with other technologies that would benefit both the driver and the grid if these proposed requirements too must be baked into new product developments underway by manufacturers.

Conclusion

EVCA thanks the Energy Commission for its work to accelerate charging deployments through successful programs like CALEVIP. As the Energy Commission looks to finalize technical requirements for future project years, EVCA encourages the Energy Commission to balance their interest in driving technological innovations with its goal deploying chargers rapidly at scale. While EVCA welcomes the Energy Commission taking a larger role in driving technological innovation– like it has done through the vehicle to grid integration proceeding – CEC should consider carefully if tying grant funding to the implementation of these new technology standards – many of which are still under development – is most appropriate. EVCA encourages the Energy Commission to host future workshops to discuss technology developments in the EV charging space and looks forward to active participation by its members to ensure that new technology innovations are implemented in California in-line with their commercialization timelines.

Thank you for your consideration,



Abdellah Cherkaoui
Chair
Electric Vehicle Charging Association