

DOCKETED	
Docket Number:	22-EVI-06
Project Title:	Vehicle-Grid Integration
TN #:	269496
Document Title:	Scott Cox Comments - Re Comments of the Electric Vehicle Charging Association on Exploring Plug & Charge and Roaming Regulatory Concepts
Description:	N/A
Filer:	System
Organization:	Scott Cox
Submitter Role:	Public
Submission Date:	4/15/2026 3:47:12 PM
Docketed Date:	4/15/2026

*Comment Received From: Scott Cox
Submitted On: 4/15/2026
Docket Number: 22-EVI-06*

**Re Comments of the Electric Vehicle Charging Association on
Exploring Plug & Charge and Roaming Regulatory Concepts**

Additional submitted attachment is included below.

April 15, 2026

California Energy Commission
Docket Unit, MS-4, Docket No. 22-EVI-06
715 P Street
Sacramento, CA 95814

Re: Comments of the Electric Vehicle Charging Association on Exploring Plug & Charge and Roaming Regulatory Concepts — Docket No. 22-EVI-06

Dear Acting Director Kalafut and Fuels and Transportation Staff:

The Electric Vehicle Charging Association (EVCA) is a non-profit trade association representing 18 companies across the electric vehicle (EV) charging industry, including charging network providers, equipment manufacturers, software and backend service providers, and EV manufacturers. Our members collectively operate tens of thousands of public charging ports across California and are directly engaged in implementing and advancing Plug & Charge and roaming interoperability in the market today.

EVCA appreciates the California Energy Commission's (CEC) commitment to improving the EV driver experience through standardization, and we commend staff for convening this workshop as an exploratory, collaborative process. We offer the following comments in response to the questions posed by CEC staff at the March 25, 2026, workshop. These comments reflect the technical perspectives and practical experience of EVCA members who are actively deploying and operating the infrastructure and software systems at issue. EVCA emphasizes that improving reliability and usability should remain the primary objective of any regulatory framework. New technical or interoperability requirements should be carefully evaluated to ensure they do not introduce additional system complexity that could degrade reliability, particularly in distributed charging environments where connectivity, hardware variability, and site-specific constraints already present operational challenges.

EVCA strongly supports the CEC's policy goals: improving first-time charge success rates, reducing friction for EV drivers, and building an even more reliable, interoperable public charging network. We offer these comments to help ensure that any regulatory concepts the CEC pursues reflect the current state of technology, the practical realities of the market, and the commercial dynamics that are already driving adoption of Plug & Charge and roaming.

I. ISO 15118 AND PLUG & CHARGE

A. ISO 15118 as a Floor

EVCA recommends that the CEC frame any minimum standard in terms of **hardware capability** rather than operationalized functionality. Requiring that charging hardware be ISO 15118-capable establishes a clear, achievable technical floor and is consistent with both the CEC's existing funding program requirements and the prior CARB regulatory approach. Requiring operationalization, meaning that Plug & Charge must be actively

functioning across bilateral contractual agreements, is a materially different obligation that introduces commercial and legal complexities beyond the CEC's stated regulatory goals. Importantly, any requirements placed on chargers should be prospective, affecting only newly installed chargers and providing flexibility for repairing and replacing existing ones.

B. Version Flexibility: Allow Industry to Choose Between ISO 15118-2 and ISO 15118-20

ISO 15118-20 represents the next generation of the standard and offers meaningful improvements, particularly in cybersecurity architecture. However, due to OEM product development cycles, ISO 15118-20 is not expected to be widely available in the passenger vehicle market for approximately 2 to 3 years. Additionally, -20 is not backward compatible with -2, meaning that a mandate for -20 today would effectively require waiting for a new generation of vehicle models before the standard becomes functional at scale.

EVCA accordingly recommends that the CEC allow industry the flexibility to implement either ISO 15118-2 or ISO 15118-20, provided the hardware supports Plug & Charge. This approach has several advantages:

- It avoids a "false start" in which a mandate outpaces vehicle readiness.
- It keeps California's framework in lockstep with OEM timelines, which is essential because interoperability is only realized when both the charger and the vehicle support the same standard.
- It allows operators who are already investing in -20 (particularly in the commercial and transit segments, where heavy-duty and school bus adoption of -20 is already occurring, or where network security is prioritized) to continue on that path without regulatory disruption.
- It avoids locking in a version choice that could become obsolete before conformance testing infrastructure for -20 is fully established.

If the CEC determines that it wants to establish a future date by which ISO 15118-20 would be the required minimum, EVCA recommends tying that transition to a defined milestone, specifically, the finalization of conformance test protocols for -20, with a reasonable lead time of no less than 18 months after that milestone is achieved. This approach provides the industry with a clear roadmap while ensuring that any mandate is technologically grounded.

C. AC Level 2 vs. DCFC Implementation

As a technical matter, the ISO 15118 communication protocol, certificate handling, and Plug & Charge messaging are the same for both AC and DC charging. The differences are in the charging flow itself, not in the interoperability architecture. EVCA notes, however, that the practical infrastructure requirements for deploying Plug & Charge on AC Level 2 chargers are more distributed and varied than for DCFC, which typically has network connectivity built into the deployment model. Workplace, multifamily, and fleet depot charging environments often involve shared electrical infrastructure, dynamic load management, and variable or intermittent network connectivity. These factors introduce additional complexity in deploying and maintaining Plug & Charge functionality at scale. Additionally, the cost of the needed hardware components such as a TLC modem, comprises a higher percentage of the cost of a Level 2 charger than for a DC fast charger.

CEC should explicitly account for these differences in any implementation timeline for Level 2 requirements, consistent with the three-year runway proposed in the workshop concepts.

D. Public Key Infrastructure (PKI) Support

EVCA supports CEC engagement on public key infrastructure as a critical enabler for Plug & Charge at scale. EVCA supports, in concept, SAE Certificate Trust List (CTL) as a framework for PKI governance in California. The SAE CTL provides a standardized, cross-industry mechanism for certificate authority recognition that avoids fragmentation of trust infrastructure.

EVCA also recommends that the CEC engage on the issue of **multi-contract handling**. Currently, not all auto-OEMs permit drivers to install third-party contracts in the vehicle, which means Plug & Charge can effectively be locked to a single eMSP or billing provider chosen by the OEM. Enabling multi-contract handling would give drivers meaningful choice in their billing provider and allow commercial CNPs to compete on equal terms. This issue is particularly important in fleet and workplace charging contexts, where employers or fleet operators may need to manage multiple billing relationships or service providers across a single deployment. Enabling multi-contract handling would support more flexible operational models and reduce dependence on OEM-controlled ecosystems. EVCA points to the European Union's governance framework for public charging, developed by the Sustainable Transport Forum and enacted through the AFIR regulation, as a model for how regulators have addressed this issue.

II. OCPI AND NETWORK ROAMING

A. OCPI 2.3 Should Not Be Mandated as an Immediate Minimum

EVCA urges the CEC to carefully consider the practical consequences of mandating OCPI 2.3 as an immediate minimum standard. The current state of the market reflects years of organic adoption: the majority of CNPs are operating on OCPI 2.1.1 or transitioning to OCPI 2.2.1, both of which are supporting functional roaming operations in California today. A mandate to migrate to 2.3 by a fixed near-term deadline would impose substantial costs and friction on operators who have already built working interoperability infrastructure.

EVCA recommends instead that the CEC frame its minimum standard as **OCPI 2.1.1 or later**, consistent with the general approach used in the CARB regulatory framework. This framing would explicitly include OCPI 2.3 as a compliant option for new integrations going forward, without requiring operators with functioning 2.1.1 or 2.2.1 implementations to renegotiate existing bilateral agreements or replace working systems. The improvements that 2.3 offers over 2.2.1 (including support for taxes and vehicle type) are meaningful for future integrations, but do not justify forcing the disruption of existing infrastructure. EVCA further notes that version upgrade mandates carry non-trivial implementation costs, particularly for operators managing large portfolios of deployed Level 2 infrastructure. These costs include backend system upgrades, certification, integration testing, and, in some cases, hardware retrofits. Regulatory approaches should minimize forced upgrade cycles that do not directly translate into measurable improvements in driver experience.

EVCA notes that the CARB mandate adopted in 2019 references OCPI 2.1.1 without "or later" language. Updating that language to "2.1.1 or later" would formally recognize the

evolution of the standard and provide a durable, forward-compatible compliance framework without the dislocation of a hard version cutover.

B. Capability vs. Operationalization: Do Not Mandate Bilateral Roaming Agreements

As with Plug & Charge, EVCA recommends that the CEC maintain a clear distinction between **OCPI capability** and **mandated bilateral roaming agreements**. Requiring that charging network providers maintain OCPI-capable infrastructure is a reasonable technical floor. Requiring providers to execute roaming agreements with all other networks is a commercial obligation that would impose significant legal, financial, and operational burdens on members, including potential compelled disclosure of commercially sensitive terms.

The market evidence supports a capability-based approach. Since 2019, California has seen substantial voluntary adoption of roaming agreements, driven by business dynamics and customer demand rather than mandate. EVCA believes this organic market development will continue and accelerate as the OCPI ecosystem matures. EVCA also notes that AB 2697 (Irwin, 2024) expressly requires that any CEC roaming standards preserve providers' ability to choose between bilateral and hub-based agreements — a statutory directive that a capability-based framework naturally honors.

C. Prospective Application and Lead Time for Any Version Upgrade

If the CEC ultimately determines that a specific OCPI version upgrade is warranted, EVCA strongly recommends that any such requirement apply **prospectively only** to new integrations and new roaming agreements executed after the effective date of any regulation, not to existing deployed systems or existing contracts. Many bilateral roaming agreements specify the OCPI version in the contract terms; a retroactive version mandate would effectively force renegotiation of every existing agreement, creating significant market friction with no commensurate benefit.

Additionally, EVCA urges that any OCPI version transition timeline include a lead time of no less than 18 to 24 months to allow CSOs, CNPs, eMSPs, and backend providers to implement, test, and deploy updated integrations in an orderly manner. A synchronized industry-wide cutover without adequate lead time risks widespread service disruptions.

D. Offline Operation Must Be Preserved

The CEC's roaming concepts appear to assume that all chargers will be continuously online. EVCA requests that the CEC expressly acknowledge that offline-capable charging systems are a valid and valued part of the California charging ecosystem. Some members have built proprietary offline authentication and roaming solutions that enable drivers to initiate and complete charging sessions without network connectivity; a particularly important capability in underserved locations, parking structures, and areas with unreliable cellular service. EVCA emphasizes that offline-capable charging is not a niche feature but a critical component of resilient infrastructure. Many real-world deployments, including structured parking, multifamily housing, fleet depots, and rural locations, experience intermittent or constrained connectivity. Regulatory frameworks that implicitly assume persistent connectivity risk excluding viable deployment models and slowing infrastructure buildout in precisely the locations where charging access is most needed. Any roaming regulation should be written so as not to prohibit or disadvantage these

solutions, and the CEC should clarify that OCPI requirements apply to the network-layer capabilities of a CNP, not to offline-mode functionality.

III. OUTCOME-BASED PERFORMANCE METRICS

EVCA encourages the CEC to consider pairing any technical requirements with outcome-based performance metrics, such as those in its recent reliability regulations. These metrics more directly reflect the driver experience and can help ensure that regulatory interventions are delivering intended benefits. A metrics-driven approach also allows flexibility in how operators meet performance goals, supporting innovation while maintaining accountability.

V. CONCLUSION

EVCA appreciates the CEC's thoughtful approach to this proceeding and the staff's willingness to engage the industry in an exploratory workshop format before initiating a formal rulemaking. We encourage the CEC to adopt a framework that: (1) establishes ISO 15118 hardware capability as the baseline, with version flexibility between -2 and -20; (2) sets OCPI capability as the roaming baseline using "2.1.1 or later" framing; (3) maintains a clear distinction between capability requirements and mandated bilateral agreements; (4) applies any version upgrade requirements prospectively with adequate lead times; (5) preserves offline-capable charging as a valid operating model; and (6) coordinates with CARB to avoid duplicative or conflicting requirements. EVCA reiterates that regulatory success should ultimately be measured by improvements in real-world charging reliability and accessibility. Policies that preserve flexibility, minimize unnecessary system complexity, and reflect the operational realities of distributed charging infrastructure will best support California's long-term transportation electrification goals.

EVCA and its members are committed to working collaboratively with the CEC as this proceeding develops. We welcome the opportunity to provide further technical input, participate in stakeholder meetings, and assist in developing a regulatory framework that serves the interests of EV drivers, the charging industry, and California's clean transportation goals.

Thank you for your consideration,

Reed Addis

Governmental Affairs

Electric Vehicle Charging Association