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## InCharge Energy Comments on EV Charging Interoperability

*Additional submitted attachment is included below.*

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

December 22, 2023

**RE: Staff Workshop on EV Charging Interoperability**

Dear California Energy Commission staff,

InCharge Energy appreciates the opportunity to provide the following comments to the California Energy Commission (CEC) in response to the Staff Workshop on Charging Interoperability. InCharge is committed to providing our fleet customers with exceptional charging infrastructure and service – not only throughout California, but also across the United States and Canada. We share the CEC's interoperability goal of attaining a seamless charging experience across vehicles, chargers, and networks.

Industry veterans with over 100 years of combined electric vehicle and charging experience formed InCharge Energy in 2018. In 2022, the world leader in e-mobility, ABB, made a 60% majority stake investment in InCharge Energy. Together, we are full-service, turnkey charging infrastructure providers. InCharge Energy specializes in commercial EV fleet charging and charging solutions for medium- and heavy-duty (MDHD) vehicles. Given this focus, we understand the unique challenges faced by fleet managers, along with the many ways that behind-the-fence MDHD infrastructure varies from light-duty public charging.

InCharge Energy customers in the MDHD fleet market include UPS, Sysco, Ryder, and Quality Custom Distribution, as well as school districts across the nation. InCharge helps these partners and others with all steps of their electrification infrastructure process. We provide site planning, installation of InCharge and ABB charging hardware, energy and fleet management software, support, service, and financing solutions. From freight delivery to autonomous vehicles to bus fleets, InCharge provides fully integrated, scalable solutions.

*InCharge MDHD and fleet charging*

## Perspective on J3400/NACS Standardization

With MDHD vehicles and small fleet operators in mind, InCharge Energy cautions against simplified steps toward a “one connector future,” including through certain connector requirements. While the J3400/NACS connector is likely to replace CCS in passenger vehicles, we foresee that the CCS connector will remain relevant for MDHD vehicles. In the MDHD space, InCharge Energy expects the Megawatt Charging System (MCS) to meet market demand where new solutions for high-powered charging of larger capacity batteries are necessary. When considering connector requirements, InCharge Energy suggests distinguishing requirements for public use cases and private, behind-the-fence charging infrastructure, which may serve mixed fleets of light-, medium-, and heavy-duty vehicles.

Continued support for CCS connectors remains relevant, as a strong MDHD EV aftermarket will rely upon it. In the short-term, InCharge agrees that J1772/CCS should remain the standard for EVs in the MDHD space. A too-abrupt connector transition could hurt the used vehicle market, increasing the obsolescence of CCS vehicles currently on the roads. A rapid change without continuing support for current connectors could particularly impact small fleet operators who find lower cost, used EVs attractive in their fleet electrification transitions.

## Roaming Agreements and OCPI Capabilities

We thank the CEC for welcoming feedback on OCPI and roaming agreements. Given that roaming agreements are not universally implemented, and instead rely on bilateral agreements, maintaining OCPI capabilities can prove particularly challenging for smaller CPOs. As InCharge Energy primarily works with private fleet customers, we also note that maintaining OCPI capabilities does not make sense for behind-the-fence charging infrastructure. Private depot charging, for example, typically does not require driver payment in the way that light-duty public charging infrastructure necessitates. Any OCPI capability requirements, even when tied to public funding, should apply only to public charging infrastructure. Organizations with private charging infrastructure could opt into roaming agreements, depending on use cases.

## 15118-20 and OCPP Implementation and Certification

InCharge provides the following comments to the CEC Workshop’s prompts:

*Explore publishing a report outlining steps toward widespread implementation of ISO 15118-20, including discussion of hardware and software migration pathways.*

- Industry would benefit from such a report, as well as additional educational materials. InCharge fully supports the CEC’s exploration of this initiative.

*Continue specifying OCPP with certification as the minimum requirement, including a 2025 deadline for certification to OCPP 2.0.1 or later. Consider expanding this requirement to projects beyond block grants.*

- Given that the NEVI program currently requires OCPP certification, a 2025 deadline for requiring OCPP is well within reach for industry.

*Explore including OCPP implementation and certification as eligible costs in CEC solicitations and other projects.*

- InCharge Energy thanks the CEC for considering reimbursements for certification costs. However, we believe that a viable certification procedure is still farther out and not yet well defined. Given the uncertain timeline, we recommend that the CEC wait until at least 2027 before considering a requirement for ISO 15118-20 certification. With an eventual requirement, CEC coverage of certification expenses would strongly benefit smaller CPOs and private operators.

*Explore opportunities, including with the federal government, to clarify the forums for determining national market and governance rules for PKI.*

- InCharge Energy believes that CharIN would serve as an appropriate forum to explore these opportunities further.

*Explore opportunities, including with appropriate public agencies, to ensure nondiscriminatory EMSP selection. Most automakers will likely launch EMSPs products (many already have) and offer their service by default on the EV, and customers should have the ability to select and use an alternate EMSP on their EV if desired.*

- InCharge Energy supports consumer choice. We believe that competition and a level playing field will ultimately benefit consumers and drive faster EV adoption.

We thank you for this opportunity to provide the CEC with feedback on charging interoperability. InCharge looks forward to continuing the conversation with the CEC staff and other stakeholders who share interoperability goals. If you have any questions, in particular on interoperability challenges in the MDHD fleet space, please do not hesitate to contact Heather Regen, Manager of Government & Public Affairs, at heather.regen@inchargeus.com.

Sincerely,

Heather Regen

Manager of Government & Public Affairs
InCharge Energy