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Hubject Comments on Interop Workshop

Additional submitted attachment is included below.



California Energy Commission Dockets Office 1516 9th Street Sacramento, CA 95814

RE: Staff Workshop on EV Charger Interoperability; Docket #22-EVI-06

Hubject is pleased to provide comments to the California Energy Commission's (Commission) Staff Workshop on EV Charger Interoperability (Workshop) and the recently released "Statement on Charging Interoperability (Statement). We thank the Commission and staff for their time and starting consideration of the vital topic of interoperability in the EV charging ecosystem.

Founded in 2012, Hubject's technology platform allows our partners to make EV charging reliable, accessible, and seamless for all EV drivers. To date, we have over 1,000 partners comprised of OEMs, CPOs, EMPs, and EVSEs across 52 countries. We have facilitated over 350,000 interoperable charging ports and connected over 450,000 EVs. Our Intercharge platform is the largest global roaming platform for EV charging, providing a scalable, secure, and interoperable marketplace ecosystem for infrastructure and software providers. In addition, Hubject supports the only operable ISO 15118-based Plug&Charge ecosystem and PKI in North America.

The EV charging industry is reaching a critical inflection point due to historical levels of funding, ongoing state level activity, exponential growth in EV charging deployment, and a surge in industry stakeholders. These emerging factors have highlighted the lingering and growing issue of interoperability and network roaming within the US. To date, the predominate focus has been around deploying the physical EV charging infrastructure, but we need to pivot our focus to the digital infrastructure required for deploying reliable EV charging at scale.

We want to thank the CEC and staff for starting to address the critical issue of interoperability in EV charging, hosting this Workshop, and releasing the "Statement on Charging Interoperability" on 11/14/23. The inclusion of language for Roaming Hubs will be vital to achieving CEC's vision for a future where any driver with any EV can easily charge at any charger on any network. While it is a nascent concept in the North American market, Roaming Hubs have been used in the European Union to facilitate interoperability and roaming for a decade, and can be replicated in the North American market with simplicity and ease.

Roaming Hubs – Non-Profit v For-Profit

We are keenly aware of some industry stakeholder's apprehension towards Roaming Hubs and how their profit structure is built. While some industry stakeholders believe Roaming Hubs should be managed by a non-profit entity, Hubject strongly believes Roaming Hubs should be structured as forprofit businesses. Roaming Hubs need to be managed, updated, and maintained to successfully operate, which is not facilitated by a traditional non-profit structure. In addition, under a for-profit structure Roaming Hubs are able to offer additional services (such as custom services/integrations) to CSOs and eMobility Service Providers based upon market requirements.

Dedicated Roaming Workshop for 2024

With the Commission beginning to explore options to address interoperability in late 2023, we request that another staff workshop be hosted in this series to address roaming agreements in Q1 of 2024. This will allow the Commission, public, and industry stakeholders to continue the dialogue on roaming and



explore options for incentivizing industry to enter into roaming agreements to achieve the broad interoperability the Commission is seeking to foster.

Commission's Guiding Questions

CharIN is developing a "CCS Extended" certification that verifies ISO 15118-2 conformance. CEC staff believes CharIN CCS Extended may be an appropriate future requirement for certain CEC projects. Are there other available ISO 15118 certifications or conformance procedures that would be more appropriate?

Hubject is comfortable with the Commission implementing CharlN's CCS Extended certification for ISO 15118-2 conformance testing as a future requirement for projects. To prevent a conflict of interest and to promote competition, we request that the Commission does not make CharlN's CCS Extended certification for ISO 15118-2 conformance testing the soul certification entity. Other entities can conduct conformance testing and they should not be prevented from doing so. However, with recent industry announcements, the future of CCS is in question in North America and the Commission should keep that in consideration as it makes a final determination.

CEC staff proposes potentially allowing ISO 15118-20 and OCPP implementation and certification costs as eligible costs in certain CEC projects. Would this be an effective use of public funds, or would funds be more effective elsewhere to support broad interoperability?

We believe the Commission allowing ISO 15118-20 and OCPP implementation and certification cost is an effective use of funding. ISO 15118-20 is the second iteration with more functionality that will help support the Commission's efforts of achieving broad interoperability through multi-contract handling. To guarantee continuity within protocols, we request that the Commission develop a set of standards for conformance testing to ensure true ISO 15118-20 and OCPP compliance is achieved.

Existing regulations require CSOs to maintain OCPI capability. Is OCPI the preferred protocol to enable roaming agreements? Are there limitations within OCPI that should be addressed?

Hubject is confident in OCPI as the preferred protocol for enabling roaming in North America. Like IS 15118-20 and OCPP, we request that the Commission develop a set of standards for conformance testing to ensure true OCPI compliance is achieved.

How should the CEC support the development of roaming agreements? Alternatively, should potential roaming requirements be structured in a certain way to support replicability of agreements, a level playing field, and/or the inclusion of smaller CSOs?

At this juncture, Hubject believes the Commission should only seek to incentivize industry stakeholders to enable roaming agreements. We maintain that industry stakeholders should have the autonomy and flexibility to negotiate their own contract terms when entering into roaming agreements and/or joining Roaming Hubs. Hubject strongly believes that Roaming Hubs create a level playing field by reducing the barriers to entry for smaller CSOs and eMobility Service Providers, as well as fostering a competitive environment which ultimately benefits the EV driver.

While this would need to be explored further in additional workshops, the Commission could work to make Roaming Hub costs an eligible cost in existing block grants and to develop a pilot solicitation to test broad interoperability in a region of California. This would help incentivize industry stakeholders,



but more would need to be done to focus on connecting networks, not the traditional one-off project funding we see for installing EV charging today.

We do believe the CEC can support replicability across industry through the following means:

- Standardization and conformance Creating alignment on industry protocols and conformance.
- Incentives Provide a pathway for existing, new and smaller CSOs to enable roaming in scalable, replicable ways via Roaming Hubs.
- Data Quality and Performance Ensuring the integrity of data provided by CSOs (eg; POI Data) meets minimum requirements.
- Piloting / Testing Support for industry leading pilots and interop testing

We do believe roaming agreements should be structured in a way that can support replicability across industry. If we are going to achieve the Commission's vision of broad interoperability, replicability will be critical developing roaming agreements at scale and in a cost-effective manner. We recommend that the Commission begin developing a standard that allows roaming agreements to be developed in a replicable manner and to ensure data quality.

Hubject appreciates the opportunity to provide comments and thanks the Commission and its staff for their time and consideration. We look forward to continuing our engagement with the Commission to make EV charging easy, seamless, and equitable for all. Please feel free to contact me if you have any further questions.

Thanks – Brad Groters

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