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CEC Network Roaming Workshop Coalition Comments

Additional submitted attachment is included below.

June 21, 2024

California Energy Commission
Fuels and Transportation Division
1516 Ninth Street
Sacramento, CA 95814
Docket: 22-EVI-06

Re: We support state policymaking to increase roaming agreements

Our companies strongly support the California Energy Commission's (Commission) work to understand the EV charging roaming landscape and to find ways to accelerate roaming agreements. Our companies serve as both charge point operators and e-mobility service providers (eMSPs) via mobile apps we have developed. We have executed one or more roaming agreements – at no additional cost to the driver – and can attest firsthand to how they benefit EV adoption by improving consumers' charging experience.

Drivers should be able to seamlessly locate, use, and pay for public charging stations using one account and the app of their choice without being charged additional fees to do so. However, this is only partially the case for California's EV charging market, requiring special effort from drivers to download multiple mobile apps just to find and use a charging station. This scenario risks driver fatigue with apps and frustration with the overall experience. Therefore, our companies offer the following guidance below to help the Commission realize this vision:

Require more roaming agreements. Roaming is common, well understood, and technically feasible for the EV charging industry. Despite it being around for years, with proven partnerships, there aren't enough roaming agreements yet to simplify drivers' mobile app experience. Consumers still rely on too many mobile apps to access major public charging networks, perpetuating a clunky experience.

We strongly encourage the Commission to require more roaming agreements between major EV charging companies, with additional guidance below on how to craft a balanced approach to any such policy. Drivers deserve to be empowered to choose their preferred mobile app to find, use, and pay for a charging station. In addition to the simplicity of enabling a driver to use multiple networks via a single app, more roaming will open the mobile app market and lead companies to compete for more customer traffic. This dynamic strongly benefits drivers by putting their interests first.

Furthermore, to achieve the Commission's goals for a fully operational Plug & Charge future, roaming between charging networks is a critical underlying requirement. A consumer may want their EV from brand A to use their charging network account from brand B at a charging station from brand C. Therefore, in this example, roaming integration between brands B and C are necessary to make this possible.

<u>Do not prescribe roaming methods nor the composition of partnerships</u>. The EV charging mobile app experience is at a nascent stage – there is immense opportunity to enhance companies' roaming capabilities to offer drivers the best experience possible. To ensure this, we strongly encourage the Commission to preserve companies' ability to innovate, which is best enabled when companies can choose their preferred roaming method and can decide the details of their roaming partnerships.

Charging networks must operationalize several components to make roaming partnerships possible. These include but are not limited to data governance protocols, sharing control of chargers, reconciling billing, providing customer support, offering innovative pricing mechanisms, and resolving charger failures. There is no standardized approach to these partnerships. Should the Commission prescribe requirements for any of these components, it risks preventing companies from finding ways to improve them to benefit drivers.

Allowing companies to choose their roaming method further enhances their ability to innovate. Charging networks used bilateral agreements (also known as peer-to-peer agreements) to create North America's first roaming partnerships and remain the predominant method today. Bilateral agreements create direct relationships between charging networks which then facilitate close collaboration and learning from one another. Direct learning can help companies improve roaming features and capabilities over time. We want to maintain our ability to continue using bilateral agreements, which have historically proven successful.

We also wish to present a different perspective regarding statements made at the workshop that suggested bilateral agreements cannot effectively scale as EV adoption increases. For example, it was presented that the market may require thousands of agreements between vehicle manufacturers, charging networks, utilities, and fleets. This presupposes that every single company will create and operate its own eMSP. While there may be an increase in eMSPs in the near term as the market reaches a critical tipping point to scale, we expect the market will consolidate. It does not seem likely that every single utility or fleet will want to operate their own charging networks and mobile apps — this creates costs when commoditized options will exist. This claim also presupposes that companies, especially larger ones, do not have the resources to execute bilateral agreements or that the process is overly complicated. As stated previously, roaming is a well understood and proven concept for EV charging, with some bilateral agreements in North America having been in operation for 5+ years.

Further, hubs may present their own scaling challenges because they may create a single, central point of failure for the entire charging industry. By contrast, bilateral agreements create a distributed network of roaming integrations, which are less susceptible to systemwide outages. At scale, the costs of integration with a hub could add up, which is another force that will encourage major parties to roam directly with each other for stability and cost reduction. We also note the Commission is finalizing a first-of-its-kind reliability and reporting regulation. The Commission intends to assess and rank charging networks' uptime performance and successful charge attempt rate (SCAR), a first for this industry. Networks subject to reliability requirements (and engaged in peer-to-peer roaming agreements) are mutually motivated to resolve issues to maintain a high uptime and SCAR. It is unclear how the Commission would hold a hub accountable for any roaming errors that lead to failed or multiple charging attempts for the driver.

The workshop highlighted that there are different advantages associated with bilateral and hub-based roaming agreements, and different networks may prefer one or the other for a variety of reasons. For example, bilateral agreements are advantageous in that they facilitate direct relationships and faster issue resolution, while hubs may offer value to smaller EVSPs to facilitate roaming agreements with fewer resources. A single network may prefer to pursue bilateral agreements with some entities and hub-based roaming with others.

Roaming has not accelerated at a pace necessary to match EV adoption because companies have not been required to prioritize it as opposed to a market failure related to bilateral agreements or hubs. Ultimately, each method can offer benefits depending on companies' priorities and available resources. Companies have for years used either method or even both in North America and Europe. Therefore, we encourage the Commission to be neutral to this business model choice.

<u>Do not require roaming between every single charging network with publicly available chargers</u>. To meaningfully increase roaming to benefit drivers, we encourage the Commission to (1) apply its roaming requirements only to "major" charging networks and (2) help companies enhance the quality of their partnerships by not requiring every single company captured via a regulation to roam with one another.

Because the EV charging industry is still nascent, California continues to experience new start-ups and new market entrants. The Commission should not require networks to roam with them just because they have deployed a handful of publicly available charging stations. While we support roaming requirements, executing these agreements still require time and resources. New or smaller companies may not yet have the resources, staffing, or experience necessary to adequately support and maintain a roaming integration. This situation risks poorly managed partnerships that negatively impact drivers' experience using apps, potentially undermining the goals of this entire effort. We encourage the Commission to work closely with stakeholders to define the threshold to qualify as a "major" network in a subsequent rulemaking to properly assess when companies may be better prepared to implement roaming requirements.

Even with an established threshold for "major" networks, we do not believe it is necessary for the Commission to require every major network to roam with each other major network. Maintaining a degree of flexibility for companies to be somewhat selective on who they roam with enhances the quality of any partnership. As previously stated, there is no standard approach to roaming partnerships;

companies continue to learn and improve their roaming capabilities over time. Our companies prefer to roam with like-minded networks to ensure consistency and quality of the charging services we provide. Should the Commission require major networks to all roam with each other, it risks implementation complications when companies do not have similar approaches on how they want to provide roaming for drivers. Because of the nascency of the market, it is more important to steadily increase the number of roaming agreements between major networks over time, rather than immediately requiring everyone implement agreements with everyone else. Otherwise, there may be unintended consequences that create problems for drivers because companies are still improving their roaming capabilities.

Finally, if all major networks are required to roam with all the other ones, it also potentially forces companies into using a roaming method that they would not otherwise want to use. Some companies may have irreconcilable views on whether a bilateral agreement or a hub is the best way to roam – therefore if companies have no flexibility on who they must roam with, it essentially creates a subsequent mandate on the roaming method they must use.

<u>Grandfather existing roaming agreements.</u> As previously stated, some companies already have bilateral agreements in operation that have worked effectively for years. We encourage the Commission to grandfather these into any policy it adopts. Otherwise, companies will have to scrap these agreements for new ones, which adds costs and ties up resources without any added benefits for drivers.

<u>Support open communication protocols like OCPI to enable roaming.</u> The Commission noted in its May 31, 2024, workshop that Open Charge Point Interface (OCPI) is a common open protocol for CSO-EMSP communication. Additionally, the Commission highlighted the Air Resources Board and the National Electric Vehicle Infrastructure Formula Program both require OCPI-capability for charging networks. Our companies support the Commission incorporating OCPI standards into any future roaming rulemaking given its industry-wide adoption and track record of enabling scalable roaming for EV drivers. Because the industry has used OCPI for years, pivoting to other protocols now would be a significant departure in longstanding policy for California and other jurisdictions, potentially undermining efforts to accelerate roaming agreements.

<u>Encourage driver education and awareness of roaming.</u> Some drivers may be unaware of how to access partner networks via one app. Alternatively, a network may have default settings that do not show the names of their partner networks. Our companies are actively working to mitigate these experiences and increase driver education and messaging around roaming. The Commission can play a role in spreading awareness of roaming and its benefits, and we welcome the opportunity to discuss this further with staff.

Conclusion

The Commission has a critical role to play by requiring more roaming agreements. Our companies have demonstrated the value of bilateral agreements to consumers by saving them money on fees, leveraging close collaboration within partnerships to innovate and mitigate charging issues for drivers, and scaling to meet customer demand. We look forward to partnering with the Commission to accelerate roaming to the benefit of all EV drivers.

Thank you,

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