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Joint EV Parties Comments

Please find attached comments on behalf of ChargePoint, EVgo, Electrify America and Tesla.

Additional submitted attachment is included below.

May 31, 2023

California Energy Commission
23-IEPR-05
1516 Ninth Street
Sacramento, CA 95814

RE: Commissioner Workshop on Clean Energy Interconnection – Distribution Grid

Dear Energy Commission Staff:

On behalf of ChargePoint, EVgo, Electrify America, and Tesla (the Joint EV Parties), we appreciate the opportunity to provide comments following the May 9 Commissioner workshop on clean energy interconnection for the distribution grid hosted as part of the 2023 Integrated Energy Policy Report (IEPR) process. The workshop focused on gathering feedback on processes and timelines for interconnection and energization of clean energy resources such as electric vehicle (EV) charging equipment and gather recommendations for how to accelerate interconnection and energization of clean energy resources on the electric distribution grid in support of reaching climate goals. This is aligned with the general focus of the 2023 IEPR on identifying barriers and solutions to accelerate the connection -including interconnection, energization, and associated system upgrades - of clean energy technologies with the electric grid.

The Joint EV Parties believe it is important to reiterate specific recommendations for accelerating and streamlining the connection and energization process for EV charging projects in California (CA). We recognize that meeting the state's ambitious policy goals for transportation electrification will require accelerating interconnection processes to enable scale and efficiency. At the same time, this effort will require collaboration between electric vehicle service providers (EVSPs) and utilities in order to facilitate additional transparency and communication in the existing connection process. There's a need to focus on improving both the planning as well as the connection process. With delays already apparent at this nascent stage of EV adoption, the Joint EV Parties appreciate the role of the California Energy Commission (CEC) in providing an avenue to amplify best practices via the IEPR process, with the goal of accelerating charger deployments to help the state meet its ambitious goals for EV adoption.

The Joint EV Parties have commented in many forums on the need for improving the connection and energization process in CA. For instance, in March 2022 the CA investor-owned utilities (IOUs) hosted a workshop that focused on process improvements. In response to the workshop, the Joint EV Parties filed comments articulating some of the key challenges and opportunities for improving the timelines. The recommendations for best practices included streamlining easements, adopting an average energization timeline of 90 days, evaluating additional staffing needs to execute utility-side construction work, improving distribution system capacity maps, and assessing dependencies such as contractors and additional permitting requirements.¹ Since then, the CA Public Utilities Commission (CPUC) has adopted an average energization timeline target of 125 business days for IOUs, which only apply to stations under 2MW, require no substation upgrades, and that take service under the new Rules 29/45 (not

¹ Joint EV Industry Parties, November 30, 2022. Draft Resolution E-5247 in Response to Pacific Gas & Electric's Advice Letter 6607-E, Southern California Edison's Advice Letter 4803-E, San Diego Gas & Electric's Advice Letter 4011-E, Bear Valley Electric Service's Advice Letter 444-E, Liberty Utilities' Advice Letter 192-E, and PacifiCorp d/b/a PacificPower's Advice Letter 685-E

Rules 15/16).² The CPUC's leadership on this topic is helping to foster an important dialogue, and the Joint EV Parties commend the CEC for continuing the conversation through the IEPR process.

In the spirit of providing the CEC with specific, tangible suggestions for improving energization timelines, the Joint EV Parties provide the following recommendations for consideration:

- ***Provide more frequent updates to EV forecasts to inform the growing need for transformers and consider other policy tools that California may leverage to bolster production of transformers and other grid equipment.***

Transformer shortages are impacting projects across the country and can cause project delays up to 24 months. This issue is a threat to California's broader electrification goals and is only expected to continue to grow in magnitude.³ Evaluating the procurement process for transformers is important and identifying best practices amongst utilities can help reduce bottlenecks. For instance, it may be useful to procure and allocate transformers based on forecasts versus historical data given that electrification is growing at such a rapid pace. Additionally, California may consider manufacturing incentives to bolster the supply of transformers and other grid-related equipment.⁴

- ***Provide dedicated energization crews for EV charger deployments***

The Joint EV Parties cannot emphasize enough the important role that proper staffing plays in ensuring timely energization of electric vehicle service equipment (EVSE). Disruptions to construction scheduling for utility-side distribution system upgrades can cause delays up to 6 months, which may only worsen as the demand for new service requests from EV charging grows. Dedicated crews – a resource previously deployed in some areas of California but have since been removed - would alleviate delays. Further, a more holistic conversation on staffing is necessary to ensure utilities are resourced to fulfill the volume of requests today, and into the future as EVSE deployments scale in alignment with California's aggressive goals for vehicle adoption.

- ***Encourage more proactive planning and upgrades and provide regulatory certainty outside general rate cases (GRCs)***

Capacity upgrades can cause delays of up to two years in the energization of needed charging equipment. Such long delays can discourage EV adoption if drivers experience long wait times during travel or if fleet operators are not able to get the necessary power to charge their vehicles. These long wait times can be reduced by better planning for and anticipating EV charging needs.

² <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M499/K892/499892084.PDF>

³ During a presentation at the National Charging Initiative's Energize! Workshop at Roadmap 2023, a representative from Edison Electric Institute shared that transformer delays may last for 5 years or more without policy intervention.

⁴ EVgo has also filed comments requesting that the federal government leverage the Defense Production Act to bolster manufacturing of transformers and other grid equipment.

The CPUC can facilitate this proactive planning by ensuring that utilities' General Rate Cases (GRCs) accurately account for EV load growth consistent with the achievement of California Air Resources Board's zero-emission vehicle (ZEV) regulations and include necessary funding and staffing levels to quickly build out infrastructure needed to meet the demand for EV Supply Equipment (EVSE) as the need arises.

For example, for its 2025 GRC, SCE conducted a Transportation Electrification Grid Readiness (TEGR) analysis that supplements the EV load forecast in the Integrated Energy Policy Report (IEPR), incorporates the most recent state policy targets, and uses disaggregation methods to "help identify likely areas of significant load increases driven by transportation electrification that are not identified through the traditional planning process."⁵ This type of analysis can be a valuable tool to stay ahead of TE-driven capacity needs and should be supported broadly in the IOUs' GRCs.

In addition, it may be necessary to establish a process by which each utility is able to record and recover prudently incurred costs associated with infrastructure needs to support EV charging that exceed what was anticipated in the GRC. The transition to EVs is happening more quickly than expected,⁶ and electricity planners should anticipate that adoption forecasts may undershoot actual demand. Allowing utilities to establish a memorandum account or some other means to record and recover prudently incurred EV infrastructure-related costs that exceed GRC funding allocations would ensure that forecasts do not become a limiting factor on the speed of EV adoption.

- ***Increase transparency amongst utilities and EVSPs***

Developers should proactively share future project pipeline information with utilities in advance of submitting a service connection request. Utilities should clearly articulate where in the process developers are and how long the timeline is expected to take for a project.

- ***Create a coordinated multi-stakeholder planning process to identify areas along travel corridors where light-, medium-, and heavy-duty fast-charging sites are most likely to be needed (like the CA RETI initiative)***

The buildout of fast-charging sites to facilitate travel along highway corridors presents a unique challenge of coordination among multiple entities that may be best served through a multi-stakeholder planning process. The buildout of these sites is unique in the following ways:

- DC fast-charging sites can demand significant instantaneous power on par with an apartment building or sports stadium, but can be built in a fraction of the time;
- DC fast-charging sites are often constructed as they are needed; delay in energization caused by infrastructure buildout can create problems for travelers with EVs, and can hurt future EV adoption;
- These sites are often needed in rural areas, where transmission and distribution (T&D) capacity might not already exist;

⁵ SCE 2025 General Rate Case, WP SCE-02, Vol.7, Book A, TEGR Forecast Development Workpaper, p. 91

⁶ "California hits 1.5 million in zero-emission vehicle sales," by Rob Nikolewski, *San Diego Union Tribune*, April 25, 2023.

- Multiple different entities will seek to construct these sites in the coming years, possibly leading to piecemeal buildout of infrastructure if not coordinated;
- Unlike residential or fleet EV charging, there is some flexibility in location of public DC fast-charging stations – these sites are typically needed within a certain radius of land, but not in a specific location. However, it is important to ensure customer experience is prioritized which often means infrastructure needs to be located near amenities that customers can easily access while charging.

The issue of coordination around building DC fast-charging sites along travel corridors – wherein multiple entities are planning projects that will require T&D capacity – is not dissimilar to the challenges faced during the early days of the state’s Renewable Portfolio Standard (RPS), when renewable energy developers sought to independently build projects that would require new transmission. To reduce land use impacts and minimize the cost of new transmission lines, the state created the Renewable Energy Transmission Initiative (RETI), which used a collaborative process to identify areas most suitable for renewable energy development and ensure the transmission would be available to serve those projects, without building duplicative and redundant infrastructure.

A process similar to RETI could be undertaken to optimize the buildout of DC fast-charging along travel corridors. By identifying ideal areas for these projects, utilities could proactively build distribution capacity to serve those areas with confidence that EV load will show up to use the infrastructure. Entities seeking to build DC fast-charging sites will be more likely to locate their projects in areas where capacity exists and wait times can be avoided. This type of coordination could allow utilities to save money by building out infrastructure in large “blocks,” rather than in small incremental pieces at each separate service request, and to concentrate capacity in fewer separate locations.

This type of coordinated process would ideally identify not only areas along travel corridors are likely to be needed to serve the needs of light-duty (LD), medium-duty (MD) and heavy-duty (HD) EVs, but it would also take into account other factors, such as the availability of land, service and amenities for drivers, and the needs of disadvantaged communities.

- ***Allow utilities to expand T&D capacity to priority areas – including corridor and urban areas – in advance of new service connection requests***

Critical to achieving the goal of achieving cost savings through coordination on the buildout of infrastructure to serve DC fast-charging sites is allowing the build-out of infrastructure in advance of new service connection requests. If infrastructure is not built out and ready in advance of the new service requests, entities seeking to build new DC fast-charging sites will have no incentive to site their projects in the locations identified, and the benefits of this type of process would not be realized.

We recognize that many of the recommendations referenced above will require collaboration and close coordination between customers, utilities, and CA state agencies. Having a statewide stakeholder group that can help identify best practices and coordinate which entity is responsible for action can be useful.

The Joint EV Parties look forward to continuing to collaborate with our utility partners and the state on additional solutions to help ensure California’s ambitious ZEV and climate goals are achieved.

Sincerely,

Anthony Willingham
Gov't Affairs & Public Policy Lead – State Government
Electrify America, LLC
2003 Edmund Halley Drive
Reston, VA 20191
anthony.willingham@electrifyamerica.com

Francesca Wahl
Sr Charging Policy Manager
Tesla
3500 Deer Creek Rd
Palo Alto, CA 94304
fwahl@tesla.com

Matt Deal
Senior Manager, Utility Policy
ChargePoint, Inc.
240 East Hacienda Avenue
Campbell, CA 95008
matthew.deal@chargepoint.com

Noah Garcia
Manager, Market Development and Public Policy
EVgo Services, LLC
11835 W. Olympic Blvd., Suite 900E
Los Angeles, CA 90064
noah.garcia@evgo.com