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Tesla Comments 2023 Draft IEPR Recommendations

Additional submitted attachment is included below.

December 1, 2023

Docket No: 23-IEPR-01

California Energy Commission
715 P Street
Sacramento, CA 95814

RE: Comments on Draft 2023 Integrated Energy Policy Report

Dear Energy Commission Staff,

Tesla appreciates the opportunity to provide feedback in response to the California Energy Commission's (CEC) Draft 2023 Integrated Energy Policy Report (IEPR). We appreciate the consistent efforts by CEC staff to identify and address the obstacles facing California's clean energy goals. Tesla has been an active participant in the CEC's IEPR workshops and previously submitted comments in May 2023 on the Workshop on Clean Energy Interconnection and in September 2023 after the Load Modifier Workshop.

Achieving California's ambitious goals for transportation electrification will require accelerating the interconnection (new service connections) process for electric vehicle (EV) charging infrastructure. As of today, there are still numerous challenges that hinder the rapid deployment of EV charging infrastructure, including expanding grid capacity to serve transportation electrification load. The IEPR has an important role to play in solving these challenges by driving interagency coordination on critical issues such as upgrading distribution system capacity to serve EVs. Tesla's comments below include the following recommendations:

- Provide additional specificity on the recommendations outlined in this report.
- Encourage proactive investment to align existing planning processes with accelerated load growth.
- Facilitate a load data sharing protocol between utilities and EV charging providers/fleet operators.
- Support dedicated staff for EV-charging infrastructure projects and proactive workforce development investments.
- Enable distribution capacity and connection processes to be more granular and publicly disclosed.
- Address permitting timelines for EV infrastructure projects and provide recommendations to streamline the permitting process.

I. Provide additional specificity on the recommendations made to address the barriers to deploying clean energy resources.

CEC staff identifies five primary barriers to the deployment and grid connection of clean energy resources.¹ While these are real, pertinent issues, the IEPR should be more specific, prescriptive, and granular in its recommendations. It's important for agencies and other stakeholders to have specific, actionable next steps to address the challenges outlined in this report. Tesla's comments below correspond to the five key problems identified in the Draft IEPR. We also offer specific additions to supplement the CEC's recommendations.

II. Aligning existing planning processes with accelerated load growth from EV charging will require proactive investment and new, innovative solutions.

¹ Problems 1-5: Accelerated Deployment is Straining Existing Planning Paradigms (Pg. 28), The Growing Number and Size of Projects Applying to Connect Overwhelm Existing Processes and Can Lack Capacity to Connect (Pg. 35), Rate Impacts Must Be Managed While Rapidly Preparing the Grid (Pg. 44), Available Capacity, Connection and Upgrade Processes, and Timelines for Completion Are Not Always Transparent or Consistently Tracked (Pg. 47), Permitting Can Take a Long Time and the Scale of Deployment Will Need Broader Public Engagement and Support (Pg. 52).

Tesla appreciates the CEC's recognition that the acceleration of clean energy and EV infrastructure deployment is incompatible with existing planning paradigms. The four recommendations that the CEC offers in response to this issue are a good starting point but could be more specific.

The first recommendation offered by the CEC is to enhance the coordination between policies and regulations to ensure that policy goals are incorporated into investment decisions and capacity planning. Tesla strongly supports the notion that EV forecasting and adoption goals should be incorporated into transmission and distribution system planning. The CEC's recommendation should be more specific about *how* to enhance this coordination. Tesla recommends that the CA Public Utilities Commission (CPUC) ensure that utilities' General Rate Cases (GRCs) use load growth forecasts consistent with the achievement of California Air Resources Board's (CARBs) zero-emission vehicle (ZEV) regulations. In other words, GRCs should not only rely on historical data for grid investment decisions but should lean into future EV policy goals as a source of truth. Inclusion of CA's ZEV goals in the baseline scenario of the updated IEPR electricity demand forecasts is a step in the right direction, but the CPUC should ensure that this forecast is relied upon in the utilities' GRCs and reflected in proactive infrastructure investments.

The CEC's second recommendation is to expand proactive transmission and distribution infrastructure processes. Again, we are supportive of this effort but request more granularity in how state agencies can achieve this. Tesla recommends that there be a process by which utilities can record and recover incurred costs associated with EV charging infrastructure that exceed what was anticipated in the GRC. As provided by SB 410 (Becker, Chapter 394, Statutes of 2023), utilities should be encouraged to establish a memorandum account or some other mechanism to ensure that insufficient GRC forecasts do not become a limiting factor on the speed of infrastructure deployment. The CPUC should embolden utilities to confidently make proactive investments in transmission and distribution infrastructure in advance of new service connection requests and in proceedings outside of GRCs.

Finally, Tesla is supportive of the state agencies moving expeditiously on the Freight Infrastructure Plan and including light-duty vehicles in that effort. The need for proactive transmission and distribution (T&D) investments is especially acute along travel corridors and will become even more so with the electrification of heavy-duty trucking. Building out T&D infrastructure in a coordinated manner at optimal charging locations along those corridors will not only reduce delays in energization timelines for charging providers but could also save ratepayer costs by reducing the number of substations and lines where upgrades are ultimately needed.

III. The CEC and CPUC should help facilitate a load data sharing protocol between utilities and EV charging providers/fleet operators.

In discussing the uncertainty of where grid capacity will be needed to support new infrastructure, the CEC highlights that "*improved coordination and information sharing across utilities, large customers such as medium- and heavy-duty truck fleets, and other stakeholders can help reduce this uncertainty.*"² In its recommendations for this section, the CEC in partnership with the CPUC should support the development of a robust data-sharing mechanism through which utilities can receive confidential development plans from EV infrastructure providers and fleet operators. Developers should proactively share future project pipeline information (up to five years) with utilities in advance of submitting a service connection request. This would allow utilities to improve forecasting and increase the accuracy of proactive transmission and distribution investments. We encourage the CEC and CPUC to answer outstanding questions about this process, including whether this data sharing should occur inside the GRC or outside a docketed proceeding while maintaining confidentiality to any business sensitive growth projections.

IV. The growing number of EV infrastructure projects requires dedicated personnel and proactive workforce development investments.

² Draft 2023 Integrated Energy Policy Report, Page 29

The CEC identifies some of the major pain points that have delayed charging infrastructure deployment in recent years. Supply chain constraints and a limited qualified workforce are both issues that have impacted Tesla's ability to deploy chargers on schedule. Tesla supports the CEC's recommendation to use third-party contractors for the interconnection studies, design work, and construction of projects. Utilities should ensure that contractors will expedite these activities in line with the CPUC's 125-business day energization timeline. We additionally recommend that utilities hire dedicated energization staff for EV charging deployment. It's important for utilities to have dedicated staff on the design side and dedicated crews for construction. The design and construction process for charging infrastructure have both previously impeded timely energization, so utilities should commit staff to both workflows. This dedicated EV-charging personnel would streamline the entire process from application to energization and would provide charging developers with a single point of contact. We further recommend that this model be implemented by Publicly Owned Utilities (POUs) and that energization staff from Investor-Owned Utilities (IOUs) share best practices to enable a more efficient use of both utility and developer resources. As the qualified workforce deficit continues to grow, the CPUC should also ensure that utilities consider the necessary staffing levels to support accelerating infrastructure deployment. Utilities should be allowed to proactively invest in staff and workforce development in their GRCs to meet the growing demand in this field. The CPUC should also allow utilities to establish hiring targets and find ways to automate more activities.

While the CEC identifies transformer and switchgear shortages as a bottleneck, the recommendations are silent on how to address these equipment shortages. Tesla recommends that utilities re-evaluate the procurement process for transformers and switchgear. Utilities should procure transformers based on California's EV forecasts and should not rely on historical data, which has become obsolete due to the paradigm shift of rapid electrification. California could also consider manufacturing incentives to bolster the domestic supply of this equipment.

Tesla supports the CEC's recommendation to explore opportunities for temporary power solutions while permanent infrastructure is constructed. There must be a streamlined approval and interconnection process for these resources that doesn't add a prohibitive amount of labor or time to the project.

V. Distribution capacity and connection processes should be more granular and publicly disclosed.

The CEC identifies one of the key issues EV charging developers are facing: lack of transparency about available distribution capacity. In Tesla's experience deploying its national network of Direct Current Fast Chargers ('DCFC'), finding areas with adequate capacity for EV charging deployments is challenging. Tesla submits an interconnection request, and the utility either approves or denies the project on the basis of available capacity. In many utility territories, there is no map or resource granular enough to allow Tesla to deploy charging infrastructure based on where capacity is available. In California, IOUs are required to provide hosting capacity maps, but the granularity and accuracy/timeliness of these maps greatly varies with SCE being the furthest along in moving to real time capacity maps recently. This process is cumbersome, labor-intensive, and inefficient. It would be helpful if utilities shared capacity maps at the distribution level to inform where charging deployment is possible without prohibitive upgrades. The CEC recognizes that a "*lack of transparency into infrastructure capabilities can lead to exploratory-only applications that are used to identify potential upgrade costs and timelines. Such exploratory applications can clog the intake and study processes, impacting other interconnection applicants.*"³ With increased EV adoption in California, these exploratory requests will overwhelm existing utility processes to the point of unreasonable delays. These problems can be alleviated with dedicated EV-charging staff and improved reporting of current and anticipated distribution capacity. The CPUC should work with utilities to establish a robust, publicly available tool to disclose this information. Dedicated EV-crews should clearly articulate where in the process developers are and how long the timeline is expected to take for a project. These timelines should be tracked, whether part of the EV Infrastructure Rules 125 business day target or outside that scope, in order to inform future public policy efforts to improve and expedite these processes. Projects that exceed 2 Megawatts (MW) should also be subject to an appropriate energization timeline. We recommend that the SB 410 implementation process include the creation of an appropriate timeline for projects over 2MW as well as projects impacted by capacity upgrades. Timeline data should be tracked across the board and used to facilitate a faster energization process in the future.

³ Draft 2023 Integrated Energy Policy Report, Page 47

VI. The CEC should address permitting timelines for EV infrastructure projects and provide recommendations to streamline the permitting process.

The CEC offers four recommendations to facilitate a faster environmental permitting process for clean energy projects. However, the CEC does not address permitting for EV charging projects. While meaningful progress on EVSE permitting has been made through the passage of landmark legislation like AB 1236 (Chiu, 2015) and AB 970 (McCarty, 2021) and the development of the EV Charging Station Permitting Guidebook, more work needs to be done to address bottlenecks in the permitting process. For example, right-of-way permitting with Authorities Having Jurisdiction (AHJs) and the California Department of Transportation can add months to a project's timeline. Additionally, incongruencies between the aforementioned EVSE permitting legislation and the California Coastal Act are delaying projects in key coastal zones. Tesla recommends that the CEC work with other state agencies to streamline permitting and easements for EV projects at the state and local level. With overlapping authority, differing requirements, and a lack of dedicated staff for EV infrastructure permitting, timelines will only continue to increase without formal intervention. The CEC needs to re-evaluate these dependencies in order to expedite charger deployment.

Tesla appreciates the opportunity to provide feedback on the CEC's 2023 Draft IEPR recommendations. We sincerely appreciate the CEC's efforts to accelerate the interconnection and deployment of EV charging infrastructure in California and look forward to engaging on the implementation of the IEPR's recommendations going forward.

Sincerely,

Francesca Wahl
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Business Development and Public Policy
Tesla, Inc.