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**Attachments:** [image001.png](#), [Tesla Comments\\_TRPA Climate Code\\_Nov 2023.pdf](#)

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Hello TRPA –  
Please see our attached comment for the RPC meeting on March 27, 2024, regarding the following project:

Code Amendments Supporting Climate Resilience, Affordable Housing, and Mixed-Use Design Standards

Best,  
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November 27, 2023

Julie Regan  
Executive Director  
Tahoe Regional Planning Agency

John Hester  
AICP, Chief Operating Officer  
Tahoe Regional Planning Agency

## **Re: Comments on TRPA Draft Climate Code, Attachment A**

Tesla<sup>1</sup> appreciates the opportunity to provide comments on the Tahoe Regional Planning Agency (TRPA) Draft Climate Code. We commented previously in July 2023 on TRPA's Permitting Improvement Project to evaluate and improve TRPA's processes and ordinances.

Tesla applauds TRPA's efforts to increase climate resiliency and promote sustainable development in the Tahoe region with the inclusion of climate codes. We are generally supportive of the Draft Climate Code amendments in Attachment A as these code updates build on the foundation laid by prior code cycles. Our comments below include the following recommendations to further accelerate EV adoption and reduce the cost of EV charging:

- Align EV charging definitions with those approved in CALGreen 2022
- Include EV charging stations as accessory and primary uses
- Reevaluate proposed EV capable requirements
- Expand the EV charging station coverage exemption

### **I. Align EV charging definitions to definitions in the recently approved CALGreen 2022 Intervening Code Cycle.**

Tesla supports TRPA's efforts to define and codify EV charging terminology within the Code of Ordinances. Defining terms associated with EV charging will create more transparency and clarity between charging developers and review staff. The proposed definitions do not align with standardized code language developed through rigorous, consensus-based processes, such as what was recently adopted in the Final Express Terms of the California Green Building Standards Code (CALGreen) 2022 Intervening Code Cycle. Tesla proposes recommended language in the attached Appendix 1.

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<sup>1</sup> Tesla is an American manufacturer of advanced electric vehicles and battery energy storage systems with the mission to accelerate the world's transition to sustainable energy.

## **II. Include EV charging stations as accessory and primary uses.**

Tesla appreciates the inclusion of EV charging stations in sections 21.3.1 and 21.4 respectively. The determination of primary and accessory use will reduce the likelihood of zoning-related delays for approval and help streamline the permit application process. We recommend aligning EV charging language to the proposed definitions in section 90.2 for consistency. Tesla proposes recommended language in the attached Appendix 1.

## **III. Reevaluate the proposed EV Capable requirements for commercial, multi-family, hotels and motels by increasing EV infrastructure percentages and matching requirements to the building use type.**

Since 2015, CALGreen has increased and strengthened EV charging infrastructure requirements for residential and non-residential buildings with each successive code update. In the most recent code cycle, all new multi-family buildings must provide 40% of spaces with low power Level 2 EV charging receptacles and 10% of spaces with a Level 2 EV charger. New non-residential buildings are required to have 20% of their parking spaces be EV-capable, with 25% of the EV-capable spaces required to be provided with Electric Vehicle Supply Equipment (EVSE). Fast chargers can also be used to meet the requirements.

TRPA's currently proposed code requires only 10% of parking in buildings with a minimum of forty spaces be EV-capable. This requirement falls short in adequately future proofing new multi-family and commercial buildings which will last for 50-100 years. While EV-capable requirements are appropriate in certain building use types, for residents of multi-family housing in particular— who face numerous logistical, financial, and infrastructure barriers to accessing EV charging at home – a mix of EV-ready and EVSE-installed infrastructure is essential to ensure equitable EV charging access. Future proofing new buildings to support EV charging that can be accessed in the near term is a key tool to accelerate the EV adoption and lower the future cost to transition out of combustion engine vehicles.

TRPA should reevaluate the entirety of section 34.4.1. We recommend that 100% of the units with parking in a new multifamily building be a mix of EV-capable and EV-ready. This would follow the precedent set recently in the 2024 International Energy Conservation Code (IECC) which requires a mix of EV-capable, EV-ready, and EVSE-installed adding up to 100% for new multifamily housing. For new commercial buildings, the minimum baseline should be 20%. Furthermore, TRPA should segment out commercial buildings based on occupancy type, as there likely will need to be more variation based on dwell time and usage to match EV charging needs. For example, a shopping center, warehouse, airport, and corporate complex will have different vehicle dwell time needs and different percentages will make sense for each. Again, we recommend that TRPA look to the 2024 IECC. Table C405.14.1 of the IECC

commercial code provides an example of required EV power transfer infrastructure requirements for various commercial occupancy classifications.

#### **IV. Expand the EV charging station coverage exemption.**

Tesla supports the inclusion of EV charging as an exemption, along with solar and other small utility installations. However, as written, most EV charging station projects will not be streamlined by this exemption. The exemption is insufficient to install Level 3 EV charging stations. Tesla EV charging stations require coverage for charging dispensers, switchgear, site control infrastructure, transformers, and other equipment. A typical Tesla Level 3 EV charging station with 12 charging stalls requires a minimum of 400 square feet of coverage. A Tesla Level 3 EV charging station with 4 charging stalls requires a minimum of 250 square feet of coverage. Installations by other companies require a similar amount of coverage. To better address and encourage EV charging development, Tesla recommends expanding the coverage exemption to 400 square feet.

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Thank you for the opportunity to provide comments on TRPA's Draft Climate Code, Attachment A. With the recommendations above, the EV charging related sections of the draft code will be significantly strengthened and establish TRPA as a leader in beneficial electrification.

Sincerely,

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Business Development and Public Policy  
Tesla, Inc.

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Commercial Charging, North America  
Tesla, Inc.

## APPENDIX 1

Language to be added is underlined. Language to be removed is ~~struck~~.

**Code 90.2****Electric vehicle charger**

Off-board charging equipment used to charge an electric vehicle. ~~An “electric vehicle charger level 2” means a 208-240 volt electric vehicle charger. A “direct current (DC) fast charger” means a 400-volt or greater electric vehicle charger.~~

**Electric vehicle charging station (EVCS)**

One or more electric vehicle charging spaces served by EVSE ~~electric vehicle charger(s)~~ or other charging equipment allowing charging of electric vehicles receptacles.

**Electric vehicle supply equipment (EVSE)**

**The conductors, including the ungrounded, grounded and equipment grounding conductors and the electric vehicle connectors, attachment plugs, personnel protection system, and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.**

**EV capable spaces**

**A vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways, both underground and/or surface mounted, to support EV charging.**

~~Installation of the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage and adequate panel capacity to accommodate future installation of a dedicated branch circuit and charging station(s). “EV ready” means EV capable plus installation of dedicated branch circuit(s) or electrical pre-wiring, circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations. “EV installed” means EV ready plus installation of a minimum number of Level 2 or DC electric vehicle supply equipment (EV chargers).~~

**EV ready spaces**

**A vehicle space which is provided with a branch circuit; any necessary raceways, both underground and/or surface mounted; to accommodate EV charging, terminating in a receptacle or a charger.**

**~~Electric vehicle charging spaces~~**

~~A parking space intended for use of EV charging equipment and charging of electric vehicles. The minimum length of each EV space shall be 18 feet. The minimum width of each EV space shall be 9 feet.~~

**Level 2 electric vehicle supply equipment**

**The 208/240 Volt 40 ampere branch circuit, and the electric vehicle charging connectors, attachment plugs, and all other fittings, devices, power outlets, or**

**apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.**

**Code 21.3.1**

A. Accessory uses such as garages, green houses, homeowner association offices, art studios, workshops, swimming pools, storage structures, tennis courts, dog runs, emergency facilities, home occupations, accessory dwelling units, electric vehicle **charging** stations, and other uses listed in the definition of a “primary use” as accessory.

B. Accessory uses such as garages, parking lots, swimming pools, tennis courts, bars and restaurants, equipment rental, maintenance facilities, laundries, gymnasiums, coin operated amusements, meeting rooms, managers quarters, childcare facilities, emergency facilities, employee facilities other than housing, accessory dwelling units, restricted gaming (Nevada only), electric vehicle **charging** stations, and other uses listed in the definition of a “primary use” as accessory.

C. Accessory uses such as garages, parking lots, emergency facilities, maintenance facilities, employee facilities other than housing, accessory dwelling units, restricted gaming (Nevada only), storage buildings, electric vehicle **charging** stations, and other uses listed in the definition of a “primary use” as accessory.

D. Accessory uses such as garages, accessory dwelling units, electric vehicle **charging** stations, and emergency facilities.

E. Accessory uses such as garages, emergency facilities, childcare, related commercial sales and services such as ski shops, pro shops, marine sales and repairs, parking lots, maintenance facilities, swimming pools, tennis courts, employee facilities other than housing, accessory dwelling units, outdoor recreation concessions, bars and restaurants, electric vehicle **charging** stations, and other uses listed in the definition of a “primary use” as accessory.

**Table 21.4-A**

**Fuel and ice dealers**

Retail trade establishment primarily engaged in the sale to consumers of ice, bottled water, fuel oil, butane, propane, electric vehicle charging **stations**, and liquified petroleum gas (LPG), bottled or in bulk, as a principal use. Outside storage or display is included as part of the use

**Vehicle storage & parking**

Service establishments primarily engaged in the business of storing operative cars, buses, or other motor vehicles. The use includes both day use and long-term public and commercial garages, parking lots, and structures. Outside storage or display is included as part of the use. The use includes electric vehicle charging **stations**. The use does not include wrecking yards (see “Recycling and Scrap”)

## Code 34.4.1

### ~~34.4.1. Electric Vehicle Capable Parking Spaces~~

~~Ten (10) percent of the total number of parking spaces on a building site with a minimum of 40 (forty) spaces provided for all types of parking facilities shall be electric vehicle capable spaces (EV spaces) capable of supporting future electric vehicle supply equipment. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes. EV spaces will count toward the total amount of parking spaces.~~

- ~~1. The development of EVSE applies to new development and redevelopment when the project requires a permit.~~
- ~~2. Developments with 100 percent deed restricted housing shall be exempt from the above requirement.~~