September 23, 2019

Ms. Ida Clair
Principal Architect
Division of the State Architect
1102 Q Street
Sacramento, CA 95814

Re: Comments on Proposed EVCS Code Change Proposals for EV Charging Accessibility Standards

Dear Ms. Clair,

The California Electric Transportation Coalition (CalETC), CALSTART, ChargePoint, the Electric Vehicle Charging Association (EVCA), and Tesla respectfully submit the following comments regarding the Division of State Architect's (DSA) proposed building code changes for electric vehicle charging station (EVCS) accessibility standards.

CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. CalETC supports and advocates for the transition to a zero-emission transportation future as a means to spur economic growth, fuel diversity and energy independence, ensure clean air, and combat climate change. CalETC's board of directors includes: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, and the Southern California Public Power Authority. Membership also includes manufacturers of zero-emission vehicles in all weight classes, electric vehicle charging station providers, and other industry leaders supporting transportation electrification.

CALSTART is a nationally and internationally recognized clean transportation non-profit founded over 25 years ago. CALSTART works with over 210 member companies from the public and private sectors of the transportation industry, including: fleets, manufacturers, public agencies, and fuel providers to advance clean transportation policy and technology. CALSTART's work is organized into the major initiatives of cars, buses, trucks (and off-road vehicles), fuels, and mobility.

ChargePoint is the world's largest electric vehicle charging network with more than 100,000 Level 2 EV and direct current fast charging spots. ChargePoint's customers include major employers, municipalities, universities, utilities, real estate developers

and parking garage facility owners and operators that provide EV charging and related services to EV drivers.

EVCA is a non-profit trade association representing twelve electric vehicle service providers (EVSPs), software and equipment manufacturers, and installation and maintenance providers. Our members include American Building Management, Blink Charging, BTCPower, ChargePoint, Clean Fuel Connection, Envision Solar, EVBox, EV Connect, EVgo, Flo, Noodoe, and Volta. EVCA's mission is to advance the goal of a clean transportation system in which the market forces of innovation, competition, and consumer choice drive the adoption of EVs and deployment of charging infrastructure.

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. Today, Tesla is one of the largest manufacturing employers in California with nearly 20,000 employees in the state, including more than 10,000 at Fremont where all Tesla vehicles are assembled, including Model 3, which is designed and built as the world's first mass-market electric vehicle. As a manufacturer of EVs, Tesla has a direct interest in transportation electrification and associated EV charging infrastructure issues. As of July 2019, Tesla has deployed 1,683 supercharger charging stalls at 120 locations in California and 14,081 supercharger charging stalls at 1,604 locations globally. Tesla has also deployed 2,300 Level 2 wall connectors at 900 destination charging locations in California.

California has goals to deploy 1.5 million zero-emission vehicles (ZEVs) and 250,000 EV charging stations, including 10,000 DC fast chargers by 2025. California also has a goal of deploying 5 million zero-emission vehicles by 2030, which will require even further scale-up of the charging infrastructure for electric vehicles. The state currently has 4,764 public L2 charging stations and 685 public direct current fast charging stations. We have a long way to go to meet California's ZEV and fueling goals, as well as the air quality and climate change targets underpinning these goals. In order to drive adoption of plug-in electric vehicles and meet these targets, we need to drastically increase the amount of publicly accessible, easy-to-use charging stations. In this spirit, we offer the following comments for your consideration on the draft code amendments that were released on June 24, 2019.

1. **EVCS – distinct facilities for different charging levels (page 57)**

While we appreciate the intent of this proposed code change, we believe it raises several implementation questions and challenges, outlined below. The most critical question to address is how to meet accessibility requirements when co-locating Level 2 and DC fast chargers.

There are only 3 classes or "levels" of charging. The industry uses only 3 classifications for charging levels – Level 1, 2, or 3 (Level 3 is also known as Direct Current Fast Charger). Therefore, to be technically accurate, we believe the reference to charging levels in the proposed code change should read as follows: "…(e.g. Level 1, Level 2, Level 3~~, DC Fast Charge, etc.~~)…". The "etc." listed in this sentence could create

confusion by indicating there is another class of charger when one doesn't exist. As a result, authorities having jurisdiction, especially those less familiar with charging technology, could miss-classify or create a new classification of charger that doesn't exist for purposes of implementing accessibility requirements. This creates uncertainty for compliance, thus undermining companies' ability to deploy charging stations if accessibility standards vary from city to city. We believe the requested changes above minimize the potential for confusion on how to apply the standards across charging classes.

Co-Locating Level 2 and Level 3 Chargers. Even when taking into consideration the potential to co-locate Level 2 and Level 3 chargers at a parking garage or lot, we still believe this proposal will have unintended consequences of hindering charging station deployment and thus create missed opportunities for providing accessible charging stations. Because this would mandate a distinct set of accessibility requirements for each level of charging station, that means if a site host wants to co-locate two different classes of chargers, they will need to create two van accessible spaces. Van accessible spaces are significantly larger than standard accessible spaces; some parking lots and garages lack the appropriate space needed to create a van accessible space, much less two van accessible spaces. Therefore, this requirement disincentivizes site hosts to co-locate different levels of charging stations because it may be technically infeasible or costly to creates two van accessible spaces. As a result, this undercuts the state's EV and EV charging station deployment goals; availability of public charging stations is key to increasing consumer confidence in EVs.

In order to address the co-location challenge, we recommend a hybrid approach that creates more flexibility for site hosts but also ensures accessibility for different levels of charging stations. The following language should be inserted to modify the current draft text:

11B-228.3.2 Minimum number. *EVCS complying with Section 11B-812 shall be provided in accordance with Section 11B-228.3.2* ~~*for each charging level (e.g. Level 1, Level 2, DC Fast Charge, etc.).*~~ *Different charging levels (e.g. Level 1, Level 2, Level 3) may be considered as part of the same facility so long as the accessible parking spots include at least one EVCS of each type of charging level that is on the site.* ~~*Each charging level provided shall be considered as a facility.*~~ *Where EVCS are provided in more than one facility on a site, the number of EVCS complying with Section 11B-228.3.2 provided on the site shall be calculated such that each level of charging can be used to meet the total number of accessible parking spots* ~~*according to the number required for each facility*~~*. Where an EV charger can simultaneously charge more than one vehicle, the number of EV chargers provided shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.* When table 11b-228.3.2.1 requires more accessible EVCS than type of charging level, the larger quantity of charging type must be be accessible.

If a site host wants to install two different levels of chargers, this would require them to install one class of charger at a van accessible space, and then have the other class be installed at a standard accessible space (which from a practical standpoint would likely

share the accessible aisle with the van accessible space). We believe this maintains the integrity of providing accessibility to different levels of charging stations while also taking into consideration the variation of size and space availability for parking lots and garages to comply with these requirements.

Conclusion
Thank you for the opportunity to provide comments; we'd very much appreciate the opportunity to discuss our proposed changes with DSA in more detail. We look forward to continuing to work with DSA as the proposed building code changes for EVCS accessibility standards moves forward.

Thank you for your consideration,

Hannah Goldsmith
California Electric Transportation Coalition

Meredith Alexander
CALSTART

Alexandra Leumer
ChargePoint

Abdellah Cherkaoui
Electric Vehicle Charging Association

Francesca Wahl
Tesla