

September 27, 2021

BUILDING STANDARDS COMMISSION

2525 Natomas Park Drive, Suite 130 Sacramento, California 95833-2936

Via Email: cbsc@dgs.ca.gov

RE: CALGreen, Electric Vehicle Infrastructure -- Retrofits

Dear Building Standards Commissioners and Staff,

We commend the HCD and the BSC for pursuing opportunities to expand EV charging infrastructure into existing parking facilities in the 2022 CALGreen code cycle.

Recognizing substantial populations live in existing multifamily housing developments or older homes without access to charging, we believe the following proposed Section 4.106.4.2.3 is a good start, leveraging parking alterations in existing facilities:

4.106.4.2.3 Electric vehicle charging for additions and alterations of parking lots serving existing multifamily buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

Notes:

1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

We have three recommendations to further improve the CALGreen code for retrofits:

1) Add the following language:

Exceptions: Electrical infrastructure additions or alterations in existing buildings for the **sole** purpose of a) enabling access to power for charging EVs (including charging at Level 1, Level 2 or DC Fast Charging), and/or b) changing to more energy efficient lighting systems, are *not required* to comply with Section 4.106.4.2.3.

We believe that exceptions should be allowed for retrofits in existing buildings if the triggering permit is **solely** for the purpose of adding EV charging circuits, receptacles and EVSE, (including Level 1, Level 2 and DC charging), and/or for upgrading to more efficient lighting systems, for the following reasons:

- Existing electrical panel capacity may be limited, and owners should be encouraged to install as many points of access to power EVs as possible within their existing constraints (such as panel capacity limitations), without having to incur expensive panel or transformer upgrades;
- Real and perceived cost barriers to providing points of access to power for EV charging should be minimized as much as possible by allowing flexibility and avoiding prescriptive standards that are feasible for new construction but not necessarily for retrofits;
- To encourage self-initiative by owners and managers of existing multi-family dwellings who want to provide access to power for EVs with minimal complications and who have limited panel capacity
- To maximize the number of EVs that have access to EV Ready spaces at Level 1, Level 2 or DC charging, served from existing electrical panel and transformer capacity.

2) If the retrofit clause is triggered in Section 4.106.4.2.3, require this minor increase to provide *EV Ready* charging, rather than EV Capable. Suggested language change:

4.106.4.2.3 Electric vehicle charging for additions and alterations of parking lots serving existing multifamily buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered, shall be EV Ready electric vehicle charging spaces (EV spaces). ~~capable of supporting future Level 2 EVSE.~~

3) Apply the retrofit requirements of Residential code 4.106.4.2.3 (along with our above suggestions) to the Non-Residential code.

We encourage you to adopt all three of these recommendations as a group, rather than simply one or two.

Please reach out if you have any questions or require clarification.

Thank you for considering the above recommendations.

Guy Hall, Director, Electric Auto Association*

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Project Coordinator (Retired)*

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* Organizations are listed for identification purposes only