

Attachment G-1

Descriptions of the proposed changes to the regulations and the reasons for making them.

This discussion does not address non-substantive modifications to correct typographical or grammatical errors, changes in numbering or formatting, addition of or edits to internal regulatory cross-references, or similar revisions that improve clarity.

Proposed Modifications to Section 1962.3, Electric Vehicle Charging Requirements

1. Subsection (c)(3)(B)2. Staff is proposing to add language to make clear that the required charging cord must provide sufficient power to enable charging from a state of discharge to a full charge in less than 4 hours. This change is in line with the 45-day proposed on-board charger minimum requirements in subsection (c)(1) and is necessary to ensure both the on-board charger and charging cord are able to provide sufficient charging in less than 4 hours with a Level 2 connection. Currently, vehicles through model year 2025 subject to this section are required to provide an on-board charger with the capability of full charging in less than 4 hours; maintaining this less-than-4-hours requirement is necessary so that consumers are able to charge in the required time from a Level 2 charger, regardless whether they are using equipment that is installed in their home or the Level 2 charging cord that comes with the vehicle. As staff propose to increase the ZEV requirements to 100% of new car sales by 2035, meeting consumer needs is necessary to the success of this regulation to ensure emissions are reduced as intended. Research demonstrably shows that consumer access to Level 2 connections at home and short charging times are necessary to expand and maintain ZEV ownership and that slow charging capabilities are correlated to vehicle dissatisfaction, making access to Level 2 charging necessary to reduce emissions as intended. (See Initial Statement of Reasons (ISOR), p. 49 et seq.) Especially as the market expands to lower price point vehicles to appeal to more diverse vehicle owners, including used vehicle purchasers, it is important to reduce any barriers, including those rooted in consumer perceptions about the ability to charge, that would discourage selection of a battery-electric vehicle (BEV) or plug-in hybrid electric vehicle (PHEV). If BEVs and PHEVs become the predominant technologies, it is necessary that these vehicles are able to be charged reasonably quickly, which necessarily means at Level 2 speeds in both residential and non-residential settings; these proposed changes are necessary to help achieve that goal.
2. Subsection (c)(3)(B)3. Staff is proposing to remove the reference to the “National Electrical Manufacturers Association (NEMA) standard outlet.” Staff found redundancy in specifying NEMA specific plugs with other requirements and finds

Attachment G-1

this change necessary to improve clarity and transparency for regulated entities and other stakeholders and to avoid burden lacking commensurate benefit.

3. Subsection (c)(3)(C)2. Staff is proposing to add language to make clear that charging cords must have user selectability to downgrade amperage during charging, particularly down to amperage that aligns with potential changes to the California Code of Regulations, Title 24, Part 11 (California Green Building Standards), Chapter 4. The access and availability of an adequate electrical circuit to connect a charging cord to varies greatly among vehicle owners and where they routinely park their vehicle. In many situations, vehicle owners do not have a dedicated electrical circuit of sufficient power to meet the maximum charging rate of the included charging cord. Without the ability for such a consumer to select a lower rate of charging (on-cord or, more likely, in vehicle), the consumer would be forced to separately purchase less capable Level 1 or Level 2 charging equipment to use in lieu of the included cord or, if possible, to have electrical modifications made to their residence to add a more powerful or dedicated circuit. The proposed changes therefore are necessary to reduce barriers to home charging, which is a key component to successful consumer acceptance of ZEVs which is necessary for the success of this regulation to reduce emissions as explained in Section III-C-3-d in the ISOR, page 50. New building codes approved for inclusion in Title 24, Part 11 require multifamily developments to have at minimum 20-amp Level 2 receptacle. Staff's proposed addition of user selectability of 16 amps is necessary to ensure home charging ability for consumers where the cord is capable of greater than 24 amps but the consumer only has access to a 20-amp 240V circuit. As explained in Appendix F-4 to the ISOR, the California Electrical Code requires amperage to not exceed 80 percent of the branch-circuit rating; 16 is 80 percent of 20.
4. Subsection (c)(4). Staff proposes changes to this subsection to make clear that the Direct Current (DC) fast charging inlet requirement included in the 45-day proposal applies to all BEVs, but not all PHEVs. Staff is proposing to make explicit that the DC fast charging inlet requirement applies only to PHEVs that have DC fast charging ability (and that are 2026 and subsequent model year). This proposed change is necessary for clarity because without this change, applicability could be ambiguous and may imply that all PHEVs must have DC fast charging, which is not what staff intend to propose.