ELECTRIC VEHICLE (EV) CHARGING SYSTEM FOR SINGLE FAMILY RESIDENCE

2013 California Electrical code; Underwriters Laboratory (UL) listed charging system.

Proposed Guideline:

An electrical permit is required to install an EV charging system at a single family residence. The following information is required as part of the plan submittal:

1. EV charging system information: Level 1 or 2, EVSE system with UL listed number or other approved nationally recognized testing laboratory, in compliance with UL2202, "Standard for Electric Vehicle (EV) Charging System Equipment".
2. Existing electrical service panel information at the residence. Include EVSE load and circuit size to determine if electric panel upgrade is required. Provide load calculations to determine if there is adequate capacity in the existing panel. (CEC220)
3. Panel upgrade and electrical wiring shall be in conformance with the 2013 California Electrical Code.
4. Identify if a second electric meter is required to be installed because of electric utility rate for EV charging.
5. Clarify EVSE locations (garage, carport, interior, exterior, etc.)
6. EVSE shall be installed in accordance with manufacturer's guideline and must be suitable for the environment (indoor/outdoor).
7. **If** the EV charging equipment is located in an area subject to physical (i.e. vehicular) damage and adequate barrier shall be installed. (i.e. 3" to 4" bollard)
8. Submit installation guideline as part of submittal.