

**From:** Devi Eden [<mailto:DEden@energy.state.ca.us>]  
**Sent:** Tuesday, May 31, 2011 10:14 AM  
**To:** Emily Withers; Shawn Huff  
**Cc:** Joe Loyer; Doug Hensel  
**Subject:** EV Charging 5-31-2011de ps.doc

Hello Emily and Shawn,

Thank you for the opportunity to participate in the CALGreen Working Group Meeting on May 17, 2011. We were particularly interested in participating in the EV Charging discussion, as you know.

We would like to submit the attached comments, which differ from the discussion on the 17th. Please let me know if you have questions.

Best regards,

***Devi Eden***, Energy Specialist

*California Energy Commission*

(916) 651-0962

E-mail: [deden@energy.state.ca.us](mailto:deden@energy.state.ca.us)

Energy Upgrade California Website: <http://www.energyupgradeca.org>

**Please Note:** As per the Governor's order, I will be out of the office three days each month for self-directed furloughs. I apologize for any inconvenience.

## **25-A. HCD proposes to adopt Section A4.106.6 of Appendix A4 as follows:**

**A4.106.6. Electric vehicle charging.** Provide facilities meeting Section 406.7 (Electric Vehicle) of the California Building Code and as follows:

**A4.106.6.1 Dedicated electric vehicle supply equipment circuit.** For each single-family residence, conduit for a 240VAC, 40 amp dedicated circuit shall be installed from the residence service panel and terminate within 5 feet of a residence's parking area (garage, carport, driveway), to accommodate the future installation of residential electric vehicle supply equipment.

**Note:** Utilities may have additional options related to supply metering and should be consulted prior to installation.

**A4.106.6.1.1 Labeling requirement.** At the service panel and receptacle, a label shall be provided as follows: "EV READY."

**Comment [d1]:** Energy Commission proposes the following, recognizing that this is a voluntary measure:

"install empty conduit with pull string, and reserve a double pole circuit breaker space in an electrical panel, marked "For Future EV" or "EV READY"

**A4.106.6.2 Electric vehicle parking stalls in multi-family residences.** For parking stalls in shared parking areas that are for use by owners or occupants of multi-family dwelling units, three percent (3%) of all parking stalls, rounded up to the nearest whole number, shall have the capability for supporting electric vehicle supply equipment.

To accommodate electric vehicle charging at electric vehicle parking stalls, at a minimum, . conduit and dedicated circuit for 208/240VAC, 40 amp shall be installed from the electric service panel to each electric vehicle parking stall. Each circuit shall terminate within five feet of each electric vehicle parking stall. The electric service panel shall have sufficient capacity for simultaneous charging at full rated amperage of electrical vehicles at each reserved stall.

**Note:** Utilities may have additional options related to supply metering and should be consulted prior to installation.

**A4.106.6.2.1 Labeling requirement.** At the service panel and parking stall, a label shall be provided as follows: "EV READY."

**NOTE:** Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

**Comment [d2]:** Recognizing that this is a voluntary measure, CEC recommends **EITHER** language for multi-family, similar to that proposed above for single family above, for **3 % of parking capacity in multi-family residences, OR** the language below, which is consistent with that found in the LEED V3.0 for New Construction, which does not favor EV over other types of alternative fuel, fuel-efficient, or low emitting vehicles:

**"Alternative vehicle fueling stations for 3% of total vehicle parking capacity of the site"**

**OR**

**"Provide preferred parking for low emitting and fuel-efficient vehicles for 5% of total vehicle parking capacity."**

CEC believes either proposal would have higher probability of adoption as mandatory by cities or counties, in a local ordinance than what was originally proposed, and would better serve developers (re: lower upfront costs), the EV AND alternative fuel industries AND low emitting vehicle industries, as well as promote cities/counties/developers to continue to move to meet state GHG emission reduction goals, while offering the greatest amount of flexibility.