



**Meeting Minutes**  
Orange Empire Division  
International Association of Electrical inspectors

**Date:** September 6<sup>th</sup> 2011

**Location:** Santa Ana Elks Lodge, 212 Elk Lane, Santa Ana, CA  
Meeting called to order at 11:50am by Randy Buck

12:00pm Flag Salute

Several first-time attendees made self-introductions.

**Treasure Report**

Given by Henry Martinez. Motion to accept approved unanimously.

Orange-Empire- Board asked members for ideas on how to put the balance to good use. Discussion ensued regarding purchase of new electronic equipment for education presentations to better facilitate our training sessions:

#1 – New projector with  $\geq 3,000$  lumens (approx. cost = \$2,000.00)

#2 - Elmo document and object projector (approx. cost = \$800.00)

Information on the two items will be presented at our next meeting for discussion and approval (October 4<sup>th</sup> 2011)

**Old Business:** N/A

**New Business**

Proposed IAEI Southern California Chapter Facebook account – straw poll was mixed.

**12:15pm Code Questions**

#1 - PV systems – Required disconnects for micro inverters, special tools needed? DC disconnects?

Brief description of the micro inverter disconnects 2005 vs. 2008. National Electrical Code Sections 690.13 is place to start – disconnects are required. Then 690.14(D) is specific to this type of installation. Sections 690.33(C) & (E) allow both types. Where capable of interrupting the load or where a tool is required and only opening with not load is allowed. Both types are considered a disconnect.

#2 – Energy commission

Brief discussion on the Edison base vs. high efficacy lamps. There is lots of how-to-do-it video and text information on the California Energy Commission Education website: <http://www.energyvideos.com/splash.php>

**Consultant's time:** N/A

**Testing Laboratory time:** N/A

**Contractor time:** N/A

**Manufacture time:** N/A

**Utilities time:** N/A

**Inspector time**

#1 – PVC system feed back into GFCI

\*Molded case is OK for backfed use. However, when a circuit breaker is marked LINE & LOAD, it is not OK to backfeed.

\*Brief discussion of live load marked, needs disconnect on PV side of device

#2 – Brief discussions on MCA, Max Fuse, & Min Fuse especially as related to HVAC.

**12:39pm Education Program: Residential Inspections**

**Presented by:** Scott Davis

**Reference material:** Dewalt Reference book, based on the 2008/2011 Nec  
- ISBN 111545480

**Outline:**

- Required receptacle types & locations (AFCI, GFCI, Kit countertops, sinks, hall, garages)
- Wall switch lighting requirement/locations (plug switch OK for habitable spaces)
- Circuit Breaker requirements – Locking breakers
- Cord/Plug requirements (Dish washer/Trash compacter exceptions)
- Wire size & box fill/conduit fill requirements & calculations
- Grounding clamps/screws (no sheet metal screws)
- Smoke alarms (3' from supply air registers)
- Required wall space (book shelves are part of required wall space)
- Equipment disconnect locations, service receptacles, & access requirements
- Shower/Tub lights
- Outdoor lighting
- Cable and raceways

Respectfully submitted by,

Charles Richardson

(Edited by Scott Davis & Tom Griffith)