

San Francisco & Santa Clara Valley Chapter Conference Notice:

NEC 2005 Code Changes - Seismic Requirements - Selective Coordination

Wednesday March 5, 2008

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Application Conference for Electrical Specifiers & Consultants

- **Short Circuit Selective Coordination with LV Circuit Breakers**
- **2008 Seismic Code Changes for Electrical Equipment**
- **2005 Code Changes Update**
- **The Other side of Selective Coordination**

Short Circuit Selective Coordination with LV Circuit Breakers:

There are big changes to the 2005 NEC Code. Emergency and Legally Required Stand By power systems, as well as the essential electrical system in health care facilities, must now selectively coordinate. The requirement is further expanded in the 2008 NEC Code to include critical operations power systems. Get up to speed on the new requirements. This course will review these new NEC requirements and will explain how to meet them with low voltage circuit breakers. We will also review system design guidelines and challenges with meeting with the NEC requirements.

Speaker: Ed Larsen, Manager of Industry Standards for Circuit Protection with Square D Company

Mr. Larsen is responsible for managing company activities relating to product standards for over current protective devices, including circuit breakers. He holds a Bachelor of Science degree in Electrical Engineering Technology and a Master of Science degree in Engineering Management from Milwaukee School of Engineering. As a senior member of the IEEE, Mr. Larsen authored a chapter in the Blue Book, the IEEE Recommended Practice for Applying Low Voltage Circuit Breakers Used in Industrial and Commercial Power Systems. He is a member of several CANENA, CSA, IEEE, NEMA and UL technical committees.

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TOPICS Continued:

2008 Seismic Code Changes for Electrical Equipment:

With the basis of the California Building Code changing this year from the 1997 UBC to the 2006 International Building Code, the design professional is faced with landmark changes on how to establish and verify seismic specification requirements for electrical and mechanical equipment. As signaled by the obsolescence of seismic zones, this shift is revolutionary and introduces sweeping changes in the basis of seismic design for critical facilities especially in areas of moderate and higher seismicity. Presented will be an overview on the basics, from the design professional's perspective, of how to establish site specific project specification requirements for electrical and mechanical equipment in a critical facility and also verify manufacturer's compliance by the use of a number of examples.

Speaker: Philip Caldwell, Electrical Engineer for Square D Company

Since graduating in Electrical Engineering from Virginia Tech., Phil has thirty years of experience in the commercial nuclear and electrical industry including design assurance qualification testing to North American and European standards. He is the Square D Company's external representative to all activities and government agencies in North America that are involved in earthquake engineering research and code development including IEEE 693. Phil is a member of Earthquake Engineering Research Institute and the Seismological Society of America as well as IEEE and ASCE.

Update on California 2005 Code Requirements for Electrical Equipment:

The new California Electrical Code is based on the 2005 NEC. This presentation will review selected changes adopted for the 2005 code with focus made on changes related to system protection, equipment installation and application. You will receive insights on why the Code Panel adopted these changes and gain a better understanding of the intent of these changes.

Speaker: Gary Fox, PE, Specification Engineer for GE Consumer & Industrial

Gary H. Fox, PE, received his BSEE from California Polytechnic State University, San Luis Obispo in 1978. He has been employed by General Electric Company for 29 years. In his current assignment he provides application and technical support for power distribution/control equipment and lighting. Mr. Fox is a Senior Member of the IEEE, and has held many Officer Positions within IEEE, including Chair for the San Francisco Chapter, IAS; Chair, San Francisco Section; and Chair, San Francisco Bay Area Council. He was a recipient of the IEEE Third Millennium Medal. He has been a licensed Professional Engineer since 1982.

The Other side of Selective Coordination

Designing the optimal electrical system is now more challenging than ever. Balancing the requirements of arc fault, selective coordination and series ratings can be confusing and require tradeoffs. This presentation discusses the characteristics of molded case circuit breakers as well as power breakers in light of these tradeoffs, to help you optimize the application of these products. We will review many of the 80/20 rule issues around selective coordination.

Speaker: Chris Lovin, District Application Engineer

Mr. Lovin holds a BSEE from the University of Illinois and is a registered PE in the state of Illinois. With over 20 years at Cutler Hammer (Westinghouse) he has held positions in sales marketing, operations as well as engineering.

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THE WHEN and WHERE

Date: Wednesday March 5, 2008

**Time: 8:00 am Registration,
Continental Breakfast
8:30 am – 4:40 pm
Conference and Lunch**

**Location: Marriott Pleasanton
11950 Dublin Canyon Rd.
Pleasanton, CA 94588
925-847-6000**

**Cost: \$250.00 Total Cost Pre-
registration required
Please fill in attached form**

**Contact: Square D Company
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925-463-7112
Or: James Alvers
925-463-7115
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FREE Bart Shuttle
Provided by the Marriott Hotel

Take BART to the Dublin Station.
Call (925) 847-6000 (Marriott Hotel) when you
get to the Dublin BART station to schedule a
pick up.

Call Finn Schenck 510-703-0071 or
Jim Alvers 610-604-6979 - if you have any
other transportation needs, or if you missed
the shuttles.

BONUS

Sign up by Feb. 29 to receive your
choice of (select one):

- 2005 NEC Code Handbook
- 2008 NEC Code Handbook

As well as:

- Speakers' presentation notes and handouts.



