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**Environment, Health, & Safety  
Training Program**

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**EHS 0581 Construction Subcontractor Electrical Safety Site Specific Training  
Course Syllabus**

**Subject Category:** Electrical Safety

**Course Length:** 3 hour class + 1 hour test

**Delivery Mode:** Classroom

**Course Prerequisite:** None

**Medical Approval:** None

**Frequency:** Every 3 years

**Course Purpose:**

This course outlines the Lab's Electrical Safety Program and its Application to Construction Subcontractors. It communicates in detail Berkeley Lab specific policies and procedures for the control of electrical work (Chapter 8, Work Process F) and fulfills the lab's Host Employer responsibilities per NFPA 70E, Article 110.1(A).

**Course Objectives:** Upon completion of the course the student should understand the Laboratory's Electrical Safety Program and Performance Expectations with regards to performing electrical work and will be introduced to:

- ES&H Manual, Chapter 8, Electrical Safety Program (ESP)
- Electrical Safety Manual (ESM)
- Electrical Safety Website
- LBNL terms: AHJ and QEW
- QEW levels, restrictions and QEW badges
- QEW Practical and performance expectations for Certification
- Basic Integrated Safety Management as it applies to electrical work
- Hazard Classification Tables
- Controls:
  - Modes of Work
  - Zero Voltage Verification requirements
  - Voltage Glove requirements
  - Arc Flash PPE levels
  - ANSI Barricades and Signage
  - Two-Person rules
  - Subcontractor Inspection with IA/HJ (Mode 0)
  - Subcontractor LOTO Permit (Mode 1)
  - Subcontractor Energized Electrical Testing Permit (EETP), (Mode 2)
  - Subcontractor Daily Toolbox meetings
- Emergency Response Actions required following an Electrical Injury/Incident

**Subject Matter Expert:** Mark Scott, Stephanie Collins

**Training Compliance Requirements:** LBNL Electrical Safety Manual, EHS Safety Manual (formerly PUB-3000)-Chapter 8, *Electrical Safety Program*, 29CFR 1910.147, 29CFR 1910.333, NFPA 70E

**Course Instructional Materials:** PowerPoint presentation and video

**Performance Criteria:** Student must pass a written test with a score of 80% or greater to receive course credit.

**Web Resource:** Electrical Safety web page <http://electricalsafety.lbl.gov>