

ERNEST ORLANDO LAWRENCE Berkeley National Laboratory

> Environment, Health, & Safety Training Program

EHS 0578 QEW Electrical Work Planning and Authorization Course Syllabus

Subject Category: Electrical Safety Course Length: 8 hours Delivery Mode: Classroom Course Prerequisite: EHS 0545 or 0557 or 0563 Medical Approval: None Frequency: Every 3 years

Course Purpose:

This is one of two courses required for Qualified Electrical Workers who supervise, lead or plan electrical work. Building on work completed in other QEW training classes, this course shifts perspective, focusing on supervisory responsibilities, tools and resources to be used to plan and authorize electrical work to ensure worker safety. The course works through scenarios and electrical incidents using available resources and the ISM steps to re-enforce safe work practices and demonstrate how these accidents could have been prevented while showing them how to capture improvement opportunities to drive electrical work beyond compliance and into best practices.

Pre-Course Required Reading:

This course requires a signed acknowledgement that all of the following reading has been completed prior to attending this class:

PUB-3000 Chapter 8, Electrical Safety Program Electrical Safety Manual Sections 4, 6 and 10 PUB-3000 Chapter 6, Work Planning and Control PUB-3140 Integrated Safety Management System 6.2.1 & 6.2.3

Course Objectives: Upon completion of this lesson, the student will have the knowledge and skills necessary to:

- Locate and verify QEW status on the Qualified Electrical Worker List.
- Locate QEWs they supervise in Activity Manager and verify worker authorization, training status and any restrictions.
- Identify the roles and responsibilities associated with planning, authorizing and executing electrical work.
- Apply ISM principles to electrical work as a QEW supervisor.
- Write an Electrical Safe Work Plan (ESWP).
- Perform an electrical Job Briefing.
- Demonstrate Direct Field Supervision as it pertains to electrical work being conducted by their QEWs (1, 2, 3 and craft Apprentices).
- Explain the "Skill of the Craft", task qualification and proficiency and how it relates to assigning and executing electrical work.
- Explain the 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: None. This class focuses on the discussion of the multitude of factors that need to be considered when planning and executing electrical, including individual worker assignment.

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

Note: * This course has a minimum enrollment of 4 students and a maximum enrollment of 8 students