

ERNEST ORLANDO LAWRENCE Berkeley National Laboratory

> Environment, Health, & Safety Training Program

EHS 0559 AHJ Granting Provisional QEW3 (PQEW3) Status Course Syllabus

Subject Category: Electrical Safety Course Length: N/A Delivery Mode: N/A Course Prerequisite: Medical Approval: None Frequency: One time

## About this Course: This is not a training course.

This course code (EHS 0559) is used to provide an interface between Berkeley Lab Training (BLT) and Work Planning & Control Activity Manager to indicate that a worker has (or has not) met the baseline requirements for entry as a Qualified Electrical Worker 3 (QEW3). When candidate meets all requirements, the Electrical Safety team will credit EHS 0559 as completed. This is in accordance with PUB 3000 Chapter 8 Work process E.

This course is also used to demonstrate that the worker's supervisor and line management have:

- Verified the nature of their employee's job tasks and necessity to perform electrical work required to be completed at the QEW3 level
- Determined their need to become a Qualified Electrical Worker 3 and be entered into the Lab's QEW program
- Understand the need for the worker to complete the training necessary to qualify them as an electrical worker at the Lab.

Once the electrical worker has completed all required training courses, tests and demonstrations required under the new program, the Provisional portion of their QEW status will be removed and they will be known as QEW3.

### Process

- 1. Line management requests that the Electrical Safety team includes their worker into the QEW program.
  - a. Line management authorizes employee to become a Qualified Electrical Worker 3 (traditionally known as a high voltage electrician)
- 2. QEW candidate submits QEW application and all supportive documents pertaining to previous electrical skills, knowledge and course work completed via Smartsheet QEW application found on Electrical Safety Webpage.
- 3. ESO's will compile received documents and put together a QEW candidate package and submit it to the Electrical Safety Group in EHS for AHJ review and approval. Examples of supportive documents include:
  - Copy of Diploma depicting "Electrical Engineering" degrees awarded
  - Electrical Apprenticeship/Journeyman completion records
  - Joint Service Transcripts, DD-214's, Sailor/Marine Academic Education Registry Transcript (SMART)
  - High Voltage Electrical Course Completion Certificates
  - Arc Flash Hazard Electrical Course Completion Certificates
  - o Service Vendor Course or other Employer High Voltage Electrical Training, Maintenance certificates
  - Significant experience performing high voltage switching, panel board, circuit breaker, and other electrical equipment design, maintenance/repair activities with equipment receiving input power greater than 750 VAC and which may present an arc flash hazard
  - Multiple publications depicting high voltage electrical distribution design expertise, research applications and recognition as an SME within the DOE complex or similar business
  - Former employer records indicating primary job tasks included performing electrical work above the hazard thresholds listed for QEW2's (plant maintenance electrician or high voltage electrician at operating industrial, production, manufacturing facility or plant, utility lineman) and associated training records demonstrating knowledge of electrical safe work practices for shock and arc flash hazard recognition, mitigation and protection.

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

## Training Compliance Requirements: 29CFR 1910.147, 29CFR 1910.333, NFPA 70E

# Course Instructional Materials: N/A

Performance Criteria: AHJ must approve application into QEW program in order to receive course credit.

**Web Resource:** Electrical Safety web page, Qualified Electrical Worker @ http://electricalsafety.lbl.gov/electrical-safety/qualified-electrical-worker-qew/