



## High Voltage Qualified

8-Hour Course (HV Portion)

- OVERVIEW**
- Day 1** e-Hazard Low Voltage Qualified Course (required), *see Low Voltage Outline*
- Day 2** The second half of this course addresses the potential electrical hazards and safety practices specific to industrial high voltage systems. Working on or around these types of systems requires additional knowledge and training on the relevant hazards and safety measures. Attendees in this class focus on the safety procedures, line tools and mobile equipment considerations related to qualified high voltage tasks. As part of the course, students work in small groups to apply what they have learned to preparing and presenting a pre-work briefing of a practical situation.
- REFERENCES** *OSHA Regulations (1910.269 and others as applicable), Current NFPA 70E Standard, Current National Electrical Safety Code (NESC)*
- MATERIALS** *e-Hazard High Voltage Qualified Workbook, plus Low Voltage Course Materials*

### 1. Regulations & Training

- Applicable Standards for Higher Voltages

### 2. High Voltage (HV) Hazards

- Overview

### 3. Work Practices & Responsibilities

- Qualifications and Responsibilities
- Create Electrically Safe Work Environment
- Barricading Considerations
- Site-Specific Considerations
- Signage Requirements
- Considerations for Substations, Switchgear Facilities, etc.

### 4. HV Safety Equipment & Use

- PPE
- Live-Line Tools
- Insulating Equipment
- Testing for Absence of Nominal Voltage
- Protective Grounding

### 5. Rules & Policies for HV Safety

- Definition: Working On, Working Near
- Energized Electrical Work Permit
- Boundaries
- Switching Order/LO/TO
- HV Auxiliary Equipment

### 6. Mobile Equipment – HV Hazards

- General Considerations
- HV Hazards for Maintenance (OSHA 1910, Subpart S)
- HV Hazards for Construction (OSHA 1926)
- Qualified HV Operations

### 7. Putting It All Together – HV Exercise

- Develop Work Plan
- Identify Hazards and Safe Work Zone
- Determine Required PPE
- Identify Procedures and Tools Needed
- Prepare/Present Pre-Work Briefing