



## **“A Practical Application of NFPA 70E” Electrical Safety Training**

Our unique training is a **real-world** approach to applying NFPA 70E to your facility. Because of our background in both engineering and maintenance, we understand the perspective of a typical maintenance worker in an industrial facility. When possible, we will integrate the training in with the results of your facility’s recent Arc Flash Hazard Analysis and existing Electrical Safety Program for an integrated solution.

We offer two versions of the training depending on the level of the participant. We have a detailed version for the “qualified electrical worker” and a less detailed version for the “unqualified worker”.

### **Training Features:**

- **Training Manual (for the qualified electrical worker)**
- **Electrical Hazards Awareness Publication (for the non-qualified worker)**
- **Exam/Course Test (available on our website or hard-copy version)**
- **Optional “hands-on” session in the field in front of electrical equipment – helps to reinforce the concepts of the training class.**

### **Summary of Course Topics:**

#### **Important Standards to Know**

- NEC (NFPA 70)
- NFPA 70E Electrical Safety
- OSHA 29 CFR 1910.331-335

#### **Electrical Hazards**

- Electric shocks, arcs and blasts
- Fault current and potential difference
- Electrical safety in industrial plants

#### **Safe Installation Practices**

##### **National Electrical Code**

##### **OSHA 29 CFR 1910.301-307**

- Guarding of Live Parts, 110.27
- Identification of Disconnect, 110.22
- System Grounding, 250
- Overcurrent Protective Devices, 240
- Workspace Clearance requirements, 110.26

#### **Safety-Related Maintenance Practices**

##### **NFPA 70E Chapter 2**

- General Requirements, Article 205
- Substations/MCC’s/Busway/Disconnects
- Premise Wiring, Article 215
- Contoller Equipment, Article 220
- Hazardous Locations, Article 235
- Battery Banks, Article 240

#### **Safety-Related Work Practices**

##### **NFPA 70E Chapter 1**

##### **OSHA 29 CFR 1910.331-.335**

- Qualified person requirements, 110.2(A)(1)
- Training requirements, 110.2
- Selection and use of work practices
- Setting up electrically safe work conditions
- Working on or near exposed live parts
- Personal protective equipment, 130.7
- Selection, Use and Care of  
Rubber gloves  
Eye, head and face protection  
Arc-Resistant (AR) clothing (two-category system)  
Job Task/PPE Matrix Tables

#### **Flash Hazard Marking Requirements**

##### **NEC 110.16 & NFPA 70E**

- Warning Label samples
- How to Read the Label
- Approach Boundaries, T-130.4(D)(a)
- Energized Work Permits, Annex J
- PPE Selection Table 130.5(G)

#### **Electrical Switching Practices & Personal Protective Grounding**

- Electrical switching practices
- Proper protective grounding practices