



## **“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**

##### **NFPA 70E-2004 Chapter 4**

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

- Guarding, 400.16
- Identification, 400.14
- System Grounding
- Location of Overcurrent Protection Devices
- Workspace Clearance requirements, 400.15

#### **Safety Maintenance Practices**

##### **NFPA 70E-2004 Chapter 2**

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

#### **Electrical Safe Work Practices**

##### **NFPA 70E-2004 Chapter 1**

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

- Qualified person requirements, 110.6.d.1
- Training requirements, 110.6
- 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
- Flame Resistant (FR) 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-130.2 (c)
- Live Work Permits, Annex J
- Risk Categories, T-130.7(C)(9)(a)

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

- Electrical switching practices
- Proper protective grounding practices