
Professional Training and Consulting

One-day NFPA 70E Application Course

NFPA 70E – What Does It Mean to My Company

Target Audience

- Electricians (separate)
- Health & Safety Managers
- Plant & Facility Managers
- Plant & Facilities Managers
- Mechanics & Plumbers
- Maintenance Managers
- HVAC Technicians
- Machinists & Millwrights
- Environmental & HR personnel

LEARNING OBJECTIVES

- Understand the relationship between OSHA and NFPA 70E
 - Understanding standards for electrical safety
 - Understand arc flash and its ratings
 - Understanding hazards and labeling of live parts
 - Creating safe working conditions (includes establishing ESWC)
 - Understanding electrical shock hazards
 - General standards for personal protective equipment (includes donning)
 - Understand Electrical Work Zones (includes setup)
 - Executing an Electrical Work Permit
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COURSE OUTLINE

Topic 1: History and Background

- OSHA / NEC / NFPA
 - Arc Flash
 - Regulation vs. Standard
 - Who must comply?
 - Why comply, Why now?
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Topic 2: Let's Talk Terminology

- Arc Flash
 - Arc Blast
 - Shock
 - PPE
 - EWZ
 - EWP
 - Labeling
 - HV/LV
 - LOTO + ESWC
 - Qualified / Authorized
 - Electrically Safe Tools
 - CAT III/IV
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Topic 3: Implementation

- Identify Work
 - High Voltage / Low Voltage
 - In-house / contract
- Labeling
- Electrically Safe Work Condition - 4 steps
 1. *Disconnect*
 2. *Lock Out Tag Out*
 3. *Test*
 4. *Ground if necessary*
- Electrical Work Zone
 - Boundaries
 - Distances



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- Lifts
 - Access
 - Training
 - Workers and Management
 - Qualifications
 - Personal Protective Equipment
 - Levels
 - Calculations
 - Voltages
 - Clothing
 - Eye/Face/Hands
 - Job compatibility
 - Lifts
 - Costs & Supply
 - Tools/metering
 - Electrical Work Permits
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Topic 4: Electrical Safety Program

- Where to start
 - Prioritizing
 - Vendor compliance
 - Making it sustainable
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Topic 5: Doing is Believing

- Making an Electrically Safe Work condition
 - Electrical Work Zone setup
 - Personal Protective Equipment suit-up
 - Electrical Work Permit writing
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Topic 6: Here is what's next...