## One-day OSHA/NFPA70E Safety Training

- Introduction and Registration
- Pre-Quiz -> Assess current level of regulatory knowledge and discussion of educational facility equipment and systems (Optional)
- Hazards of Electricity
  - ♦ -Shock
  - ◆ -Arc flash
  - ◆ -Fires
  - ◆ -Falls
- Overview of OSHA "Subpart S" General Industry Safety Related Work Practices
  - ♦ -Brief overview of OSHA/citations
  - ◆ -Application of standard
  - ♦ -Qualified vs. unqualified persons
  - ◆ -Training requirements
  - ◆ -Energized vs. de-energized (Lockout/tagout)
  - ◆ -Defining "high voltage"
  - ◆ -Unprotected overhead lines
    - -Approach distances
    - Other controls
  - -Ancillary safety hazards
    - -Flammable/combustible Atmospheres
    - -Illumination
    - -Confined spaces
    - -Conductive items/apparel
    - -Housekeeping concerns
    - Interlocks
  - ◆ -Equipment use
    - -Portable items
    - -Circuits (opening/closing/overcurrent protection)
    - -Test instruments
  - ♦ -PPE
  - ♦ -Alerting techniques
- Overview of OSHA "Subpart K" Construction Industry Safety-Related Work Practices
  - ◆ -Applicability
  - ♦ -General Installation Practices
  - ♦ -Marking and identifying disconnects
  - ♦ -Less than or equal to 600 volts
    - -Work clearances
    - -Guarding live parts
  - ♦ -Greater than 600 volts
    - -Enclosures and installations
    - -Work clearances
  - ♦ -Qualified persons considerations

- Overview of NFPA 70E 2015 Safety Related Work Practices
  - ♦ -Application
  - ♦ -Qualified vs. unqualified persons
  - ♦ -Training requirements
  - ♦ -Rescue practices
    - -Removal from contact
    - -First Aid/CPR recommendations
  - ♦ -Energized electrical work permits
    - -Elements
    - -Authorization
  - ♦ -Arc flash protection boundaries
  - ♦ -Approach boundaries
    - -Limited
    - Restricted
    - -Using the 70E tables
  - ◆ -PPE: Shock vs. arc flash
    - -Use of 70E tables
    - -Simplified approach vs. calculations
  - ◆ -Ground-fault circuit interrupters (GFI's)
  - ♦ -Hazard Assessment
    - -Shock
    - -Arc flash: default and short circuit duties
    - -Ancillary safety issues
- NFPA 70 2014 (NEC) labeling requirements
- Using Testing Equipment to determine voltages including hands-on exercise
- Elements of the Corporate Electrical Safety Program (if applicable)
- Review and Test