

Subcontract Safety Support Guide

NFPA 70E Arc Flash Standard Compliance Elements for Work at SRS

Purpose: Used as a reference in order to give consistent information to subcontractors regarding NFPA 70E elements that are to be addressed in their worker protection plans (WPP).

NOTE: Preparer/STR/End User to determine applicability after scope review with Facility/SME or Electrical Engineer (EE).

NOTE: Advise subcontractor that NFPA 70E Annex E - Electrical Safety Program Guide can offer assistance with building a program.

The following is a summary of what is expected from subcontractors addressing 70-E compliance elements in their WPP and/or Addendum.

Element (1)

Workers shall have basic electrical safety and NFPA 70E training.

Identify training elements for basic electrical safety from NFPA 70E that your company uses to train employee(s) to electrical safety-related work practices and procedures. To include an explanation of:

- Understanding the specific hazards associated with electrical energy and knowledgeable of the construction and operation of the equipment to recognize and avoid electrical hazards that might be present with respect to that equipment or work method.
- Safe-related work practices and procedure requirements as necessary to provide protection from electrical hazards.
- Trained to identify and understand the relationship between electrical hazards and possible injury and methods of release from contact with exposed energized conductors or circuit parts.
- Describe type(s) of training – classroom or on-the-job or a combination of the two.
- Degree of training determined by the risk to the employee.
- Address qualified and non-qualified worker training on and near exposed energized electrical conductors or circuit parts.

Element (2)

Workers shall understand all information on the SRS equipment label data as it relates to the NFPA 70E table(s) to determine the Hazard category and PPE requirements for arc flash and shock protection.

- SRS uses equipment labels as an alerting technique. SRS has posted electrical switchgear, motor control centers and some disconnects with arc flash warning labels. These labels when used with the NFPA 70E tables identify Arc Flash and Shock Hazards for selection of the appropriate PPE and safe approach boundaries.
- WPP should reflect your employees using this label with NFPA 70E tables to determine appropriate PPE guidance.
- IF YOU THE SUBCONTRACTOR SHOULD FIND OR COME ACROSS A NON-LABELED PIECE OF EQUIPMENT – **STOP WORK AND NOTIFY THE STR!** You must include this in your WPP for direction to employees while working here at SRS.
- Reflect in your WPP - Pre-job briefing **that** includes overview of SRS labeling system.

Element (3)

For qualified/non-qualified personnel working on or near electrical conductors, workers shall have an understanding for arc flash protection and shock protection boundary requirements and proper alerting techniques for these boundaries.

- Define/Explain in your WPP the different types of arc flash and shock protection boundaries that are accessible for the **qualified electrical worker** and **non-qualified worker**.
- Address the restricted areas of concern for **non-qualified workers** in all boundaries.
- Describe how and what method you will use to alert personal when approaching or entering these boundaries based on their level of training. Examples include barricade, signs, postings or labels.

Element (4)

Furnish PPE and insulated tools for all-case scenarios and identify proper use, storage, care and inspection of all PPE.

Include in your WPP that the company will provide proper protective equipment.

- Identify different types of PPE that employees will use including Flash suits, FR clothing, FR Hoods, voltage rated gloves and tools, safety glasses, face shields, hard hats, earplugs, and goggles.
- Explain how and what method will be used to properly care for this equipment.
- What storage method will be used – example – flash suits and hoods maybe stored in duffle bags or plastic containers.
- Also care is important, proper cleaning techniques for flash suits and hoods.
- Identify inspection criteria mandatory and regulatory requirements for all PPE equipment.