Are you prepared?

The threat of arc flash is real, and the consequences of an event can be devastating: lawsuits, fines, equipment damage, operations downtime, lost production and most significant, personnel injury or death. An effective arc flash safety program incorporates the elements shown below.

Single-line diagram

Shows how electrical distribution equipment is connected and how power flows, from the incoming power source through each individual load, and is necessary to understand the system as a whole

Protective device coordination study

Ensures that only the affected portion of the system is taken offline if there is a fault

Incident energy analysis

Calculates the arc flash boundary, working distance and incident energy per NFPA 70E

Short-circuit study

Calculates available fault current, compares it to the equipment ratings, and identifies overdutied equipment that needs to be replaced

Safety training

Educates employees about how to interpret the study, the one-line diagram and the arc flash warning labels

Arc flash warning labels

Affixed to electrical equipment to indicate the incident energy, working distance and arc flash boundary for that piece of equipment, and is used to select the proper personal protective equipment (PPE)

Mitigation solutions

Helps to lower incident energy at locations of concern, typically those with high incident energy over 40 cal/cm^2

Documented electrical safety program

A documented system consisting of electrical safety principles, policies, procedures, and processes that directs activities appropriate for the risk associated with electrical hazards

Personal protective equipment (PPE)

Protects a qualified worker in the event of an arc flash event, and is meant to be used only after recognizing the hazards and taking steps to minimize or eliminate them

Electrical maintenance

Helps to ensure that protective devices such as breakers, relays and trip units will clear a potential arcing fault

Arc flash study update

Required when changes occur in the electrical system that could affect the results of the analysis, or every five years, and ensures that the study results and labels are accurate

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