Post-Arc Flash Analysis Safety Training

Arc flash dangers such as shock, electrocution, and arc blast are serious hazards. NFPA 70E, the National Consensus Standard for Electrical Safety in the Work Place, is the leading reference for determining electrical hazards and protecting employees. The standard recommends facilities perform an Arc Flash Analysis to better protect workers and equipment operators from the electrical hazards they face day-to-day by helping to mitigate the risk of serious bodily injury or property loss. Once an Arc Flash Analysis has been performed and labels are in place, it is important to ensure employees been properly trained on how to interpret label information so they are fully protected from varying equipment-specific hazards. An engineering firm-provided Arc Flash Analysis Report is loaded with useful information that, if fully understood, can be an important operational tool instead of being just filed away. This course will assist both the building's electrical infrastructure operator and their supervisors in detailed understanding of the Arc Flash Analysis Report. This knowledge will help prevent personnel injury or loss from a catastrophic arc flash event. Case studies, site-specific power points, video and equipment walk-downs will be utilized in the program.

Duration: 8 Hour Program

ARC FLASH ANALYSIS

The Importance of Having the Analysis
Case Study on Arc Flash Fatalities
AF Analysis –vs- NFPA 70E Tables
Electrical Shock & Electric Arcs
How an Analysis Determines Incident
Energy and Flash Protection Boundaries
Understanding the Arc Flash Label and
Term/Unit Explanation
When the Labels Apply
How to Best Utilize the Arc Flash Analysis
Report Information for Operations

FLASH PROTECTION BOUNDARY AND LIMITS OF APPROACH

Definitions of Boundaries and Spaces
Protecting Unprotected Workers
Flash Protection Boundary & Alerting
Techniques
Limited Approach Boundary
Restricted Approach Boundary
Prohibited Approach Boundary

ARC BLAST HAZARD

Hazardous Attributes of an Arc Flash
Theory Behind an Arc Flash
Common Causes of an Arc Flash
Factors the Affect Personnel Injury
Things We Can't Control
Distance
Protective Device Trip Times
How to Minimize the Potential for a Blast
Basic Calculation Methods
Protection Methods when Equipment has
HIGH (dangerous) Incident Energies

PERSONAL PROTECTIVE EQUIPMENT (PPE)

NFPA 70E Hazard Risk Categories
PPE Selection for Known and <u>Unknown</u>
Incident Energy Levels
How Each Article Protects the Worker
Flame Resistant (FR) Clothing
Layering of Clothing
Laundering and storage of FR Clothing
Choosing the Right FR Clothing and PPE
Hand & Foot Protection
What Not to Wear During an Arc Flash