

Written Electrical Safety Program Development

Written Electrical Safety Programs & Plan Development

Liberty Electric's Written Electrical Safety Programs are intended to protect personnel from electrical shock, arc-flash, and fire hazards from energized electrical equipment. These written programs are needed to ensure compliance to OSHA Subpart S Electrical requirements published as Federal Law in the Code of Federal Regulations 29 CFR 1910.

An Electrical Safety Program and Developed Plan must apply to all employees, contractors, and vendors that may be exposed to electrical hazards in the course of performing their work including examination, maintenance, repair, diagnostics, troubleshooting, calibrating, and installation. NFPA 70E 110.1 (A) The employer shall implement and document an overall electrical safety program that directs activity appropriate to the risk associated with electrical hazards. The electrical safety program shall be implemented as part of the employer's overall occupational health and safety management system, when one exists. Liberty Electric Inc. can save you many hours developing a Written Electrical Safety Program for your facility. With years of extensive background in electrical safety Liberty Electric's staff of Licensed Master Electricians and Electrical Engineers; Liberty Electric can develop a written program specific to your facility.

PURPOSE

Written Electrical Safety Programs are developed to prevent electrical injuries to all personnel in the workplace. The implementation of and adherence to the program creates an electrically safe workplace to ensure all employees, contractors, and visitors are protected from electrical hazards capable of causing injury or death.

WORK PROCESS

During this process Liberty Electric's staff will examine your current procedures and documentation used for your electrical safety program, identify any gaps and develop a new documented program that meets OSHA compliance that follows recommendations of NFPA 70E 2015. The program will be conducted by a Licensed Master Electrician maintenance specialist who has a strong understanding of the various electrical standards and who is experienced in developing electrical safety and maintenance programs.

WRITTEN ELECTRICAL SAFETY PROGRAM OUTLINE

FUNDAMENTALS

- Purpose
- Scope
- Principles
- Definitions
- Responsibilities
- Regulations, Codes, and
- Standards

QUALIFICATION

- Qualified Persons
- Requirements
- Qualified Person
- Task-Qualified Person
- Qualified vs Task Qualified
- Determining Qualification
- Non-Qualified Persons

- Training
- General Requirements
- Qualified Persons
- Task-Qualified Persons
- Non-Qualified Persons
- Contractors, Vendors, and
- Suppliers

DESIGN AND INSTALLATION

- Design Considerations
- Layout and Sizing
- Entrances
- Working Space
- Installation
- Listed or Labeled

- Interrupting Rating
- Operating Environments
- Guarding
- Abandoned Cables
- Clearances
- Temporary Wiring

IDENTIFICATION and LABELING

- Electrical Equipment
- Identification
- Conductor Identification
- Warning Labels
- Flash Hazard Warning Labels (size, color & information)

DRAWINGS, REPORTS, and TESTS

- One-Line Electrical Drawings
- Classified Area Signage
- Reports and Documentation
- Arc-Flash Hazard Analysis
- Electrical Safety Audit
- Electrical Compliance Report
- Lockout-Tagout Annual Audit
- Tests
- Infrared Scanning
- Relay Testing
- Circuit Breaker Tests
- Transformer Analysis

EQUIPMENT

- Test Equipment
- Ground Fault Circuit Interrupters (GFCI)
- Circuit Breakers
- Portable Electrical Equipment
- Hand Tools
- Extension Cords
- Temporary Grounding Cables
- Flexible Cords and Cables
- Disconnecting Devices
- Portable Ladders
- Capacitors
- Current Transformers
- Uninterruptible Power Supplies
- Batteries
- Power Electronic Equipment

SAFETY RELATED WORK PRACTICES

- Job Planning
- Hazardous Locations

- Electrically Safe Work Condition
- Temporary Grounding
- Energized Electrical Work Permit
- Hazard Analysis Methods
- Theoretical Analysis
- NFPA 70E Analysis
- Shock Hazards Analysis
- Limited Approach Boundary
- Restricted Approach Boundary
- Flash Boundary
- Arc-Flash Hazard Analysis
- PPE for Arc -Flash
- Phase I -Data Collection
- Phase II – Engineering
- Lockout / Tagout
- Individual
- Safety Watch
- Illumination
- Confined Work Space
- Manhole Entry
- Conductive Materials & Equipment
- Conductive Apparel
- Housekeeping
- Interlocks
- Using Test Equipment
- Resetting Tripped Devices
- Fuse Handling
- Flammable Materials
- Switching Procedures
- Overhead Power lines
- Lifts and Vehicles
- Direct Current (DC)
- Alerting Techniques
- First Aid

PERSONAL PROTECTIVE EQUIPMENT

- General
- Hand Protection
- Voltage Rated Gloves
- Head Protection
- Face Shields
- Hearing Protection
- Safety Glasses

- Footwear
- Clothing
- Cleaning
- Insulated Tools
- Live-Line Tools
- Protective Shields / Barriers and
- Insulating Materials

PROCEDURES

- Lockout / Tagout
- Temporary Grounding
- Voltage and Current
- Measurement Procedure

CHECKLISTS

- Energized Electrical
- Work Permit
- Lockout / Tagout
- Electrical Safety
- Training
- Job Planning

POLICIES

- Corporate
- Facility

DELIVERABLES

- Written Electrical Safety Program Document based on NFPA and OSHA standards and is customized to your facility needs. Your Written Electrical Safety Program will be delivered in editable Word format.
- Liberty Electric Inc. will provide consultation on implementing your new/revised program.

For more information on how Liberty Electric Inc. can help you make your facility safer and OSHA compliant with a new/revised Written Electrical Safety Program use Liberty Electric's Contact Tab on our home page.