

Contents

RESPONSIBILITIES.....	3
DEFINITIONS	3
HAZARD CONTROL	3
Engineering Controls.....	3
Administrative Controls	4
Work Practice Controls	4
ELECTRICAL EQUIPMENT INSPECTIONS	6
PERSONAL PROTECTIVE EQUIPMENT.....	6
EMPLOYEE TRAINING	7
Qualified Employees	7
Unqualified Employees	7

GENERAL

Electricity is a serious work place hazard, capable of causing both employee injury (shocks, electrocution, fires and explosions) as well as serious property damage. By providing maintenance personnel with proper training in safe electrical work practices, (Company name) hopes to reduce the risk of such incidents.

RESPONSIBILITIES

L.D. Docsa Associates, Inc. management is responsible for providing employee safety training, conducting electrical safety inspections, correcting all electrical safety hazards, and ensuring that all new electrical equipment and components comply with codes and regulations. Employees are responsible for the immediate reporting of electrical safety hazards, for not working on electrical equipment without proper training and authorization, and for inspecting equipment prior to using it.

DEFINITIONS

Qualified worker: An employee who is trained and authorized to perform work on electrical equipment and components.

Unqualified worker: An employee who has not been trained or authorized to perform electrical work.

HAZARD CONTROL

The following control methods will be used to prevent occurrence of electricity-related incidents:

Engineering Controls

- All electrical distribution panels, breakers, disconnects, switches and junction boxes must be completely enclosed;

- Water-tight enclosures must be used if any of these components could possibly be exposed to moisture;
- Structural barriers must be used to prevent accidental damage to electrical components;
- Conduits must be supported for their entire length, and non-electrical attachments to conduits are prohibited;
- Non-rigid electrical cords must have strain relief wherever necessary.
- Lockout and Tagging. While any employee is exposed to contact with parts of fixed electric equipment or circuits which have been de-energized, the circuits energizing the parts shall be locked out or tagged or both.

Administrative Controls

- Only trained, authorized employees may repair or service electrical equipment; · Contractors must be licensed to perform electrical work;
- Physical barriers must be used to prevent unauthorized persons from entering areas where new installation or repair of electrical components or equipment is being performed;
- Only authorized employees may enter electrical distribution rooms;
- All electrical control devices must be labeled properly;
- Senior facility management must authorize any work on energized electrical circuits.

Work Practice Controls

- Employees covered under this policy must wear electrically rated safety shoes or boots;
- Use only tools that are properly insulated;
- Non-conductive gloves will be available for work on electrical equipment;
- Electrical-rated matting will be placed in front of all electricity-distribution panels.

- Conductors and parts of electrical equipment that have been de-energized but not been locked or tagged out shall be treated as live parts.
- The lines shall be de-energized and grounded or other protective measures shall be provided before work is started.
- When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:
 - For voltages to ground 50kV or below - 10 feet (305 cm);
 - For voltages to ground over 50kV - 10 feet (305 cm) plus 4 inches (10 cm) for every 10kV over 50kV.

- When a qualified person is working in the vicinity of overhead lines, whether in an elevated position or on the ground, the person may not approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in below:

Voltage range (phase to phase) Minimum approach distance
300V and less Avoid Contact
Over 300V, not over 750V 1 ft. 0 in. (30.5 cm).
Over 750V, not over 2kV 1 ft. 6 in. (46 cm).
Over 2kV, not over 15kV 2 ft. 0 in. (61 cm).
Over 15kV, not over 37kV 3 ft. 0 in. (91 cm).
Over 37kV, not over 87.5kV 3 ft. 6 in. (107 cm).
Over 87.5kV, not over 121kV 4 ft. 0 in. (122 cm).
Over 121kV, not over 140kV 4 ft. 6 in. (137 cm).

- Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 ft. (305 cm) is maintained. If the voltage is higher than 50kV, the clearance shall be increased 4 in. (10 cm) for every 10kV over that voltage.

- Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to work safely.
- Portable ladders shall have non-conductive side rails.

ELECTRICAL EQUIPMENT INSPECTIONS

Inspect all electrical equipment for hazards that could cause employee injury or death. Consider the following factors when determining the safety of the equipment:

- Suitability for the intended use;
- Proper insulation;
- Heating effects under conditions of use;
- Arcing effects;
- Classification by type, size, voltage, current capacity and intended use.

PERSONAL PROTECTIVE EQUIPMENT

L.D. Docsa Associates, Inc. will provide personal protective equipment for use by employees working in areas where they could be exposed to electrical hazards.

Employees are required to observe the following procedures for PPE use:

- PPE use is mandatory when contact with exposed electrical sources is likely;
- Only use PPE that is designed for the work being performed;
- Inspect and test all PPE prior to use;
- Use a protective outer cover (leather, for example) if the work being performed might damage the PPE's insulation;
- Wear non-conductive headgear if there is danger of electrical burns or shock from contact with exposed, energized equipment;

- Wear eye and/or face protection any time there is danger of flying objects, flashes or electrical arcs produced by an electrical explosion.

EMPLOYEE TRAINING

Qualified Employees

Training for those employees qualified to perform electrical work will consist of:

- Specific equipment procedures;
- The training requirements outlined in OSHA standard 29 CFR 1910.331 to 1910.339.

Unqualified Employees

Employees not qualified or authorized to perform work on electrical equipment and components will be trained in general electrical safety precautions for the purpose of hazard awareness. The following electrical safety rules also apply to unqualified employees:

- Do not conduct any electrical repairs;
- Report all electrical hazards to your supervisor;
- Do not operate equipment if you believe there is an electrical hazard;
- Do not allow electrical equipment or components to contact water;
- Remember that even low-voltage electricity can be physically harmful;
- Do not use cords or plugs that are missing the 'ground' prong;
- Do not overload electrical receptacles.