OSHA Electrical Safety-Related Work Practices

2 Days, 1.6 CEUs

While electrical hazards are not the leading cause of workplace injuries and accidents, they are disproportionately fatal and costly. These injuries not only disrupt the lives of the workers and their families, but also impact the productivity of employers. This course focuses on OSHA's electrical standards, which are written to protect employees exposed to dangers such as electric shock, arc flash, and explosions. The information in this course helps to interpret and apply these standards. A thorough understanding of OSHA electrical safety requirements, as they apply to your facility, is essential for minimizing electrical accidents and ensuring compliance.

This course is intended for any construction, industrial and commercial personnel that work on or around electrical equipment operating at 50 volts or more. This course assists in meeting the OSHA mandated training requirements of 29 CFR 1910.331-.335 for both "gualified" and "ungualified" personnel.

Classroom Attire:

AVO is committed to the personal safety of each participant. Lecture courses may involve a tour of a work or shop area and for this reason open-toe shoes and shorts are not considered appropriate attire for the classroom.

Learning Objectives:

Upon completion of this course, the participant will demonstrate by answering review questions and attaining a minimum grade of 80% on the final exam, that he/she is able to:

- Explain the hazards and effects of electricity.
- Interpret applicable regulations.
- Perform hazardous energy control for industrial facilities as required by OSHA.
- · Use safe work practices while working on or around industrial electrical equipment and overhead lines.
- Select appropriate personal protective equipment for a variety of applications.
- Apply the general requirements of electrical regulations and standards to establish an electrically safe work environment.

Day 1*

- Ι. Introduction
 - A. Schedule
 - B. Course Outline

II. Hazards of Electricity

- A. Electrical Shock
- B. Electrical Arc Flash
- C. Electrical Arc Blast

III. Electrical Safety Regulations and Standards

- A. Who is OSHA?
- B. Overview of the Regulations and Standards

IV. Deenergized Work (LOTO)

- A. Deenergization
- B. Confirming a System Is Deenergized
- C. One-Line Diagrams
- D. Lockout/Tagout
- E. Application of Control

*Class scheduling times may vary based on discussions and size of class

F. Reenergization

- G. Additional Requirements
- H. Additional Regulatory Requirements for Electrical Lockout

SCOPE

1 Typical Minimal Lockout or Tagout System Procedures

Day 2

V. Energized Work

- A. Definition of Energized Work
- B. Definition of Qualified Person
- C. Electrical Hazard Risk Assessment
- D. Training Requirements for a **Qualified Person**
- E. Regulatory Requirements for Energized Work
- F. Overhead Line Clearances
- G. Protective Equipment and Tools

- VI. Personal Protective Equipment
 - A. Protective Techniques
 - **B. Electrical Protective Equipment**
 - C. Arc Flash Protective Equipment
 - D. Arc Blast Protective Equipment
 - E. Other Protective Equipment
 - F. Energy Detection Equipment

VII. General Requirements

- A. Examination, Installation and Use of Electrical Equipment
- B. Working Space for Electrical Equipment
- C. Requirements for Industrial Facilities with Utility-Like Installations

VIII. Conclusion

- A. Review
- B. Final Exam



