

ELECTRICAL SAFETY FOR POWER GENERATION, DISTRIBUTION, & TRANSMISSION

CLASS FORMAT:

Classroom

STANDARD CLASS SIZE:

NTT recommends a class of up to 35 participants to obtain the best results.

NTT PROVIDES:

- 2-day (16 contact hours) of on-site instruction
- Student textbook, "High Voltage Electrical Safety for Electrical Power Generation and Distribution"
- Classroom consumables
- Completion certificates
- Shipping, instructor fees and travel expenses

CLIENT PROVIDES:

- Classroom of 500 square feet or greater
- Projection screen, white board and/or flip chart(s)

Review the OSHA specific requirements to work safely and efficiently for working near high voltage electrical systems. This course covers the training mandates under OSHA 1910.269, including the requirements to be deemed a Qualified Worker.

Learn how to create a safe work environment for you and your co-workers through understanding electrical hazards and proper work and protection practices.

Review the OSHA specific requirements for working near high voltage electrical systems including, personal protective grounding, equipment grounding, live line tools, PPE and LOTO. Training will address power generation, over-head and underground lines and NESC applications.

With a seven-fold increase in OSHA's penalty structure for violations and proposed revisions to allow harsher criminal negligence citations, you and your contractors need to be updated.

COURSE AGENDA

INTRODUCTION TO OSHA

- Key national consensus standards NFPA 70E
 - National Electric Safety Code (ANSI) aka ANSI C2
- Standards development
 - American National Standards Institute (ANSI)
 - American Society of Testing and Materials (ASTM)
 - Institute of Electrical and Electronic Engineers (IEEE)
 - National Fire Protection Association (NFPA)

UNDERSTANDING ELECTRICAL HAZARDS

- Electric shocks, arcs and blasts
- Fault current and potential difference
- Electrical safety in industrial plants

29 CFR 1910.269: ELECTRIC POWER GENERATION, TRANSMISSION & DISTRIBUTION

- 1910.269(a): Application
- 1910.269(c): Job briefing
 - Required topics
 - Number of briefings
- 1910.269(d): Hazardous energy control (lockout/tagout) procedures
 - Clearance procedures
 - Switching procedures



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COURSE AGENDA, continued

29 CFR 1910.269: ELECTRIC POWER GENERATION, TRANSMISSION & DISTRIBUTION, CONTINUED

- 1910.269(g): Personal protective equipment
 - Flame resistant (FR) clothing
 - Rubber protective equipment
- 1910.269(i): Hand and portable power tools
 - Portable equipment grounding
 - Ground Fault Circuit Interrupters (GFCI)
- 1910.269(j): Live-line tools
 - Primary vs secondary protection requirements
- 1910.269(l): Working on or near exposed energy parts
 - Approach distances
 - Safe work practices
- 1910.269(m): De-energizing lines and equipment for employee protection
 - Switching procedures
 - Clearance procedures
- 1910.269(n): Grounding for the protection of employees
 - Equipotential grounding
 - Testing/maintaining grounds
- 1910.269(p): Mechanical equipment
- 1910.269(q): Overhead lines
 - Minimum clearance distances
 - Stringing/removing lines
- 1910.269(t): Underground electrical installations
 - Protective grounding
 - Special hazards
- 1910.269(w): Special conditions
 - Capacitors
 - Current transformers

ELECTRICAL SAFETY-RELATED WORK PRACTICES

- Qualified person requirements
- 1910.332: Training
- 1910.333: Selection and use of work practices
 - 1910.333(a)(1): Work on de-energized parts
 - 1910.333(b)(2) & 1910.147: Lockout/Tagout (LOTO)
 - 1910.333(c): Working on or near exposed energized parts
 - 1910.334(c): Test instruments and equipment
- 1910.335: Safeguards for personnel protection
 - 1910.335(a)(1): Use of protective equipment
 - 1910.335(a)(2): Insulated tools

APPENDICES

- OSHA interpretation
- Relevant OSHA standards

