

Are Your Employees Electrically Qualified or Not?

Are you basing your answer on your company's current training protocol and your employees' experience?

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In 2020, there were 2,200 electrical injuries that required time away from work and 126 electrical fatalities.¹ This suggests that companies may want to revisit their electrical safety training programs to determine whether their employees are qualified under OSHA Standard 1910.269.

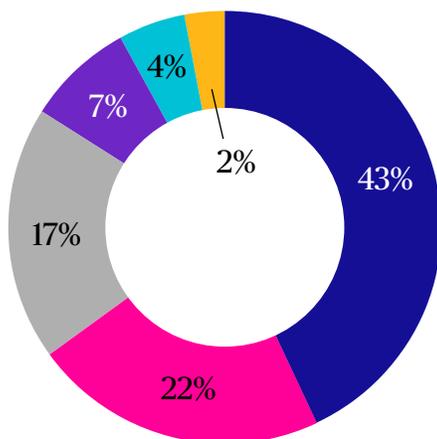
The statute sets forth specific training and competency requirements for employees involved in the operation and maintenance of any systems or activities that generate, transmit, or distribute electrical power. It mandates the training that must be developed and given to employees as highlighted in OSHA 1910.269(a)(2)(vii), which states, "The training shall establish employee proficiency in the work practices required by this section and shall introduce the procedures necessary for compliance with this section."

These requirements must be met in order for an employee to be deemed a "qualified electrical worker" and therefore able to perform specific work.

In this article, we will review what it takes for an employee to be considered electrically qualified under the OSHA statute. Let's begin with the OSHA training requirements governed by 1910.269 Subpart V.

It would be helpful to read this article with a copy of your written Qualified Electrical Worker Program in hand.

The Construction and Mining Industries Continue to Experience the Highest Number of Construction Fatalities.



- Construction and extraction
- Installation, maintenance, and repair
- Building and grounds cleaning and maintenance
- Transportation and materials moving
- Farming, fishing, and forestry
- Management

Source: www.EFSI.org.

Employee Training

OSHA 1910.269(a)(2)(i)(c) states, "The degree of training shall be determined by the risk to the employee for the hazard involved."

OSHA 1910.269(a)(2)(ii) states, "Each qualified employee shall also be trained and competent in the skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment; the skills and techniques necessary to determine the nominal voltage of exposed live parts; the minimum approach distances specified in this section corresponding

to the voltages to which the qualified employee will be exposed and the skills and techniques necessary to maintain those distances; the proper use of the special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools for working on or near exposed energized parts of electric equipment; and the recognition of electrical hazards to which the employee may be exposed and the skills and techniques necessary to control or avoid these hazards."

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What this Means for Employers

The employer has the authority to deem when an employee is qualified for specific tasks. The employer must determine what training is necessary to enable employees to:

- Identify hazards
- Mitigate risks associated with their work
- Select the proper work procedures
- Recognize special precautions along with existing conditions
- Control all energy
- Identify and select the proper PPE to safely perform their tasks.

OSHA also requires additional training in order for an employee to be declared qualified by the employer. Therefore, per the regulation, “Each employee shall be trained in and familiar with the safety-related work practices, safety procedures, and other safety requirements that pertain to his/her specific job assignments.”

Additionally, according to OSHA 1910.269(a)(2)(i)(b), “Each employee shall also be trained in and familiar with any other safety practices, including applicable emergency procedures (such as pole-top and manhole rescue) that are not specifically addressed by this section but that are related to his/her work and are necessary for his/her safety.”

In the past, to be considered qualified, an employee was required to meet all the training requirements of OSHA 1910.269(a)(2). But with the revisions made to this section in the 2014 final ruling, an employee can now be trained and considered qualified to perform certain work tasks without having to meet the requirements of a completely qualified worker. For example, let’s say that employees complete task-specific training regarding entering utility substations or switchyards and subsequently demonstrate proficiency. Per OSHA’s final ruling, the employees can now be considered qualified to enter

substations and switchyards for engineering, vegetation control, HVAC, or other maintenance tasks. Not having to provide the full scope of training required under OSHA 1910.269 is a significant cost-saving measure for employers. In the past, anyone who performed this type of work had to be escorted onto the property by a qualified company employee.

Documentation of Proficiency

OSHA 1910.269(a)(2)(viii) states that the “employer shall ensure that each employee has demonstrated proficiency in the work practices involved before that employee is considered as having completed the training required under paragraph (a)(2) of this section.”

What this Means for Employers

Per paragraph (a)(2)(viii), OSHA does not consider an employee to be qualified unless there is documentation of his/her demonstrated proficiency. Written or electronic record keeping are acceptable, provided that information about the instructor and the method by which the employee received the training is included.

The note to paragraph (a)(2)(viii) provides the three-step process for determining the proficiency of employees with prior training.

1. Confirm the employee has the training required under OSHA 1910.269(a)(2).
2. Use an exam or interview process to determine whether the employee understands the relevant safety-related work practices prior to performing any work.
3. Closely supervise the employee until he/she has demonstrated proficiency.

This clear guidance can be helpful for employers who operate as contractors and may experience a frequent change of workers. Employers are responsible for ensuring that each employee on each job is qualified for the electrical work he or she is performing.

Thinking about restructuring your Electrical Qualification Training Program?

Here is an example of what an effective “Electrical Qualification Training Program” might look like:

- Introduction to NFPA 70E
- Standards and intent
- Changes for 2022
- NEC article 110.16
- Positive electrical safety culture
- General requirements for electrical safety-related work practices
- Maintenance and training requirements
- Host and contract employer responsibilities
- Electrical safety program (ESP)
- Job briefings
- Shock hazards
- Insulated tools and equipment
- Meter safety
- Arc flash/blast hazards
- Electrically safe work conditions
- Examples of ESWC and working within limited approach boundaries
- PPE Requirements
- Understanding and interpretation of arc flash and shock hazard labeling requirements
- Hazard risk assessment
- Proper voltage testing procedures
- Field testing and fitting of voltage rated gloves
- Performing lockout tagout exercises
- Proper use of NFPA 70E PPE tables and shock boundaries
- Emergency procedures and the release of victims hands-on exercise
- Practical exam — hands-on demonstration

Electrical Injury Statistics at a Glance²

166

Electrical fatalities

8%

Percentage of all electrical injuries that were fatal

1,900

Nonfatal electrical injuries involving days away from work

57%

Percentage of electrical fatalities occurred in service-providing industries

9

Median number of days away from work for nonfatal electrical injuries

1. <https://www.bls.gov/iif/oshwc/case/osn-electricians-2015-19.htm>

2. Source: Electrical Safety Foundation International (ESFI); Bureau of Labor Statistics' (BLS) Census of Fatal Occupational Injuries (CFOI) and Survey of Occupational Injuries (SOII) for 2019

Does Your Electrical Qualification Worker Program Pass Muster?

As employers review their Electrical Worker Qualification Program in light of the requirements of OSHA 1910.269 outlined in this article, some may find that their current program does not support full compliance with the OSHA standard.

If that is the case with your program, it is recommended that you reassess your needs and responsibilities as an employer to ensure that your employees have the required training, proper knowledge and PPE to safely perform their work.

Chubb Global Risk Advisors can assist you with developing a Qualified Electrical Worker written program, as well as delivering specifically tailored training modules covering any of the bullet point topics above – getting you to the final piece of practically evaluating your qualified electrical workers through a live hands-on demonstration. Please reach out with any questions or concerns so we can have a discussion on how we can help to keep your team safe while assisting with maintaining compliance.

Connect with Us

For more information about how CGRA can help protecting your business, connect with us today.

Chubb Global Risk Advisors
866.357.3797 (toll-free)

globalriskadvisors@chubb.com

www.chubb.com/CGRA

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