



# NFPA 70E Qualified Person Training FAQ

## **What is the difference between the 8 hour “Full” Course and the 5 hour “Lite” Course?**

The key point to understanding the differences between the courses is to understand that both courses cover all aspects of NFPA 70E (2021 Edition) Chapter 1 “Safety-Related Work Practices” and meet the minimum requirements of OSHA 29 CFR 1910.332(b) regarding the training of “Qualified Personnel”. However, the 8 hour course spends extra time in the following:

- Lock Out Tag Out (LOTO)
- Electrical Work Permit (Hot Work Permit)
- Job Planning
- Performing Electrical Shock Hazard Assessments
- Performing Arc Flash Hazard Assessments
- Electrical Hazard Labeling Requirements
- Administrative Guidelines

The “Lite” course is more geared to individuals who are not involved in electrical work on a daily basis and are working in an environment where the electrical hazard assessments have already been performed by the employer (energized equipment has been properly labeled). Another group who benefit from the “Lite” course are those who have already attended and passed the 8 hour course and just need a refresher (every 3 years).

The “Full” course is designed to empower the attendee with the ability to perform electrical hazards assessments where no previous electrical hazards assessment has been performed. Electrical Contractors are faced with this level of uncertainty on sometimes a daily basis. There is an increased risk associated with employees performing electrical work on electrical equipment where no hazard information is available. These employees must be able to assess the hazards and select proper PPE prior to exposure to these hazards and the “Full” course accomplishes this critical training.

**What is the difference between a Qualified Person and an Unqualified Person regarding the Hazard of Electricity?** This is a hot topic right now in the industry. Recently, a customer informed me that his employees are “only exposed to the hazards of electricity a couple times a year so do they need to be trained as Qualified Personnel”. Great question I replied. I informed him that I only handle weapons-grade Plutonium with my bare hands a couple times a year...should I be trained???? If not trained, how would I know what PPE to select??? I know it is an over-exaggeration but you get my point.

NFPA 70E (2021 Edition) defines Qualified Person as “One who has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has received training to identify the hazards and reduce the associated risk”. The “demonstration of skills and knowledge” portion of the definition refers to the electrical competency of the worker. The “identify hazards and reduce the associated risk” portion of the definition refers to the safety training of the worker and is mandated by OSHA 29 CFR 1910.332.



The difference between a Qualified Person and an Unqualified Person is really about the exposure to exposed electrical components or conductors above 50 volts (both AC and DC). If a worker must take voltage reading to confirm a de-energized circuit...they must be a Qualified Person (Number One Rule of Electrical Safety). If a worker is only tasked with operating a switch or disconnect under normal operating conditions, they are an Unqualified Person. If an electrical panel must be opened to expose bare energized conductors, the person involved must be a Qualified Person. Remember, if we have an open electrical panel for any equipment that is energized, a shock risk assessment (mandatory) will establish a perimeter that can only be crossed by a Qualified Person. According to NFPA 70E Table 130.4, that perimeter (Limited Approach Boundary) on an electrical panel 151 VAC to 750 VAC would be 3 foot 6 inches. If your employee would need to get any closer, they must be considered Qualified.

Lastly, if you are still unsure if your personnel should be considered Qualified or Unqualified, you can look at OSHA 29 CFR 1910.332 Table S-4. This is a listing by OSHA of "Typical Occupational Categories of Employees Facing a Higher Than Normal Risk of Electrical Accident". This list contains Blue Collar Supervisors, Electrical and Electronic Engineers, Electrical and Electronic Equipment Assemblers, Electrical and Electronic Technicians, Electricians, Industrial Machine Operators, Material Handling Equipment Operators, Mechanics and Repairers, Painters, Riggers and Roustabouts, Stationary Engineers, Welders. The footnote at the end of the Table S-4 list further clarifies by stating "Workers in these groups do not need to be trained if their work or the work of those they supervise do not bring them or the employees they supervise close enough to exposed parts of electrical circuits operating at 50 volts or more to ground for a hazard to exist". Pretty plain and simple right?

### **What type of Electrical Safety Training must I incorporate in our Electrical Safety**

**Program?** This question gets asked a lot. Between E-learning, online videos, webinars, instructor lead classroom training and on-the-job options, which should be utilized. OSHA 29 CFR 1910.33(c) mandates "classroom or on-the-job type" training for Qualified Personnel. This doesn't mean that any of the other formats are not valid forms of Electrical Safety Training, it just means that for Qualified Personnel, a more "intimate" level of training is required. A hybrid format could be utilized and may be a great option for personnel scattered about the country. This hybrid option might include a thorough coverage of the related topics through an E-learning format followed-up by a shorter instructor-lead classroom option.