



## Weekly Safety Meeting: NFPA 70E – Knowing the Boundaries

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Upon completion of this safety talk, participants will be able to:

- Know the differences among Limited Approach, Restricted Approach, and Arc Flash Boundaries.
- Understand the importance of Lock Out/ Tag Out.

Contrary to what most believe, NFPA 70E is not just a guide for selecting Personal Protective Equipment (PPE). Its real intent is to keep workers safe by preventing exposure to energized circuits or parts. This includes qualified, those trained to safely work on that particular electrical circuit or equipment and unqualified workers, those not having the skills and knowledge related to a given type of work. All should be aware of the basic safety measures to prevent exposure found in NFPA 70E. A logical starting point is to recognize that the hazards associated with electrical energy, shock and arc flash/blast, exist within given boundaries. They are the Limited Approach, Restricted Approach, and Arc Flash Boundaries.

Whether you are a qualified or unqualified worker, make sure you know these boundaries. They can be provided by the company representatives that performed the Shock and Arc Flash Hazard Analyses for any exposed energized circuits or equipment in your work area. If you are an unqualified worker, do not go within the Limited Approach Boundary without a qualified worker. An unqualified worker may never enter the Restricted Approach Boundary. If you are a qualified worker you may enter the Restricted Approach Boundary if the proper precautions are observed, such as wearing shock protection for the voltage present and insuring that you are insulated or guarded from the energy.

No one should enter the Arc Flash Boundary unless they are wearing all the proper personal protective equipment. This will include Arc Rated (AR) clothing that matches the Arc Flash PPE Category present. The best precaution offered by NFPA 70E is the importance it places on establishing an electrically safe work condition. To do this, steps must be taken to perform a proper Lockout/Tagout (LOTO), which deenergizes the circuits and parts and locks or tags energy control devices to prevent re-energization of the lines.

Qualified workers must become familiar with and use the appropriate LOTO procedure. You also need to make all others, including unqualified workers, aware of the LOTO to prevent workers mistakenly reenergizing circuits or parts. Unqualified workers must be able to recognize the LOTO and comply with its directions. Knowing the electrical safety boundaries and LOTO will ensure you avoid exposure to energized circuits and parts. Consult with your supervisor to identify where these boundaries exist and when LOTO will be used to protect workers