

How to run this talk (5 minutes): Use this with crews who work on or around electrical equipment covered by your electrical safety program. Read each talking point aloud, then ask the discussion questions and let the crew answer. Close with the one rule, point out where your electrical safety program, energized-work permit forms, arc-flash labels, and arc-rated PPE are kept, and pass the sign-in sheet on page 2. This is an awareness refresher — it does **not** replace NFPA 70E training and does **not** make anyone a **qualified person**. Only qualified persons work on or near exposed energized parts.

What NFPA 70E Is — and How It Fits OSHA

- **NFPA 70E** is the national consensus standard for **electrical safety in the workplace**. OSHA's electrical rules (29 CFR 1910 Subpart S) set the legal duty; **70E spells out the recognized way to meet it** — risk assessment, boundaries, PPE, and safe work practices.
- **It exists because of arc flash**. An arc-flash event is essentially an explosion — intense heat, a pressure wave, and molten metal — possible at **low or high voltage**. 70E's job is to keep workers outside the danger, or protected inside it.
- **A qualified person** is trained and has **demonstrated** the skills and knowledge to identify exposed energized parts, know their voltage, and use the safe work practices, boundaries, and PPE. Everyone else is **unqualified** for that task — and stays clear.

The Default: an Electrically Safe Work Condition

- **Rule one: don't work it hot**. Before work, equipment is put into an **electrically safe work condition**: identify all sources, interrupt the load, disconnect, verify where possible, **lock out/tag out, test each conductor dead** with a rated tester (live-dead-live), and ground where required.
- **Energized work is the rare exception** — only when de-energizing is infeasible or creates a greater hazard, and then under an **energized electrical work permit**, by qualified persons, with the full risk assessment and PPE.
- **"It's just a quick check" is how people get hurt**. Voltage testing and troubleshooting on energized equipment are still energized work — boundaries and PPE apply.

Discussion — Ask the Crew

1. Which equipment on *our* site has arc-flash labels — and what do ours say the PPE is?
2. What has to happen before equipment is "electrically safe" to work on?
3. Who here is a qualified person, for which tasks — and what does everyone else do near that work?
4. When is energized work ever allowed, and what paperwork and PPE come with it?

The one rule to remember today: De-energize and verify first — energized work is the rare, permitted exception, not the shortcut. Know your boundaries, read the label, wear the arc-rated PPE it calls for, and if you're not qualified for the task, stay outside the boundary.

This talk is a refresher, not the required training. OSHA 29 CFR 1910 Subpart S requires electrical safety training and qualified-person determinations, and NFPA 70E is the recognized standard for the risk assessment, boundaries, and PPE. The **NFPA 70E Electrical Training Kit** adds the full video (available in English or Spanish), quiz & answer key, certificates, and sign-in sheets — reusable for every new hire. [SafetyVideos.com/nfpa-70e-electrical-training-for-general-industry](https://www.safetyvideos.com/nfpa-70e-electrical-training-for-general-industry)

Boundaries — Shock and Arc Flash

- **Two shock boundaries** surround exposed energized parts: the **limited approach boundary** (unqualified persons stay outside it unless advised and escorted by a qualified person) and the closer **restricted approach boundary** (qualified persons only, with proper technique and PPE).
- **The arc-flash boundary** is the distance at which an arc could still inflict a second-degree burn. **Inside it, arc-rated PPE is required** — and it can extend farther than you'd guess.
- **If you're not qualified for the task:** know where the boundaries are, stay outside them, and never lean past a barricade "just to look."

Risk Assessment, Labels & PPE

- **Before electrical work, 70E requires a shock and arc-flash risk assessment** — what could go wrong, how bad, and what controls and PPE follow.
- **Read the equipment label**. Arc-flash labels show the nominal voltage, the arc-flash boundary, and the required PPE (a PPE category or incident energy). **No label, or you don't understand it? Stop and ask a qualified person.**
- **Arc-rated PPE is a system:** arc-rated clothing, head and face protection, and rubber insulating gloves with leather protectors as specified — everyday clothing offers no protection and can ignite.
- **Tools and meters matter too:** insulated tools, and test instruments **rated for the environment** (CAT rating) and verified before and after use.

Toolbox Talk Sign-In Sheet

Attendance record · NFPA 70E Toolbox Talk · NFPA 70E / OSHA 29 CFR 1910 Subpart S

Date

Location / Facility

Presented by

#	Name (print)	Signature	Job title / Department
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By signing above, each attendee acknowledges they participated in this NFPA 70E toolbox talk on the date shown. Retain this sheet with your training records. **Note:** attendance at a toolbox talk is not NFPA 70E training and does not make anyone a qualified person — keep it with, not in place of, each worker's formal training records under your electrical safety program.