
Lockout / Tagout & Zero-Energy Verification

Mandatory field safety sequence for commercial rooftop and switchgear maintenance technicians

EMPLOYEE TRAINING MODULE · FICTIONAL SAMPLE CURRICULUM

MODULE 1 · ISOLATION SEQUENCE

Four Steps Before Touching Any Conductive Assembly

Every technician on the work order must independently verify zero stored energy and attach a personal lock before tools enter the boundary.

- 1. Notify affected site operators and log the isolation window on the dispatch tablet.
- 2. Open the load-rated disconnect and apply an индивидуальный personal padlock plus serialized danger tag.
- 3. Bleed residual capacitor and pneumatic pressure to zero using the rated discharge path.
- 4. Perform a live-dead-live voltage test with a calibrated CAT IV multimeter before starting work.

Three Non-Negotiable Field Safety Standards

MODULE 2 · CRITICAL CONTROLS & THRESHOLDS

¹ Lock / Tech
EVERY CREW MEMBER ATTACHES THEIR OWN LOCK TO THE GROUP HASP— NEVER RELY ON A LEAD’S LOCK

0 Volts
LIVE-DEAD-LIVE METER CHECK AGAINST A KNOWN SOURCE BEFORE AND AFTER TESTING THE ISOLATED BUS

100% Sign-Off
ALL TOOLS CLEARED, GUARDS REPLACED, AND PERSONNEL ACCOUNTED FOR PRIOR TO RE-ENERGIZATION

MODULE 3 · RESTORATION & HANDOFF

Re-Energization & Shift Transfer Protocol

Never remove another technician's lock. If a job spans two shifts, complete a face-to-face lock transfer at the isolation box.

- Inspect the enclosure interior to confirm all jumpers, ground straps, and hand tools are removed.
- Reinstall all dead-front panels and arc-flash barriers before removing the last personal padlock.
- Announce impending re-energization to all personnel within the restricted approach boundary.
- Record post-restoration baseline telemetry and sign the digital training verification log.