Electrical Safety Training Abu Dhabi

Service Objectives

A hands-on, Abu Dhabi-focused programme that turns standards into executable routines for safe isolation, arc flash risk control, and reliable field verification across workshops, substations, and active project sites.

- Understand electrical hazards (shock, arc flash, arc blast) in Abu Dhabi industrial environments.
- Perform safe isolation using LOTO, prove dead, and re-energise with documented checks and sign-off.
- Apply risk assessment, boundaries, and PPE selection aligned to NFPA 70E and local procedures.
- Work safely around switchgear, MCCs, VFDs, generators, and temporary power at construction/shutdown sites.
- Recognise hazardous area concepts (IEC/ATEX) and implications for electrical work in process facilities.
- Execute emergency response steps for shocks and suspected arc flash exposures.

> Aligned to OSHAD, ISO 45001, and NFPA 70E. NPM issues a Certificate of Completion; employer internal authorisation and permit privileges remain the organisation’s responsibility.

Who This Service Is For

- Manufacturing operations in ICAD and Mussafah.
- Petrochemical and refining clusters around Ruwais.
- Utilities and power generation; logistics hubs linked to Khalifa Port and KIZAD.
- Construction projects across Abu Dhabi (temporary power and commissioning focus).
- Teams involved in installation, commissioning, operation, inspection, and maintenance: E&I technicians, electrical supervisors, instrument engineers, safety coordinators.
- Contractors/EPCs handling shutdowns and tie-ins; facility owners building HSE competencies; supervisors authorising isolations or overseeing live work risk assessments.

Duration & Process Overview

- Standard delivery: 1 day (7–8 hours), instructor-led for mixed audiences.
- Extended option: total 1.5–2 days adding deeper arc flash, advanced testing, and additional LOTO practice.
- Delivery formats: on-site (ICAD, Mussafah, KIZAD, Ruwais), off-site in Abu Dhabi, or hybrid (virtual theory + in-person practicals).
- Language and cohort: English or Arabic; recommended 8–16 participants; pre-training needs analysis and review of permits/LOTO and site scenarios.

Methodology

A structured path from needs analysis and customisation to instructor-led delivery, hands-on practice, and competency-based assessment.

Phase	Objective	Deliverable / Duration
Needs Analysis	Understand equipment, permits, LOTO procedures, and site scenarios.	Pre-session review; inputs collected from client.
Customisation	Integrate client forms, tags, checklists; align with OSHAD and internal rules.	Tailored slides, exercises, and LOTO simulations.
Instructor-Led Theory	Translate standards (NFPA 70E, ISO 45001) and local procedures into clear steps.	Included within 1-day or 1.5–2 day programme.
Hands-On Practice	LOTO simulations, testing and verification drills, boundary control, site case studies.	On real tags/tools where possible; practical checklists.
Assessment & Certification	Knowledge checks, practical LOTO and verification, scenario-based evaluation.	NPM Certificate of Completion; employer retains final authorisation.

Key Module Focus

- **Electrical Safety Fundamentals:** Hazard physics, boundaries, roles; Abu Dhabi plant scenarios.
- **Safe Isolation & LOTO:** Isolation hierarchy, proving dead, re-energisation; simulation using client tags and checklists.
- **Arc Flash Awareness:** Incident energy concepts, approach limits, PPE categories; boundary marking practice.
- **Tools, Testing & Verification:** Instrument selection, functional checks, GFCIs/RCDs; verification workflow.
- **Temporary Power & Site Installations:** Generators, distribution boards, cable routing, earthing; site layout case study.
- **Hazardous Areas Interface:** IEC/ATEX zoning, ignition sources, equipment markings; work control checklist.
- **Incident Response:** Responding to shocks/arc flash, rescue approach, first aid handoff; communication drill.