Non-Contact Troubleshooting for LV High incident energy circuits

- For Wind turbine technicians
- Solar, Green Power Generation operators and maintenance technicians
- Midstream oil and gas power
- Steam co-gen, hydroelectric and nuclear power plant electricians
- 4160V/480V metal clad switchgear and MCC equipment maintenance
- Pulp and paper mill Electricians

NFPA 70E, OSHA 1910(S) define working on to include testing and troubleshooting which can become troublesome, uncomfortable and perilous on low voltage high incident energy. We train the technicians in the art of non-contact and de-energized troubleshooting with the use of DLROs and Thermography, especially of relevance now that NFPA 70B has become legislation since the fall of 2023

COURSE CONTENT (all practical), students have to be Qualified Electrical Workers with prior 70E training

- Setting up of a complex LOCK-OUT TAGOUT
- Generation of written procedure with switching orders and de-energizing sequence
- Setup/ Staging of Safe work Zone
- Setup of Electrically Safe Work Condition
- Inspection of PPE, tools and measuring instruments
- Live-dead-live (Absence of voltage testing) on three phase 480VAC
- De-energized testing and troubleshooting with Megger and DLRO
- Baseline Infrared readings of a circuit in normal operating condition
- Troubleshooting faults on an energized circuit with Thermography

LEARNING OBJECTIVES

- Understanding/Enforcing 70E safe work practices hands-on
- Practicing Complex LOCKOUT/TAGOUT and return to normal hands-on with a written procedure
- Sequential de-energize of three phase circuits with proper written switching orders.
- Hands on training on differences between switchoards, switchgear and disconnect switches
- Energized troubleshooting and testing with 3 phase 480VAC, 600VAC, 240VAC with 120VAC control power
- Simulation of a wind turbine main cabinet with rotork locked 600VAC, 80 Amps