

Insulation Resistance Testing

The failure of electrical insulation systems is one of the leading causes of equipment faults and electrical fires. The ability to recognize possible insulation breakdown and take timely corrective actions can protect both the equipment and the people in a facility. This seminar will use lectures, slides, case history examinations, and hands-on demonstration to provide the greatest possible exposure to electrical insulation system testing that can be achieved in one day.

Anyone who works on or near power generation, transmission, or distribution systems should attend this course. Additionally, supervisors, managers, safety personnel, and those responsible for ensuring a safe work environment should attend this course.

Duration: 8 Hour Program

BACKGROUND

Insulation System Construction
Modes of Degradation
Ohm's Law
Leakage Current
Polarization Current

TEST EQUIPMENT

Hand Crank
Electronic
Safety When Performing Testing

PERFORMING TESTS

Selecting Test Voltages
Spot Readings
Dielectric Absorption Test
Polarization Index

SPECIFIC EQUIPMENT TESTS

Cables
Buswork
Transformers
Circuit Breakers
Motors
Motor Starters
Instrumentation Components

INTERPRETING RESULTS

Go-No Go Criteria
Trending
DAR Acceptance Bands
PI Acceptance Bands

INTRO TO HIGH POTENTIAL TESTS

AC Hi Potential Testing
Power Factor Testing
Test Safety
Test Methods
Analyzing Results