

Medium Voltage Switchgear

Medium voltage switchboards play a big role in the distribution of power and management of distribution systems. Their correct installation, operation and maintenance can save thousands of dollars, prevent equipment damage, and prevent accidents. The purpose of this course is to provide a comprehensive overview on the subject of medium voltage switchboards for those involved in electrical power systems. The instructor will utilize lectures, visual aids, and case history examinations greatest possible exposure to medium voltage switchboards. 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.

Course Duration: 8 hours

INTRODUCTION

SAFETY

LOTO Requirements
PPE Selection and Use
Switching Safety

SITE SPECIFIC DISTRIBUTION

Utility Power
Automatic Transfer Scheming
Interlocks
Monitoring

CODES AND STANDARDS

NEC
Underwriters Laboratories
International Electrical Testing Association

GROUNDING

Main Bonding Jumpers
Separately Derived Systems
Sizing Grounding Conductors
Ground Fault Protection

COMPONENTS

Enclosure
Conductors
Instrument Transformers
Vacuum Circuit Breakers
• Interrupting Chambers
• Interlocks
• Racking Operations

SWITCHBOARD INSPECTIONS

Preparation
Test Equipment
Conductor Entrances
Conductor Bracing
Conduit / Raceway Bonding
System Grounding
Unused Openings
Door / Panel Alignments
Metering
Connection Torque
Working Space
Ground Fault Protection
Insulation Resistance Measurements
Connection Resistance Measurements