

# Electrical Training Phase II



# **Electrical Training Phase II**

This five-day course begins with a review of electrical safety topics. Next, substation equipment is explained followed by a description of 480V switchgear and 4.16 kV equipment. The final portion of the course explains grounding principles and applications and test equipment.

#### I. Electrical Safety

- · Electrical Safety Standards
- · Electrical Shock

#### II. Substation Basics

- ·Substation Overview
- · DC Systems
- · Introduction to Battery Maintenance
- · DC Machine Maintenance
- · AC Systems

#### III. 480 Volt Switchgear

- · Functional Description
- · Operating Procedures
- ·Installation Procedures
- · Removal Procedures
- · Breaker Operating Procedures
- · Breaker Interlocks

#### IV. 4.16 KV Equipment

- · 4160 Volt Switchgear
- · Breaker Removable Element
- · Bus Compartment
- · Current Transformer Compartment
- · Primary Termination Space
- · Voltage Transformers

## V. Grounding Procedures

- · General
- · Protective Grounding Principles
- Inspecting and Testing of Protective
   Grounding Equipment
- · Switchyard and Substation Clearance Grounding

#### VI. Fluke Multimeter

- · Fluke 787
- · Measuring Electrical Parameters
- · Using TouchHold
- · Compensating for Test Lead Resistance
- · Using the Current Output Functions
- · Power-Up Options
- · Maintenance

## VII. Test Equipment

- · Types of Test Equipment
- · Safety Precautions When Using Test Equipment