

IMEA 613

Advanced Construction/Maintenance Workshop

Workshop Objective

To provide workshop participants with instruction for the operation, troubleshooting, and metering of overhead and underground distribution systems.

Upon successful completion, participants will be able to demonstrate the knowledge and skill needed for the operation and troubleshooting of underground and overhead distribution systems. Energized conditions will be simulated during segments of this workshop.

DAY 1

- 9:00 Welcome, Introductions, and Workshop Safety Rules
- 9:30 Entrance examination
- 11:00 Field Exercise
 - Pole climbing
- 12:00 Lunch
- 1:00 Transformer Operations
- 2:00 Field Exercise
 - Identify nameplate data
 - Open transformer cover and secondary winding cut over
 - Testing for defective transformer
- 3:30 Daily Review and Discussion

DAY 2

- 8:00 Common Transformer Connections
- 9:30 Field Exercise
 - Transformer bank connections
 - Transformer paralleling
- 12:00 Lunch
- 1:00 APPA Video “Metering Safety”.
- 2:00 Field Exercise
 - Self contained meter installation
 - Poly phase w/ bypass meter installation
- 3:30 Daily Review and Discussion

DAY 3

- 8:00 Troubleshooting Meter Applications
- 9:00 Field Exercise
 - Check voltage
 - Check for shorts and grounds
 - Identify theft of service
- 12:00 Lunch

- 1:00 Switching Operation
- 2:00 Field Exercise
 - Create switching order
 - Simulate executing a switching order
 - Hold cards
- 3:30 Daily Review and Discussion

DAY 4

- 8:00 Switching Hazards
- 9:00 Field Exercise
 - OH switch inspection and operation
 - UG switchgear inspection and operation
 - UG switchgear fusing
- 12:00 Lunch
- 1:00 Troubleshooting Underground systems
- 2:00 Field Exercise
 - Fault location
 - Temporary cabling
 - Switching to restore power by direction of feed/open point
- 3:30 Daily Review and Discussion

DAY 5

- 8:00 Transformer Troubleshooting
- 9:00 Field Exercise
 - Fluctuating voltage
 - No power
 - Neutrals
- 12:00 Lunch
- 1:00 Workshop Examination

All workshop participants shall bring the following:

- Text Books, Study Guides, and Safety Manual
- Hard hat
- Safety glasses
- Leather work gloves
- Climbing boots
- Long sleeve shirt
- Climbing equipment (body belt, safety strap and climbers)
- Rain gear
- Lineman's pliers (kleins)
- knife
- 12" crescent wrench
- Channel-lock pliers
- Flat screwdriver
- Hammer