

Practical Distribution Transformers - Operation and Maintenance Training

Description

Course Description

This five days course features the theory, operation, and maintenance associated with power transformers. Topics included are transformer theory, oil testing, gas analysis, electrical testing, receipt inspections and testing, load tap changers, and preventive maintenance. Cass studies include insulation testing, TTR, and oil sampling will be discussed.

Course Objective

This course is designed to enable participants to:

- Describe the operation of a distribution transformer.
- Explain different types of transformers.
- Special transformer under harmonics.
- Explain the testing performed on a distribution transformer.
- Describe the operation of load tap changers.
- Describe the types of preventive maintenance performed on a distribution transformer.

Course Outline

- Transformer theory.
- Transformers main functions and classification.
- Transformer vector groups.
- Transformer losses & efficiency.
- Parallel operations.
- · Power transformers and safety.
- Operation transformers in a power system.
- Special design transformers (k-factor).
- Transformer Neutral Point Earthing.
- Power transformer protection.
- Auto-transformers.

- Power transformer oil tests and oil quality.
- Power transformer electrical tests: criteria & applicable standards.
- Pole mounting & pad mounting transformers.
- Preventative maintenance on power transformers.

