

Module No. : INTCV – 111
Module Name : Power Transformer & Power System Protection

Duration : 5 Day
Time Duration : 09.30 hrs to 17.30 hrs
Delivery : Instructor-Led Training
Venue : Power Technologies Training Centre, ABB Limited, Maneja, Vadodara - 390013

Course Content:

Power Transformers

Class Room Module:

- Introduction,
- Basics of Transformer – Design Aspects, Insulation,
- Selection & Application - Vector Symbols, Losses, Parallel operation etc
- Transformer Accessories – Breather, Bushings, PRV, Buchholz, MOLG etc.
- Manufacturing & Testing,
- Transport, Installation, operation – Do's & Don't, commissioning, Condition Monitoring of Power Transformer,
- Maintenance and Diagnostics.
- Case Studies

Field Module (Factory visit & Demonstration):

- Core Assembly, Active Part Assembly – winding, drying,
- Final Assembly, Testing.
- Introduction to Assembly & Routine Test,
- Commissioning, Maintenance & Troubleshooting,
- Spare Part Management,
- Question & Answer

Protection:

- Introduction, Protection Principles of Electrical Power Systems – Fundamentals
- Protection of Transformers, Busbar, Reactors, Reactors
- Protection of Motors & Generators
- Protection of Capacitors & transmission lines
- Station Protection settings
- Commissioning,
- Common Problems Faced & Troubleshooting,
- Demonstration of different relays including Numerical Relays,
- Care,
- Question & Answer.

Methods:

Class room presentation, hands – on practice & demonstrations at demo room, switchyard and during factory visit

Participants:

Personnel from Power Utilities, Power Generation, transmission companies & industries and Consultants responsible for engineering, commissioning, operation and Maintenance of substations

Pre-requisites:

Degree or diploma in engineering, basic knowledge of power system

Test:

Final written Test

Certificate for each participant:

Yes



Power Technologies Training Centre
ABB Limited
Maneja, Vadodara, India
Tel +91-265-2604448
Email dilip.shah@in.abb.com
Web www.abb.com/AbbUniversity

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