Course description

CHS502
Transformers II

Course goal
To study and improve the knowledge about the modern techniques available in the field of life time prolongation of the equipment. To study the important operational and economic consequences of an unexpected shortage or of a major failure for aged units.

Participants
Design and planning personnel, engineering and application personnel and consultants from the Electricity Supply Industry. Technical personnel from ABB companies.

Prerequisites
Electrical or mechanical engineering degree, technical college qualifications or equivalent. Basic knowledge about Power Transmission and Distribution. Attendance of course CHS501 or relevant experience is recommended.

Topics
- Life Time Prolongation of Power Transformers
  - Test method for oil analysis, Interpretation of the results, Advanced diagnostic methods, etc
- Transformer accessories
  - Oil cooler, Oil pump, Fans, Bushings, Current Transformer, etc.
- On-Line Monitoring
  - Sensors, Data Acquisition, Economical justification, etc
- Maintenance and Repair
  - Check-list, Periodicity of controls, On-site maintenance activity, Repair technology, Economical analysis of a transformer population, Economical justification, etc.
- Treatments on oil and windings
  - Filtration technique for oil, winding drying with low-frequency heating, etc.

Methods
Lectures and applied exercises.

Duration
The duration is 2 days.