GRID AUTOMATION TRAINING

Bay control REC670/650
Course SEP660

Course goal
The goal of this course is to learn the structure, concepts and functions of REC670/650. Participants will practice device configuration and parameterization with the help of the PCM600 tool.

The course combines both theoretical lectures and practical exercises.

Learning objectives
Upon completion of this course the participants should be able to:

- Set up a single line diagram on the Local Human Machine Interface (LHMI).
- Configure and test control functions.
- Verify and test Generic Object Oriented Substation Event (GOOSE) communication for interlocking and reservation.

The exercises make use of modern numerical test sets. Test will be done to verify the setting and configuration of REC670/650.

Prerequisites
Participants should know the fundamentals of working with control systems and electrical power networks. Furthermore, they should have participated in course SEP601 Protection and control IED manager PCM600 or have corresponding knowledge. Participation in course SEP800, IEC 61850 is highly recommended. Knowledge how to use ITT600 for tracing and debugging of an IEC 61850 system.
Also, be aware that all scheduled courses will be in English.

Participant profile
This training is targeted towards users who already know the fundamentals of protective relay theory and who have a desire to know the functions of REC670/650.

Topics
- Hardware and LHMI
- Apparatus control
- Bay and station wide interlocking
- Synchrocheck
- Reservation methods
- IEC 61850 Horizontal (GOOSE) communication
• Basic tests for MMS communication with usage of ITT600 as a client.

Course type and methods
This is an instructor led course with interactive classroom discussions and associated exercises. Approximately 60% of the course is hands-on activities.

Duration
The duration of the course is 2 days.