GRID AUTOMATION TRAINING

Line Distance protection REL670
Course SEP671

Course goal
The goal of this course is to learn the structure, concepts and functions of REL670. 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:

- Configuration and setting calculation for Line Distance protection.
- Test of distance switch onto fault protection, communication schemes, fuse failure, power swing, auto-reclosure and fault locator.

The exercises make use of modern numerical test sets. Test will be done to verify the setting and configuration of REL670.

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 REL670.

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. This as previous knowledge concerning how to use the PCM600 tool is required when working with the exercises. Also, be aware that all scheduled courses will be in English.

Topics
- Line Distance protection function and communication aided protection schemes:
  - Impedance zones
  - Phase selector
  - Impedance directionality
  - Switch onto fault
  - Communication logics
- Fuse Failure and Power Swing blockings
- Fault Locator
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 5 days.