

Management of an Electrical System in an HV Dispatch Centre

TRAINING OBJECTIVE

Ability to manage a power system with a control center in the phases of development, operation planning and real time operation:

- know the targets of power system operation
- know the risks related to power system safety
- ability to master the power system parameters at any time

PEDAGOGY

- Theoretical training
- Real case studies
- Use of network simulator (when available)

Length of the course:

- 2 to 3 days for managers
- 3 to 5 days for the staff not working in real time
- 10 to 20 days for real time operators

TRAINING PROGRAM

Power system operation

- The different components of the power system and their specificities
- Operation targets
- The different states of the power system
- Power system safety
- Margin and reserve concepts
- Real time operating rules
- Power system operation planning
- Help from EMS (Electronic Management Systems) software
- Power system development
- Feed-back from experience on a power system

Control center working

- Responsibilities shared between the different actors of the power system
- Data acquisition
- Control center organisation
- Power system safety in normal state
- Load-generation balancing
- Voltage control
- The balance of electricity flows
- Stability

Power system safety in a deteriorated state

- Emergency scheme
- Defense scheme
- Load shedding scheme
- Restoration procedure