Control Loop Principles
Applied to Combined Cycles

TRAINING OBJECTIVE

Understand the principles and the control parameters of a combined cycle that allow for manual operation of the plant.

Length of the course: 3 days

PEDAGOGY

- Theoretical training
- Practical training on images and schemes
- Practise manual operation
- Practical training on a simulator

TRAINING PROGRAM

- The control loop principles
- The characteristics of a stable or unstable state
- Operating in an open and closed loop
- The role of the enslavement loop
- The role of the different components of a closed or open loop
- The behaviour of the different actions of a PID controller
- The different types of control and examples (speed, flow, heat, level, etc.)
- Different regulations of the combined cycle (speed turbines, electric power,exhausttemperature, combustionturbine, conditioning temperature, fuel temperature, superheated steam temperature,reheated steam temperature, bypass HP/MP/LP, boiler levels, boiler flow, drum levels, smoke temperature, etc.)
- Analysis of operation of these control loops
- Reading control diagrams
- Operating manually rather than automatically
- Sharing feedback