framatome

PWR[1] LONG: 1300MWe PWR Technology

Part of a training path: PWR LONG / S1

Duration: 30 days (210 hours)

Language: French – English

Participants: 08 – 15

Location: Paris, other location on requests

Level: Advanced

Contact: formation.reacteurs@framatome.com

[1] Pressurized Water Reactor

You are:

An engineer or technician willing to develop her/his knowledge on 1300MWe PWR operation
A commissioning engineer or member of safety authority's staff

Prerequisites:

Basic knowledge of design and operation of 1300MWe PWR

During the training you will:

- Study 1300MWe PWR

After the training, you will be able to:

- Distinguish the design specificities of 1300MWe PWR
- Distinguish the operation specificities of 1300MWe PWR in normal, incidental or accidental operation
- Explain severe accidents sequence
- Be prepared for post-Fukushima projects

Course strengths:

- Involvement of specialists and experts
- Knowledge sharing
- Use of simulator
- Practicing exercises
- Course enriched by feedback of operated PWR

Program

Courses, conferences and tutorials:

- Atomic Physics
- Neutronics
- Thermics
- Chemistry and water radiochemistry
- Radiation protection
- Zero power operation
- Power operation
- Radiation and particles measurement sensors
- Nuclear fuel
- Detailed functional study of the power plant main systems, functional description of the turbine island and of the power plant electrical distribution
- Study of protection, safeguard, monitoring systems, of the automatisms and control means
- Study of specific power plant regulation systems
- Outage presentation (specificities, planning, safety)
- Accidents
- Post-Fukushima projects

Practical exercises on simulator (2 half days):

- Divergence - Doppler effect
- Control of reactivity in power operation