

PWR¹ Materials

Duration: 3 days (21 hours)

Language: French - English

Participants: 10 – 15

Location: Paris, other location on request

Level: Fundamentals

Contact: formation.reacteurs@framatome.com

You are:

An engineer or technician with mechanical knowledge and willing to understand the equipment choices used for the primary circuit design by identifying the constraints of:

- mechanical operation
- damage
- manufacturing technics
- control techniques used

Prerequisites:

Basic knowledge in mechanics

During the training you will:

- Study all the primary circuit components from a mechanical point of view
- Appreciate the design choices realized to the technical constraints, thermal and mechanical solicitations

After the training, you will be able to:

- Distinguish different structures and mechanical properties of equipment
- Explain the damage phenomena equipment on nuclear operation of EPR
- Explain the manufacturing technics of the primary circuit different components on PWR
- Compare the equipment methods review by nondestructive control

Course strengths:

- Involvement of specialists and experts

Program

- Introduction
- Materials used in PWR
- Vessel internals
- Primary circuit and auxiliary circuits
- The steam generator
- Cases of Nickel alloy (Inconel 600)
- Bolts, control rods and valve seats

¹ Pressurized Water Reactor