framatome

Impact of new Fuel Management on Operation and Design

Duration: 4 days (28 hours)

Language: French – English

Participants: 10 – 12

Location: Paris, other locations on requests

Level: Advanced

Contact: formation.reacteurs@framatome.com

You are:

An engineer or technician looking for a better understanding of safety stakes connected to new managements of fuel and of its impact on core operation

Prerequisites:

Basic knowledge of a power plant operation

During the training you will:

- Understand physical phenomena and fundamental principles of safety criteria associated to core reloading
- Understand the Operating Technical Specifications and Normal Operation Rules from neutronic characteristics of new fuel managements
- Master the safety demonstration of core reloadings
- Understand the core Periodic Tests design principles to avoid false interpretations
- Capture the impact of new fuel managements on design, transportation and fuel handling

After the training, you will be able to:

- Capture the impact of new fuel managements on design, transportation and fuel handling

Course strengths:

- Theoretical learning and a half day application on simulator

Program

- Definition of all required concepts in neutronics
- Fuel management (objectives, types, parameters and constraints)
- Impact of fuel managements on ELPO[1]
- Operation files update elements
- Impact of fuel managements on fuel handling
- Impact of fuel managements on OTS[2]
  - on the sizing of the RBWMS[3]
  - on the cooling capability of the fuel pool in the fuel building (BK)
- Studies impacted by fuel management changes
- Impact of fuel management on periodic tests RPR[4] / RPN[5] / RGL[6]
- Impact of fuel management on Loss of coolant Accident
- Impact of fuel management on heat removal accident and application on simulator

[1] Extended Low Power Operation
[2] Operating Technical Specifications
[3] Reactor boron and water makeup system
[4] Reactor Protection
[5] Nuclear Power Measurement
[6] Rods Control System