

# **State of the Art Workshop "Procedures currently applied to the integrity assessment of RPVs subjected to PTS loading" (online/onsite)**



**Tuesday 29 March 2022 - Friday 1 April 2022**

**PSI Auditorium**

## **Scientific Programme**

## **Day 1**

*Session:* Introduction to PTS

Brief introduction to PTS

RPV material properties and degradation I

RPV material properties and degradation II

Good practice in ageing management for NPPs

Ageing management focused on RPV materials

*Session:* State of the art for thermal-hydraulic (TH) analysis

Thermal-hydraulic phenomena relevant for PTS

Thermal-hydraulic analysis of PTS transients

Uncertainties in thermal-hydraulics

State-of-the-art for the thermal-hydraulic (TH) analysis

*Session:* Identification of further LTO improvements having an impact on PTS and selection for assessment

LTO improvements for NPP

## **Day 2**

*Session:* State of the art for weld residual stress (WRS)

State-of-the-art for weld residual stress – APAL's review

Weld residual stresses in integrity assessment

*Session:* State-of-the-art for warm pre-stress (WPS)

Warm pre-stress in integrity assessment

State-of-the-art for warm pre-stress – APAL's review

*Session:* State of the art of probabilistic PST analysis and relevant statistical tools

Probabilistic PTS - Brief Introduction

Probabilistic fracture mechanics analysis and statistical models

Uncertainty in probabilistic fracture mechanics and margin assessment

State-of-the-art of probabilistic PTS analysis – APAL's review