Lessons Learned from the Spanish Decommissioning Program

Juan Luis Santiago
Director of Operations

GOBIERNO DE ESPAÑA
MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA
enresa

ENSREG CONFERENCE 2019
Session 2

EXPERIENCE IN DECOMMISSIONING

Spain has a well established capacity and methodology for organizing and implementing decommissioning and remediation projects, through the experience accumulated over the years.

Vandellós I
1998/2003

Gas Cooled Reactor

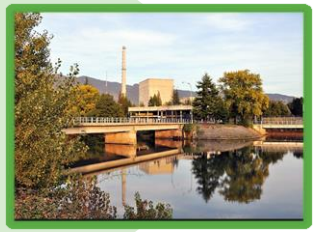
PIMIC
2006/2017

Nuclear Research Installations

Zorita
2010/2020

Pressurized Water Reactor

Sta. Mª Garoña



Boiling Water Reactor

Planning

- Decommissioning planning should start several years before plant shutdown
- 3D Modelling and Radiological characterization are essential elements to optimize the plant decommissioning strategy

Preparatory Activities

- Preparatory activities are required to adapt the facility to the decommissioning needs and will contribute to the reduction of hazards.
- Preparatory activities should be performed in the transition phase in order to reduce the duration of the decommissioning works

Technologies

- The selection of dismantling/cutting technologies play a significant role in worker safety and reduction of waste

- A well-conceived segmentation and waste packaging plan can significantly reduce cost, dose and waste while also benefiting schedule

Waste Management

- Decommissioning and waste management operations are very much interdependent and an integrated approach is required to optimize the entire waste cycle from generation to disposal

- Large amounts of waste are generated by decommissioning and there is a need to optimise waste management. This way include clearance, very low level waste disposal and volume reduction and decontamination techniques