

## DECOMMISSIONING OF KOZLODUY NPP UNITS 1 TO 4 - PROGRESS AND CHALLENGES

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1. Introduction: State Enterprise Radioactive Waste –National Operator for the Activities for RAW Management and Decommissioning of Nuclear Facilities –background, management, structure. Kozloduy NPP Units 1-4, history of the units operation and shutdown. Normative framework. Funding.
2. The presentation:
  - Strategy for Decommissioning of Units 1-4 of Kozloduy NPP –Decommissioning Plan for KNPP Units 1-4, terms, key phases, final objective –brown field.
  - Dismantling activities –Dismantling of equipment in Turbine Hall of Power Units 1-4 –amounts planned, cutting techniques, results, pictures. Activities in the Controlled Area – radiological survey, decontamination, preparation for dismantling activities.

Figure 1.Dismantling of TG–3 Rotor of Unit 2

- Free release of dismantled materials –Normative framework, Criteria, Free release procedures for different equipment type and various materials.
- Projects implementation –Projects for RAW treatment –solidified phase from evaporator concentrate tanks (ECTs), spent ion-exchange resins, sludges and solid RAW; Supply of different types of containers for transport and storage of materials; Sites for materials management; Supply of lifting and transportation equipment; Design and construction of Size Reduction and Decontamination Workshop; Free release measurement facility.

Figure.2 Facility for Retrieval and Stabilization of Spent Ion Exchange Resins - principle scheme.

- Important steps until 2015 –Receipt of decommissioning licence; Programmes; Procedures; Demolition of civil structures in Turbine Hall of Power Units 1 and 2; Dismantling of equipment in Turbine Hall of Power Units 1-4; Free released materials; Activities in the Controlled area –relocation of the boron absorber rods and dummy assemblies from the four reactors to the Spent Fuel Pool (SFP-3) with the purpose to reduce the dose budget of the personnel; Schedules, performance, results.

Figure.3 Preparation for removal of dummy assemblies, Unit 2, February 2015

- Activities planned –Commissioning of RAW treatment facilities; Commissioning of Size Reduction and Decontamination Workshop; Decontamination of the main equipment and facilities for personal dose reduction; Dismantling of Controlled Area equipment; Management of Radioactive materials and RAW.

1. Conclusions: Performance Analysis, expected difficulties, suggested solutions.

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yes

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