

Experience of Decommissioning Planning of Ignalina NPP

Ona Beinoravičiūtė
Nuclear Energy and Radioactive Waste Management Department
Ministry of Economy, Lithuania

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IGNALINA NUCLEAR POWER PLANT

- State enterprise
- 2 Units RBMK-1500
- Channel type, light water cooled, graphite moderated boiling water reactors (each contains 1661 fuel channel, two cooling loops)
- Unit 1 started operation 1983, Unit 2 in 1987
- Unit 1 closed 2004 Dec 31, Unit 2 foreseen end 2009
- Came under jurisdiction of Lithuania in 1991



LEGAL ACTS

- 2000 Law on Decommissioning of Unit 1 of INPP
- 2001 INPP Decommissioning Programme and it's Implementation Plan of Measures
- 2004 INPP Decommissioning Strategy (immediate dismantling)
- Government's Decisions on:
 - 2003 new SNF storage design
 - 2004 Solid waste management and storage facility design
 - 2006 Landfill storage and repository design
 - 2007 NSR design
- No law and decision on Unit 2 final shutdown!

PLANNING DOCUMENTS

- 1999 INPP Preliminary Decommissioning Plan
- 2005 INPP Final Decommissioning Plan
- 2005 Decommissioning Project for Unit 1 final shut down and defueling phase
- 2008 Update of Final Decommissioning Plan
 - Sections: Decommissioning Plan and Schedule, Radiological Inventory, INPP Waste Management Strategy
- 2009 Decommissioning Project for Unit 2 final shut down and defueling phase

PARTICIPATING INSTITUTIONS

➤ Owner

Ministry of Economy

➤ Operator

SE Ignalina NPP

➤ Regulators

State Nuclear Power
Safety Inspectorate

Radiation Protection
Centre

Environmental
Protection Agency

➤ Other

Municipality of Visaginas, Fire and Rescue Department, Ministry of Interior, Ministry of Environment, Ministry of Social Security and Labor, Ministry of National Defence, State Environmental Health Centre, State Labor Inspectorate, State Security Department, Lithuanian Geological Service, Technical Supervision Service

IMPLEMENTED PROJECTS

- Gas pipe-line Pabradė-Visaginas (108 km)
- Steam boiler for INPP
- Heat boiler for INPP and Visaginas
- Archive for technical documents
- Compensating reactor 330 kV



ONGOING PROJECTS

- Spent Nuclear Fuel Storage (2007 technical project)
- Solid RW Management and Storage Facility (2007 technical project)
- Landfill buffer storage (2008 technical project)
- Engineering Documents for Decontamination and Dismantling in Unit 1 (building 117 (2008) and turbine hall (2009))
- Free Release Measuring Facility (2008)
- Decommissioning Database and Management System (2008)
- Near Surface Repository (2008 technical specification)
- Upgrade of Bituminized Rad Waste Vaults (study)
- Renovation of Ignalina NPP Training Centre (2008 contract)

FINANCING SOURCES

- SE Ignalina NPP Decommissioning Fund ~ 65 MEUR
 - incomes will finish with the final shut down of Unit 2 of INPP
- Ignalina International Decommissioning Support Fund ~318 MEUR
- Ignalina Programme (183 MEUR in 2005-2006, 837 MEUR for 2007-2013)
 - 273 MEUR to IIDSF (2004-2006), 128 MEUR (2007-2008)
 - 47 MEUR to State Treasury Account (2004-2006), 99 MEUR (2007-2008)

CHALLENGES

- Final Decommissioning Plan does not include projects and their interrelation
- Projects' implementation delay
- Approval time of documents in all institutions
- Funding allocations and planning
- Legislation

THE END

THANK YOU FOR YOUR ATTENTION

