18th October 2018



Workshop "Experience of Reactors dismantling"

Ignalina NPP Decommissioning
Programme



Workshop
"Experience of Reactors dismantling"
October – November 2018, Visaginas

Ignalina NPP operation and closure

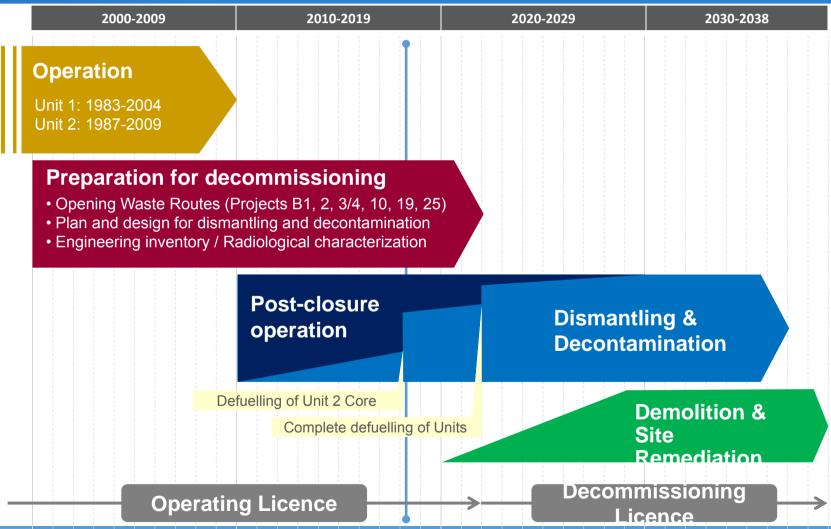


- Type: Twin RBMK-1500 water-cooled, graphite-moderated, channel-type power reactors
- Design life: 30 years
- Years in service:
 - Unit 1: Dec 1983 to Dec 2004
 - Unit 2: Aug 1987 to Dec 2009
- ❖ Capacity: Intended to supply NW region of former USSR (not Lithuania). One unit could produce 80% of Lithuanian electricity needs
- ★ Location: Far north-east corner of Lithuania. Immediately bordering Latvia and Belarus. Approx. 2½ hours drive from Vilnius
- ❖ Staffing: Designed and staffed for fully autonomous operation. Initial 5000+ staff reduced to 4600 by early 2000s. Currently is about 2000



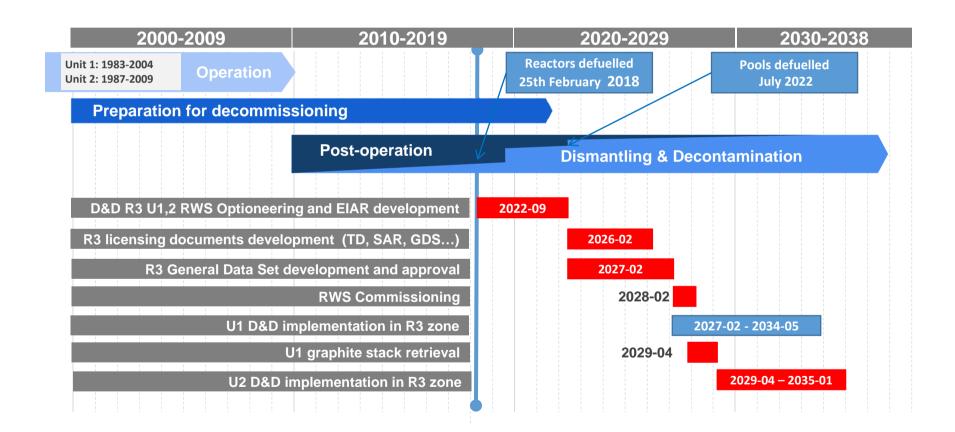
Decommissioning Plan





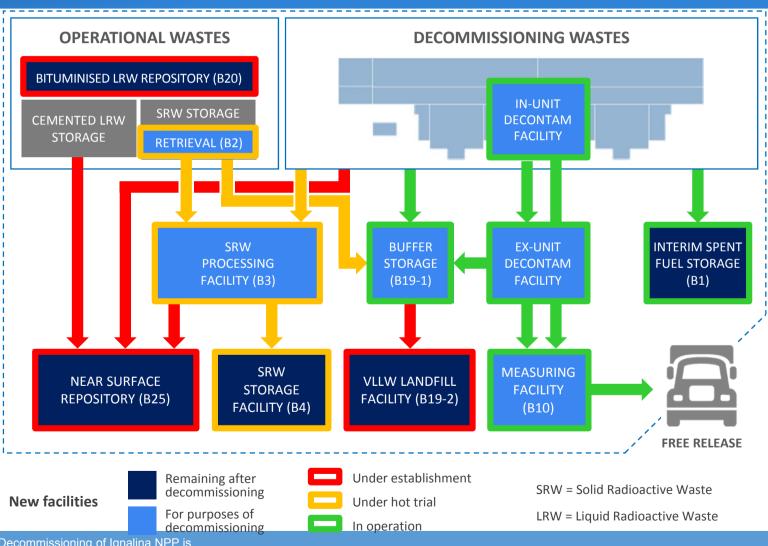
R3 reactor core dismantling Schedule





Opening waste routes







New waste facilities

New Interim Spent Fuel Storage Facility (B1)

- Storage Facility (place for 201 casks)
- •Storage casks CONSTOR RBMK-1500/M2 (91 FA)
- Loading and handling technology/equipment)
- Operational since September 2016









Treatment and Storage Facility B3/4





New Solid Waste Management & Storage Facility (B234):

- treatment of solid operational and from dismantling radioactive wastes, comprising:
- Retrieval Facility (B2)
- Processing Facility (B3)
- Storage Facility (B4, for long and short lived waste)
- Operational since October 2017 Hot Trial

New waste facilities

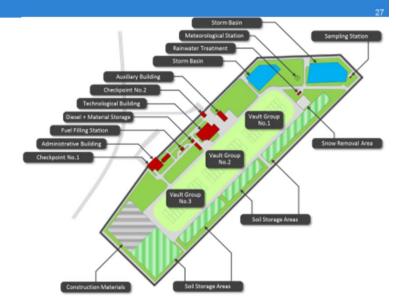


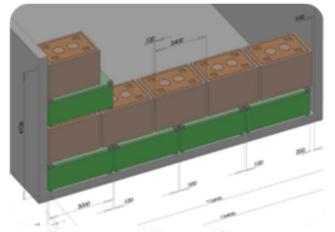
New Very Low Level Short Lived Waste Storage Facility (B19)

- Disposal of 60,000 m3 of retrieved operational wastes and dismantling Class A wastes, comprising:
- B19-1 Buffer Storage/Characterisation –
 in operation since 2013
- B19-2 Disposal Facility under construction, completion – December 2019









Near Surface Repository for 100 000 m3 Low and Intermediate Level Short-lived Radioactive Waste (B25

- After its closure the surveillance of the repository will be carried out for at least 300 years
- Technical Design and PSAR completed and agreed with state institutions
- Construction permit May 2017
- VATESI construction licence Nov. 2017
- Tender preparation to be started November 2018

New waste facilities



All new waste interim-storage or disposal facilities to be created on, adjacent to, Ignalina NPP site (radius ≈ 1.5m km)



- Simplifies permissions
- · Reduces new infrastructure
- Reduces transport
- Facilitates physical protection



