



Contribution ID: 101

Type: POSTER

Transition from operation to decommissioning of NPP units in the Russian Federation on the example of units 1 and 2 Leningrad NPP

Transition from operation to decommissioning of NPP units in the Russian Federation on the example of units 1 and 2 Leningrad NPP

1. Introduction

In Russian Federation in operation -11 NPPs (36 power units), Total - 30.5 GW. NPP produced over 20% of all power generated in Russian Federation. At 2022 –9 power units are shut down for decommissioning, of which: 2 NPP –at decommissioning stage (decommissioning license granted); 7 NPP–at decommissioning preparation stage. By 2032, 17 power units are to be shut down for decommissioning.

2. Regulatory Framework

- Federal Law on the Use of Atomic Energy No. 170-FZ (Σ ~ 16 Federal laws and decrees)
- Safety Rules for Decommissioning of a Nuclear Power Plant Unit, NP-012-16 (Σ ~ 19 Codes/ Rules and Safety Guidelines)
- “Rosatom” Concept of Nuclear Facilities Decommissioning
- “Rosenergoatom” Concept of Power Units Decommissioning
- Leningrad NPP Concept of Power Units Decommissioning
- Programs of Leningrad NPP Power Units Decommissioning (individually for each Unit)

3. DECOM Preparation Stage

Rationale for “immediate dismantling” selection:

- Lower costs
- Higher radiation and technical safety
- Possibility for the NPP workforce retention

4. Prospects

- Development, try-out, implementation and improvement of new technologies for uranium-graphite reactors decommissioning;
- Extension to other NPPs;
- Personnel training in new technologies and techniques;
- RW interim storage and processing;
- Waste decontamination, fragmentation and conditioning facility.

Primary author: ADAMOVICH, Dmitry

Co-author: TRETYAKOV, Sergey (Rosenergoatom, JSC)

Presenter: ADAMOVICH, Dmitry

Track Classification: Track 5 - Practical experiences in integrating safety and sustainable development