



PAŃSTWOWA
AGENCJA ATOMISTYKI

Update on the Polish NPP Project

Ernest Staron

Safety Assessment and Authorization Division
Nuclear Safety Department
PAA (National Atomic Energy Agency)

EMUG, 27-29 April 2022

The National Atomic Energy Agency of Poland (Polish abbrev. - PAA)

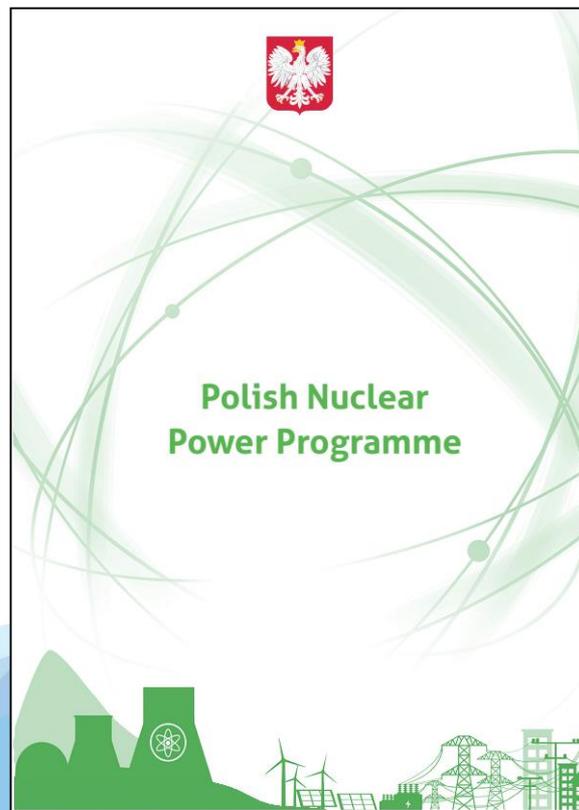
- PAA is the Polish nuclear regulatory body
 - Is independent although formally and organizationally under the supervision of the Ministry of Climate
- With respect to the Polish NPP:
 - ❖ Grants permits and licences for construction, commissioning, operation and decommissioning
 - ❖ Is responsible for the oversight of nuclear and radiation safety
 - ❖ Safety analysis topics – within the Department of Nuclear Safety
 - ❖ Cooperates in safety assessment with the Office of Technical Inspection (non-Nuclear part)

Polish Nuclear Power Program

The Program was updated on October 2nd 2020 and adopted by the Council of Ministers

The Program presents the scope and structure of the organization of activities to be undertaken in order to:

- implement nuclear energy,
 - ensure the safe and effective operation of nuclear power facilities,
 - ensure decommissioning of nuclear power facilities after the end of their operational lifetime,
 - ensure the safety of spent fuel and radioactive waste management.
- <https://www.gov.pl/web/klimat/program-polskiej-energetyki-jadrowej1>



Polish Nuclear Power Program

- It is proposed:
 - To construct 6 units , 1 to 1.6 GWe each, proven pressurised water reactors
 - Unit no. 1 should be connected to the grid in 2033

Schedule:

2022	2023	2024	2025	2026	2027
NPP1: decision on site selection NPP1: selection of technology	NPP1: application for construction license		NPP1-Unit1: PAA: construction license	NPP1-Unit1: first concrete	
2028	2029	2030	2031	2032	2033
NPP2: decision on site selection			NPP2-Unit1: PAA: construction license	NPP1-Unit1: PAA: commissioning license NPP2-Unit1: first concrete	NPP1-Unit1: PAA: operation license, connection to grid

Polish Nuclear Power Programme

- ❑ **Responsible for the construction and operation is the state-owned company PEJ (Polish Nuclear Power Plants)**
- **At present**
- **Siting**
 - March 29th PEJ submitted the Environmental Impact Assessment Report to the General Directorate for Environmental Protection
 - The preferred site is Lubiatowo-Kopalino
- **Technology**
 - April 21st – KHNP submitted an offer to build 6 APR1400 units that includes co-financing of the project and connection to grid in 2033
 - Westinghouse and Framatome should make an offer in nearest 2-3 months
 - *Choice of technology should be made at the end of 2022 / beginning of 2023*

Polish Nuclear Power Programme - site selection



Picture: Google maps

Polish Nuclear Power Programme - site selection



Polish Nuclear Power Programme - site selection



Tasks of PAA in the Polish Nuclear Power Program

There are defined 7 subtasks in Program:

1. Supporting the participation of domestic industry
2. Educational and information activities
3. Expert reports, analyses
4. Strengthening the staff and building PAA's competences
5. Adaptation of the PAA's equipment and infrastructure facilities to the tasks resulting from the PNP Program
6. Building a technical and expert support system for PAA
7. Strengthening the licensing and supervision proces at PAA

Technical and expert support system for PAA

- No official TSO
- Authorization system according to Atomic law in Poland: only authorized laboratories and expert organization can be used as a support during regulatory safety assessment and inspections in **NPPs**
- Currently only 1 authorization has been granted, plans to authorize about 20 more organizations till the end of 2023
- Work to simplify the authorization process has been performed

The authorization process

- In practice the assessment of an authorization application concentrates on checking:
 - If the scope of expertise is stated in the application
 - If the area of expertise of the employees (experts) complies with the scope stated in the application
 - Proof of expertise
 - If the organization has a procedure to prevent conflict of interest
- Information on authorization and application for receiving the authorization of the President of PAA is available on PAA's web page:
- <https://www.gov.pl/web/paa-en/system-of-technical-support-organization>

Thank you !