Overview of the Polish Nuclear Power Programme

World Nuclear Spotlight Poland,
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PGE EJ 1 was founded in 2009 as an SPV responsible for the execution of an investment process related to the construction of the first Polish NPP of up to 3750 MWe in capacity.

At present, the focus of the Company is to conduct site characterization works for potential NPP sites until the preparation of EIA and Location Reports:

- Receive scope relevant site and environment-related decisions and permits, i.e. based on the results of investigations and studies.
- Identify an NPP site that will guarantee safety of both the general public and local communities, as well as that of the environment and be suitable for the construction and operation of an NPP.

The Program is one of three strategic options of PGE Capital Group and decisions is expected.

(Nuclear Power Plant, Offshore wind farms, Modern coal)
PGE EJ 1 – stakeholders

Owners

Government and Administration

Local communities

Krokowa

Gniewino

Choczewo
Nuclear energy – Polish experience

- 1955 - First institute (Institute of Nuclear Research) was founded.
- 1958 – Construction of the first Polish nuclear research reactor EWA (Świerk).
- 1974 – Construction of Nuclear research reactor MARIA (Świerk), which is also one of the world’s biggest producers of radioisotopes used in nuclear medicine.
- 1982 – Start of the construction of first Polish NPP (Żarnowiec).
Social acceptance at sites

- Constant, open dialogue with local authorities and residents
- Program supporting the development of siting communes includes education and information campaigns, Corporate Social Responsibility (CSR) initiatives, as well as involvement of local resources in the investments projects
- Local Points of Information: ongoing education campaign, study tours, lessons and learning opportunities for children and teenagers, conferences, educational materials
- Meetings for local stakeholders
Two out of three respondents are of the opinion that a Nuclear Power Plant should be built in Poland (67% of respondents).

Every tenth respondent who does not support the construction of a Nuclear Power Plant in the vicinity of their place of residence believes however that it should be built in Poland.

The residents of Choczewo municipality (78%) and Krokowa municipality (68%) declare the greatest support for the construction of a Nuclear Power Plant in Poland.

Support for the construction of a Nuclear Power Plant is higher among younger and better educated people.
Polish NPP Program adopts a phased approach defined by the International Atomic Energy Agency

IAEA Key Milestone 1
Readiness to make an informed decision on the launch of the Nuclear Program

- Performance of analyses pertaining to an NPP, including a preliminary feasibility study
- Development and adaption of the Polish Nuclear Power Program (PNPP)

IAEA Key Milestone 2
Readiness to issue request for proposal for a nuclear technology

- Site investigations and environmental studies (site selection) – issuance of Environmental Permit
- Communications and education (social acceptance)
- Development and implementation of the Integrated Management System
- Capacity building
- Development and launch of tendering process related to the nuclear technology selection – readiness to transmit ToR to potential bidders

Scope limited to the preparation of the EIA and Location Reports

Elements put on hold in 2016

Polish NPP Program now in Phase 2

Adoption of the Polish Nuclear Power Program (PNPP) (January 2014)

Current status – beginning of Phase 2
NPP Program overview focusing on EIA and Location Reports

At present, Program works focus around site investigations and environmental studies

- For the purpose of site characterization 2 sites were selected in 2016
  (1) „Lubiatowo-Kopalino” and (2) „Żarnowiec”

- In March 2017 site investigations and environmental studies were launched in both locations

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Environmental studies
Assessment of NPP impact on the environment, local population and surroundings as input to the EIA Report and to the application for Environmental Permit
Duration – min.12 months

Site investigations
Characterisation of the area and impact of identified characteristics on the NPP’s safety as input to the Location Report in the process of applying for Location Permit
Duration – min. 24 months

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Lubiatowo-Kopalino Site  Żarnowiec Site

- ELBIS is a PGE EJ 1 main supplier of site characterization works

- Wood (previously AFW) is a main advisor for a number of studies associated with site characterization (e.g. Water study, Transport study, External hazards study) and may be involved at a later stage in an attainment of Environmental and Location Permits
Companies, which declared participation in so-called Integrated Proceeding in 2015 and technologies they offer

- **EPR**
  - EDF
  - PWR
  - 1650 MWe

- **AP1000**
  - Westinghouse / Toshiba
  - PWR
  - 1100 MWe

- **APR1400**
  - KEPCO
  - PWR
  - 1400 MWe

- **ABWR**
  - GE-Hitachi
  - BWR
  - 1350 MWe

- **ESBWR**
  - GE-Hitachi
  - BWR
  - 1535 MWe

- **EC6**
  - Candu Energy
  - PHWR
  - 700 MWe

*Source: Information from the public domain*
Thank you for your attention