Development of SMR technology-Polish perspective

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Development of

SMR technology in Poland

- In parallel to the implementation of the Polish Nuclear Power Program, the Ministry of Climate and Environment is following the global development of small nuclear reactor technology, especially its use in district heating and industry, due to the interest of Polish industrial and power companies in this technology.
- The PNPP provides for the construction of 1000-1650 MWe nuclear units, with a total capacity of 6000 to 9000 MWe, using the proven and well-developed Generation III LWR technology.
- The aim of implementing PNPP in Poland is therefore production of a large amount of clean electricity and possibly district heat, at low cost.
- SMR technology has a significant development potential. Small Modular Reactors (SMRs) will have a different role to play in the Polish power industry rather as a supplement, built for specific applications, largely for industrial companies' own needs.
- PNPP and commercial SMR projects are complementary, not mutually exclusive.

Current Status of the SMR projects

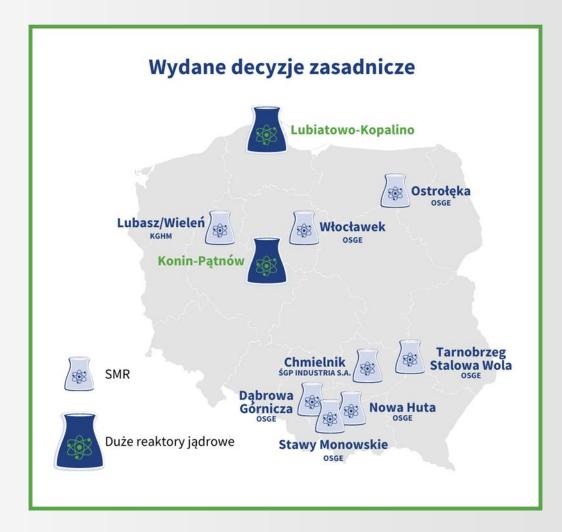
- Commencement of the pre-licensing procedure
- Preliminary Site Selection
- Decision-in-priniciple applications

• SMR Projects under consideration by Polish Industry

SMR design	Reactor type	Investor	Vendor
BWRX-300	BWR	Orlen Synthos Green Energy	GE Hitachi
VOYGR	PWR	KGHM	NuScale
Rolls Royce	PWR	Industria	Rolls Royce

Polish companies interested in SMR in Poland

Potential localizations of NPPs in Poland



Polish Regulator – Establismnet of PAA Team for SMR prelicensing activities

- Established in April 2023 by President of PAA
- The team includes employees from each PAA's department who deal with assessment of documentation as well as administration, accounting, hiring etc.
- The chairman of the team submits a monthly report on the team's activities to the PAA President
- Main tasks of the team: assessment of applications for a general opinion of the PAA President, creating guidelines, participation in international SMRs initiatives

• SMR technology – challenges

- 1.Costs
- 2. Licencing process
- 3. FOAK
- 4. Multi-technology challenges

Thank you for your attention.