**Rosatom and Nornickel study the prospects for the development of nuclear power in Norilsk**

**The Agreement of Intent and Cooperation on the construction of small nuclear power plants (SNPPs) to supply energy to the Norilsk Industrial District (NID) was signed by the Director General of Rosatom State Corporation, Alexey Likhachev, and the President of Norilsk Nickel, Vladimir Potanin. The parties plan to study and determine the priority site for a land-based SMR NPP project, its configuration as well as infrastructure necessary for plant construction and operation, and the optimal project implementation model.**

The NID power system belongs to the Norilsk-Taimyr Energy Company (NTEC, part of the Nornickel group). Isolated from the Unified Energy System of Russia, the Norilsk Industrial District’s energy system needs to meet enhanced reliability requirements. With its strategic development plans, Nornickel is looking into potential options to construct new generating capacities, considering small power plants as one of the viable pathways. Rosatom has a successful experience in operating a floating nuclear power plant (FNPP) in a similarly isolated energy system, the Chaun-Bilibino Energy Hub.

“Nornickel and the Norilsk Industrial District are both evolving, which means that we will need more power beyond 2030. A nuclear power plant is a possible solution, with its safe energy and minimized environmental impact. By joining forces with Rosatom, Nornickel will have access to cutting-edge energy technologies, while the state corporation will be able to promote the use of low-capacity nuclear power plants in remote Russian regions,” stated Vladimir Potanin.

“Within our partnership, we plan to study the needs of the Norilsk Industrial District and define the most suitable solution for its energy supply. A high-tech SMR NPP project based on the latest RITM-400 reactor facility may be considered as a priority. Our SMR projects offer a reliable source of electricity with long-term foreseeable tariffs for consumers. Moreover, due to the absence of CO₂ emissions in the process of energy generation, nuclear power can make a significant contribution to addressing climate change issues. This plays an important role for the northern territories of our country. All these advantages make SMR technologies a demanded solution for large industrial consumers who responsibly approach the choice of energy supply sources for their production facilities and territories of presence,” noted Alexey Likhachev.

**For reference:**

Rosatom is actively developing a product line of small nuclear power plants that meet the needs of remote northern territories of Russia with decentralized energy supply. In particular, today a small land-based nuclear power plant is being implemented in Yakutia. The facility will become the heart of one of Russia's largest mineral resource centers. It will provide electricity to Russian Arctic gold and ore deposits such as the Kyuchus, Deputatskoye, Tirekhtyakh as well as contribute to the socio-economic development of these territories.

RITM-400 is a project of a Russian pressurized water nuclear reactor with a planned power of 80 to 90 MW, developed by Engineering Experimental Design Bureau named after I. I. Afrikantov. The project is the next evolutionary stage of the RITM-200 reactor facility. The RITM-200 reactors have been in operation for several years on the latest nuclear icebreakers of Project 22220 “Arktika”, “Sibir” and “Ural” and have proven their efficiency and absolute safety at all stages of the life cycle. To date, enterprises of Rosatom's engineering division have manufactured and shipped nine reactors of this type.

The floating nuclear power plant (FNPP) “Akademik Lomonosov” includes two KLT-40S reactors of the *icebreaker* type. They were first connected to the power grid in December 2019, and put into commercial operation in May 2020. The total power of the Akademik Lomonosov FNPP, supplied to the Pevek coastal network is about 76 MW (coastal network itself doesn’t consume thermal energy), and in the maximum thermal power output mode – about 44 MW. At the end of 2022, electricity generation at the FNPP amounted to 194 million kW·h.

Afrikantov Engineering Experimental Design Bureau is the chief designer of RITM-200N. The enterprise is a large scientific and production center for nuclear engineering with a multidisciplinary design team and its own research, experimental and production base. The scientific and production potential of the enterprise allows to carry out the entire range of work to create various types of reactor facilities and equipment for them. It is part of the engineering division of Rosatom State Corporation, Atomenergomash.

The President and the Government of the Russian Federation are expanding the range of measures to support domestic industry. Implementation of major projects, including those in the energy sector, is accelerating. The Russian fuel and energy complex continues planned capacity upgrades. This work is being done considering current trends in digitalization and substitution of imported equipment. Rosatom and its enterprises are actively involved in this work.