**Rosatom approved design of reactor for small ground-based NPP**

*The world's first small ground-based nuclear power plant with RITM-200N reactor is planned to be commissioned in Yakutia in 2028*

At a joint meeting of Rosatom Scientific and Technical Council Bureau, Rosatom engineering division gained the approval for its designs of the RITM 200N reactor, the AS-14-15 core and its components. The Council experts recognized the high scientific and technical level of the projects as well as their compliance with the terms of reference. The latest RITM-200N is reported to become the basis for the first small ground-based nuclear power plant in the Yakut village of Ust-Kuiga. The plant is planned to be commissioned in 2028.

The reactor was developed on the basis of the modern domestic ship reactor RITM-200 designed for universal nuclear icebreakers, which was adapted for land installation. The thermal power of RITM-200N is 190 MW, its electrical power is 55 MW. The service life of the reactor is up to 60 years with 6-year fuel campaign.

Underway is the development of the detailed design, operational and acceptance documentation for RITM-200N equipment and systems.

**For reference:**

RITM-200 reactors have been in operation onboard the latest nuclear icebreakers Arktika, Siberia and Ural of Project 22220 for several years and proved their efficiency and absolute safety at all stages of their life cycle. To date, the companies of the engineering division have manufactured and shipped nine reactors of this type.

The project for the construction of a small ground-based nuclear power plant in Yakutia will ensure energy independence and socio-economic development of the region. The facility will become the heart of one of the largest mineral resource centers in Russia and in the future will provide electricity to industrial companies, including the Kyuchus, Deputatskoye, Tirekhtyakh deposits, while it will also play an important role in the creation of comfortable life conditions on the territory.

The President and Government of the Russian Federation are expanding the range of measures to support the domestic industry. The major projects, including those in the energy sector, are being boosted. Underway is the scheduled renewal of Russian fuel and energy sector capacities. This work is carried out taking into account modern trends in digitalization and substitution of imported equipment. Rosatom and its companies are actively involved in this work.

OKBM Afrikantov is the chief designer of RITM-200N. The company is a large research and production center for nuclear engineering with a multispecialty design team and in-house research, experimental and production base.

The scientific and production potential of the company allows it to carry out the entire range of work to create various types of reactors and related equipment. OKBM Afrikantov belongs to Atomenergomash, Rosatom’s engineering division.