**Small nuclear power plants**

**RITM-200N Reactor Plant**

The project for the construction of a Russian-designed SNPP utilizes the latest RITM-200N reactor plant which is based on many years of experience in operating small reactors on ships of the Russian nuclear-powered icebreaker fleet (over 400 reactor-years). To date, eight RITM-200 reactors have already been manufactured and installed on four multi-purpose icebreakers. Implementation of the SNPP project will ensure energy self-sufficiency and social and economic development of the Arctic Yakutia. Fuel supply for the SNPP is required once every 5 years, which ensures stable power supply to vital industrial enterprises and social facilities.

The SNPP will become the heart of one of the largest mineral resource centers in Russia which in the future will provide power to industrial enterprises. This involves development of the Kyuchus, Deputatskoye, and Tirekhtyakh deposits, construction of transportation and engineering infrastructure, social facilities in Ust-Yansk and Verkhoyansk Districts, and construction of a 110 (220) kV power transmission line Ust-Kuyga - Tirekhtyakh - Deputatsky. The SNPP project entails positive transformations in the township of Ust-Kuyga and Ust-Yansk District, which will create a developed area that is comfortable for work and life. The commissioning of the small nuclear power plant in the Ust-Kuyga settlement, Ust-Yansk District of the Republic of Sakha (Yakutia), is scheduled for 2028.

**Shelf-M Reactor Plant**

Development of a Shelf-M-based SNPP is a part of the federal project New Nuclear Power Engineering Including Small Reactors for Remote Territories within the Integrated Program for the Development of Equipment, Technologies and Scientific Research in the Area of Atomic Energy Use in the Russian Federation. NIKIET JSC is the developer and general designer of the Shelf-M RP. The service life of the plant is 60 years, and the reactor can operate approximately eight years without refueling. The reactor's thermal power is 35 MW enabling to generate up to 10 MW of electric power.

Sovinoye field is on the coast of the Chukchi Sea within the territory of Iultin District and is included into the Chaun-Bilibino industrial area. Sovinoye field discovered in 1970s is a center of a gold-bearing zone where more than 30 fields of alluvial and vein gold have been found. Based on the auction results in spring 2020, the license for geological survey, exploration, and gold mining at Sovinoye field was bought by Elkon MMC JSC being part of Atomredmetzoloto JSC, the mining division of Rosatom.

**Microreactors**

At present, Rosatom has started working on a solution for small mobile nuclear power plants (2 MW(e) gross). These microreactors are supposed to meet such requirements as modularity, the ability to be relocated along public roadways throughout the entire service life, and meet standard dimensions for road and rail transportation.

Today the leaders of the industry have the task to design a prototype of such a plant in order to confirm engineering solutions and proceed to its serial manufacture.