**The first full-scale NPP simulator was put into operation at the Akkuyu NPP in Turkey**

*The simulator is designed to analyze all scenarios of operation of the first nuclear power plant in Turkey and to train the NPP operational personnel*

The opening ceremony of the full-scale simulator (FSS) was held in a new building of the training center at the construction site of the first nuclear power plant in Turkey. The ceremony was attended by representatives of Akkuyu Nuclear JSC (Rosatom State Corporation company implementing the Akkuyu NPP project), the Ministry of Energy and Natural Resources of the Republic of Turkey, Rusatom Service JSC — the companies responsible for the supply, installation and commissioning of a FSS, as well as participants of the first group of Akkuyu NPP engineers, which will have to practice on the simulator.

Sergei Butсkikh, First Deputy Chief Executive Officer of Akkuyu Nuclear JSC, Director of the NPP under Construction, presented the representative of the Ministry of Energy and Natural Resources of the Republic of Turkey with a certificate on the commissioning of a full-scale simulator into commercial operation, which followed the cutting of a symbolic red ribbon by the ceremony participants.

Making speech to the participants of the ceremony, the First Deputy Chief Executive Officer of Akkuyu NuclearR JSC – Director of the NPP under Construction Sergei Butckikh noted: “An important condition for the safe and stable operation of a nuclear power plant is the operational personnel, the employees' skills and competencies. The commissioning of a full-scale simulator will allow our operators to work out all possible scenarios for the operation of a nuclear installation in conditions maximally close to real ones. On October twenty-ninth, after the completion of all pre-commissioning works, Anastasia Zoteeva, Chief Executive Officer of Akkuyu Nuclear JSC, signed an order to put the full-scale simulator into commercial operation, and the FSS is officially fully ready for operation from that date.”

The Head of the Nuclear Infrastructure Development Department of the Ministry of Energy and Natural Resources of the Republic of Turkey, Salih Sarı, expressed gratitude to everyone who participated in the FSS development, installation and commissioning, and also added: “In addition to extensive professional knowledge and high qualifications, NPP employees also need to strictly comply with the principles of safety and quality culture. The full-scale simulator will be used for decades to improve the skills of the Akkuyu NPP personnel, contributing to the development of the plant operators' and engineers' competencies. Thousands of Turkish engineers will undergo training here.”

The full scale simulator includes a software and hardware suite, a digital twin of power-and-control systems of Akkuyu NPP reactors. A complex mathematical model is used on the equipment, which ensures the simulation of all NPP operating modes in real time. All devices and control panels are identical to the equipment of the main control room of the Akkuyu NPP power unit. The information displayed on monitors and indicators is provided to operator in analog format and values as on a real NPP power unit.

A full-scale simulator will enable the elaboration of all scenarios for the operation of the power unit and improvement of the operational personnel skills. Before operating at the Akkuyu NPP, employees who have been trained at the FSS will have to pass certification exams and obtain licenses from the regulatory body – the Nuclear Regulatory Agency (NDK) of the Republic of Turkey.

***For reference:***

*Akkuyu Nuclear JSC is a company of Rosatom State Corporation, which is in charge of design, construction and subsequent operation of Akkuyu NPP.*

*Akkuyu NPP is the first-ever nuclear power plant in the Republic of Turkey. The Akkuyu NPP project includes four power units equipped with Generation III+ WWER reactors of Russian design. The capacity of each NPP power unit will be 1200 MW.*

*Akkuyu NPP is the first project in the global nuclear industry being implemented according to the Build-Own-Operate model.*

*According to the terms and conditions of the Inter-Governmental Agreement between the Russian Federation and the Republic of Turkey, the NPP's first power unit is supposed to be commissioned within 7 years after obtaining all construction authorizations. With regard to the construction license for Unit 1 was obtained in 2018, the deadline is 2025. At the same time, the project stakeholders are making their best efforts to ensure readiness for the commissioning works at Power Unit No. 1 in 2023, a jubilee year for the Republic of Türkiye.*

*Russia continues a constructive dialogue with its foreign colleagues, developing cooperation with countries from all over the world and actively forming a multipolar system of international relations. The implementation of major foreign energy projects also continues. Rosatom and its enterprises are actively involved in this activity.*