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**Turbine installation completed at Unit 1 of Akkuyu NPP (Türkiye)**

*Director General of Rosatom Alexey Likhachev and Minister of Energy and Natural Resources of Türkiye Alparslan Bayraktar took part in the event dedicated to this milestone*

Turbine installation was completed at Unit 1 of Akkuyu NPP (Türkiye). The site visit by Türkiye's Minister of Energy and Natural Resources, Alparslan Bayraktar, along with Alexey Likhachev, the Director General of the Rosatom State Corporation, underscored the significance of this pivotal event.

**Sergei Butckikh**, Chief Executive Officer of AKKUYU NUCLEAR JSC, made a report on the main stages of the project implementation in 2024 during the event. He provided a detailed overview of the commissioning work at Unit 1, readiness stage of auxiliary facilities, major construction and installation operations and plans for the upcoming year. Sergei Butckikh also reported the successful completion of a key operation in the turbine hall of Unit 1: the installation of the turbine-generating unit on the shaft-turning gear.

This year, a number of key operations were carried out, most notably the start of full-scale commissioning at Unit 1. All main equipment of the reactor unit has been installed in the reactor compartment, and preparations for pre-launch tests with loading of nuclear fuel simulators are actively underway.

The turbine assembly was successfully completed, i.e. a set of sequential operations that ended with the key event of placing the turbine-generating unit on the shaft-turning gear. The turbine shaft began rotating at low speeds for the first time. The experts thoroughly checked the correct alignment of all elements and confirmed the high quality of the turbine unit assembly. The successful completion of the operation demonstrates the high technical readiness of the turbine and auxiliary systems for the next key stage of the unit's commissioning – cold-and-hot run-in of the reactor unit.

Alparslan Bayraktar and Alexey Likhachev noted the progress achieved in 2024 at the project.

“To address Türkiye's increasing energy demand and achieve the 2053 Net-Zero Emission Target, we need nuclear energy. The Akkuyu NPP project is one of the largest projects in our country. Its implementation reflects the political will of our President, President of the Russian Federation Vladimir Putin, as well as their harmonious interaction. Türkiye and Russia, along with all stakeholders, are working together on this project as a unified team,” said Alparslan Bayraktar.

“The year 2024 was not only a year of serious challenges for Akkuyu NPP, but also of great achievements. Today we witnessed one of the key events at the site – the completion of turbine installation. This is a necessary step on the long road to the launch of the power unit. We are committed to making every effort to ensure that Türkiye's first nuclear power unit begins operation in the near future, providing millions of consumers with stable, low-carbon energy,” noted **Alexey Likhachev**.

At the forthcoming stage, a set of pre-launch tests, including tests of the sealed enclosures system and safety systems, will be carried out in the turbine hall of Akkuyu NPP Unit 1. After that, the turbine will be ready for comprehensive pre-launch operations.

**For reference:**

**Akkuyu NPP** is the first nuclear power plant being built in the Republic of Türkiye. The Akkuyu NPP project includes four power units equipped with Generation 3+ VVER reactors of Russian design. The capacity of each 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.

The NPP turbine is a high-power thermal rotary motor. The cylinder rotor is known to be one of the key components of the motor. Superheated steam produced from desalinated water in the reactor facility’s steam generators is delivered to the rotor blades under high pressure. The energy of the compressed and heated steam enables the rotor to spin, converting it into mechanical energy, which is transferred to the turbine generator that produces electric current. The Akkuyu NPP turbine-generating unit consists of a combined high- and medium-pressure module, two low-pressure modules, and a generator.

Russia is actively developing scientific cooperation with all interested countries. The implementation of major international projects also continues. Rosatom and its divisions take an active part in this work.