|  | Rosatom digital  press office  <https://atommedia.online/en/> | **Press release**  15.10.24 |
| --- | --- | --- |

**Key Turbine Component Installed at Akkuyu NPP Unit 1 (Türkiye)**

*Installation of large-size components of the turbine plant is completed*

October 15, 2024, Büyükeceli, Mersin Province, Türkiye. – The last of two low-pressure rotors has been installed in the design position in the turbine building of Akkuyu NPP Unit 1 (the plant is being built by ROSATOM in Türkiye).

The installation was performed under supervision of an engineer representing the equipment manufacturer. The weight of assembled rotor is 255 tons.

"The rotor was installed using the overhead crane. Rotor installation is a technically challenging operation that requires high accuracy. The operation has been successfully completed, and now all main large-size components of Akkuyu NPP Unit 1 turbine plant have been installed into the design position. Before we start turbine set testing, we need to adjust the turbine shaft line, as well as ensure the density and tightness of the secondary circuit. This requires welding more than 3 000 installation joints on various process systems", noted Akkuyu Nuclear JSC Chief Executive Officer Sergei Butckikh.

At one of subsequent stages of the turbine installation, specialists will perform alignment of all elements, wherein component parts will be put in an optimal position in relation to other equipment elements. Then the specialists will need to mount the turbine onto a barring gear, check the correctness of assembly and alignment of all elements, as well as readiness of operating systems for hydraulic tests.

**For reference:**

NPP turbine set is a high-power rotary heat engine. A cylinder rotor is one of the engine's key components: a superheated steam, which is produced from demineralized water in steam generators of the reactor set, is fed onto rotor blades under high pressure. The energy of compressed heated steam makes the rotor rotate, thus converting into mechanical energy that is transferred to a turbine generator, which generates electrical current. The turbine set of Akkuyu NPP power unit comprises a combined high- and medium-pressure module, two low-pressure modules, and a generator.

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.