|  | Rosatom digital  press office  <https://atommedia.online/en/> | **Press release**  14.08.24 |
| --- | --- | --- |

**Rosatom ships the reactor hall equipment for Xudapu NPP Unit 4 (China)**

*The work of Rosatom on China projects is an example of constructive partnership that opens up new prospects for cooperation in the field of peaceful nuclear energy*

On August 14, the reactor vessel and steam generator for Unit 4 of Xudapu NPP were shipped from the production site of Atommash (Mechanical Engineering Division of Rosatom). The nuclear power plant (NPP) in China is being built according to the latest Russian design. This is the second large shipment of nuclear equipment for Russian-designed NPPs under construction in China this year.

The total weight of the equipment amounts to more than 660 tons. Combined delivery by railway, road, river and sea transport will be used for the transportation of the large-size equipment to the construction site.

"Today, the equipment for 14 units of nuclear power stations under construction according to the Russian design in Russia and abroad is at various stages of manufacturing at the enterprises of the Mechanical Engineering Division. Coordinated work of the machine builders makes it possible to ship the equipment in accordance with contractual terms, and in the future, we will be able to increase production output to meet the growing demand for nuclear power generation in the world," said Igor Kotov, Head of the Mechanical Engineering Division of Rosatom.

"We already have a proven system of effective cooperation with Chinese counterparts which allows us to promptly review and resolve all possible issues related to the production processes. This enables us to ensure accurate fulfilment of the work schedule and absolute compliance of products with the requirements of international quality and safety standards for complex nuclear equipment," added Maxim Zhidkov, Head of Atommash.

**For reference:**

Two power units of VVER-1200 type of generation III+ are currently under construction at Xudapu NPP in China according to the design of Rosatom State Corporation Engineering Division. According to the contractual obligations, the Russian party will design the nuclear island of the plant, supply the key equipment of the nuclear island for both power units, and provide services for designer supervision, supervision of installation and commissioning of the supplied equipment. Atommash is playing an active role in the construction of two nuclear power plants in China: Tianwan NPP and Xudapu NPP, both with reactors of VVER-1200 type of generation III+. The Atommash plant has been manufacturing equipment for these nuclear power stations since 2021 in close cooperation with Chinese specialists. In May 2024 a reactor vessel and two steam generators were shipped from the production site in Volgodonsk for Unit 8 of Tianwan NPP. Work is now in progress to manufacture three steam generators for Unit 4 of Xudapu NPS, as well as internals and two upper units for Tianwan NPP and Xudapu NPP.

Xudapu NPP is a nuclear energy cooperation project between Russia and China, located in Huludao (Liaoning Province). In 2019 a number of contracts were signed, including the general contract for the construction of Unit 3 and 4 of Xudapu NPP with reactors of VVER-1200 type, as well as a contract for the supply of nuclear fuel. The units are scheduled to be commissioned in 2027-2028.

The reactor is a vertical cylinder-shaped vessel with an elliptical bottom. The vessel houses the core and internals. From the top, the vessel is tightly sealed with a top head with the control and protection system drives, in-core cable and instrumentation detector output nozzles. The reactor vessel is about 13 meters long and 4.5 meters in diameter. The weight of the equipment is 320 tons.

The steam generator is a heat-exchanging component of the reactor plant and it belongs to the items of safety class I. The equipment of one NPP unit includes four steam generators. The steam generator is more than 4 meters in diameter, about 15 meters long and weighs 340 tons.

Atommash produces complex equipment for almost all nuclear construction projects in Russia and abroad. In 2023 the key equipment was shipped from the production complex for the reactor halls of Unit 7 of Tianwan NPP and Unit 3 of Xudapu NPP.

Rosatom Engineering Division unites the leading companies of the nuclear industry, namely: Atomstroyexport JSC (Moscow, Nizhny Novgorod, branches in Russia and abroad), Joint Design Institute Atomenergoproekt JSC (design institute branches in Moscow, Nizhny Novgorod, St. Petersburg, branches in Russia and abroad, R&D branches) and subsidiary construction organizations. The Engineering Division ranks first in the world by the order portfolio and the number of NPSs being constructed simultaneously across the world. About 80% of the Division revenues originate from foreign projects. The Engineering Division implements construction projects for the of large-capacity nuclear power stations in Russia and across the world, renders a full range of EPC, EP, EPC(M) services, including project management and design activities, and develops Multi-D technologies for the management of complex engineering facilities. The Division relies on the achievements of the Russian nuclear industry and modern cutting-edge technologies. It builds reliable and safe nuclear power stations with reactors of VVER type of generation III+ that meet all international requirements and recommendations.