**Akkuyu NPP (Turkey) history**

**World’s largest nuclear construction project**

**The Akkuyu Nuclear Power Plant in Turkey is Rosatom’s most grand-scale nuclear power project and one of the world’s largest nuclear construction sites. Four 1.2 GW reactor units are being constructed here in parallel.**

After all the four units are put in operation, the Akkuyu NPP will generate around 35 billion kilowatt-hours of electricity per year. This is enough to supply a large metropolitan area like Istanbul with electric power. The Akkuyu NPP will meet up to 10% of Turkey’s electricity needs.

* Its four reactors will prevent carbon dioxide emissions equivalent to those of almost 10 million cars annually.
* Two out of five world’s most powerful Liebherr LR 1300 crawler cranes operate on the Akkuyu construction site.
* The Akkuyu NPP is the first-ever nuclear power project carried out with the BOO (Build–Own–Operate) approach.

The nuclear construction site is located on the Mediterranean coast in the Turkish province of Mersin. Büyükeceli (Gülnar District) is the town closest to the site.

*The Akkuyu NPP has already created tens of thousands of new jobs both at the construction site and at suppliers and contractor companies across turkey.*

Construction and subsequent operation of a nuclear power plant stimulate infrastructure development and local production in related industry sectors and increase buying power among the residents, boosting consumer demand and expanding market for a variety of local suppliers, from agricultural producers to hospitality businesses and providers of consumer services. This is how a nuclear power plant contributes to economic development locally and nationwide.

As a hi-tech facility, the nuclear power plant also raises the prestige of science-related occupations and inspires interest in higher technical and engineering education.

Akkuyu’s four powerful reactors will be a reliable source of low-carbon energy for Turkey.

Taking into account the nuclear power plant’s life cycle, the cooperation will last around 100 years, or several generations, from the project launch till decommissioning.

**Project Milestones**

**June 15, 2017:**Turkey’s Energy Market Regulatory Authority issues a power generation license for the period of 49 years.

**March 28, 2018:**The Ministry of Economy of Turkey has awarded Akkuyu Nuclear the status of a strategic investor.

**April 2, 2018:** TAEK issues a construction license for Akkuyu Unit 1.

**April 3, 2018:** A first concrete ceremony is held to mark the beginning of full-scale construction works on the site. The ceremony is attended by the Presidents of Russia and Turkey via video link.

**May 9, 2019:**Construction works are completed at the Eastern sea freight terminal intended to receive equipment and large-size cargo for the nuclear power plant. Turkey’s Ministry of Transport and Infrastructure issues an operation permit for the terminal.

**July 22, 2019:**An engineering, procurement and construction (EPC) contract is signed between Akkuyu Nuclear as a customer and Titan 2 IC Içtaş Inşaat, a joint venture between the Russian Titan-2 and the Turkish construction company IC İçtaş İnşaat Sanayi ve Ticaret A.Ş., as a contractor.

**August 26, 2019:** Turkey’s Nuclear Regulatory Authority (NDK) issues a construction license for Akkuyu Unit 2, enabling the start of full-scale construction works at all the on-site facilities.

**December 2, 2019:** Akkuyu Nuclear and the Turkish Electricity Transmission Company (TEIAS) sign an agreement for the connection of the Akkuyu NPP to the Turkish national power grid. The agreement enables Akkuyu Nuclear and TEIAS to start the development of a power evacuation system for the Akkuyu NPP that will include six high-voltage transmission lines connecting the nuclear power plant with Turkey’s power grid.

**April 8, 2020:** Construction of Akkuyu Unit 2 kicks off officially as first concrete is poured for the reactor island basemat.

**November 13, 2020:** Turkey’s Nuclear Regulatory Authority (NDK) issues a construction license for Akkuyu Unit 3.

**March 10, 2021:** The construction of Unit 3 of the Akkuyu NPP has begun.

**October 28, 2021:** Turkey’s Nuclear Regulatory Authority (NDK) issues a construction license for Akkuyu Unit 4.

**July 21, 2022:**An official ceremony is held to mark the start of construction at Unit 4. The Akkuyu NPP project has entered the peak phase of construction.

**December 27, 2022.**The flow of technological systems to the open reactor has begun at Unit 1 of the Akkuyu NPP.

**January 2, 2023.** Installation of the internal containment at Unit 1 of Akkuyu NPP was completed.

**Reference**

The Build–Own–Operate approach assumes that the vendor (the reactor technology owner) is responsible for every part of the project, from engineering, financing and construction management to plant operation, power generation and sales in the local power market, and ensures decommissioning of the station.

The Akkuyu construction project is 100% financed by Russia. Rosatom has the right to sell up to 49% in the project to other investors. The entire 49% stake can be sold to either one or several investors.

The project owner is Rusatom Energy International (REIN).

In the spring of 2021, the Akkuyu NPP constructed under REIN’s management became the first-ever nuclear power facility to obtain sustainable financing.

You can learn about Rosatom’s major NPP construction projects on the [Atomstroyexport website](https://www.ase-ec.ru/en/projects/).