

# ROOPPUR NUCLEAR POWER PLANT ON WAY TO BECOME A FACILITY

Reverse Swing



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The arrival of the first consignment of uranium fuel for Rooppur nuclear power plant (Rooppur NPP) by a special Russian aircraft last week took Bangladesh a step forward to become a nuclear fuel producing country. From Dhaka's Hazrat Shahjalal International Airport the fuel was directly transported by road to the plant in Rooppur in Pabna district. The Russian-made fuel was carried in a special convoy amid tight security. Regular vehicular movement along the Dhaka-Ishwardi-Rooppur road was suspended to make way for the fuel's safe journey to its final destination successfully. Another such shipment of uranium fuel will be arriving shortly before the official handing over of the fuel to the plant's authorities on September 5. Prime Minister Sheikh Hasina of Bangladesh from her official residence Ganobhavan and Russian President Vladimir Putin from his Kremlin office are expected to be present virtually to mark the historic occasion when the 2400-MW Rooppur Power Plant will officially become a nuclear power facility. This has been termed as Graduation Ceremony due to its transformation from just a plant to a facility.

With the handing over of the fuel Bangladesh will become the 33rd country of the world to have nuclear power-producing facility. The Rooppur plant having two units (1200 MW each) is the country's first. The project is worth \$12.65bn, almost 90 percent of it being financed by Russia. The loan is repayable within 28 years with a 10-year grace period. The plant, considered as one of the cherished mega projects of Prime Minister Sheikh Hasina, is being built in collaboration with state-owned Russian atomic company Rosatom.

The project was first conceived in 1961 when Bangladesh was the eastern wing of Pakistan. But it made no progress during the Pakistani period as no sincere efforts were made by them. It was taken up seriously by Father of the Nation Bangabandhu Sheikh Mujibur Rahman after Bangladesh's independence in 1971. The project again plunged into an uncertainty after Bangabandhu was assassinated in 1975. This left the task of fulfilling the dream of having the country's nuclear power facility to Sheikh Hasina, the daughter of Bangabandhu. After coming to power in 2009 Hasina

took up the project with a determined intention to make it a reality.

The country's first nuclear power plant is being built in Rooppur on the east side of the river Padma, near Ishwardi in the Pabna district of Bangladesh.

The project is being implemented by the Bangladesh Atomic Energy Commission (BAEC), under the guidance of the science and technology ministry of the government of Bangladesh. The nuclear power plant (NPP) will include two units, Rooppur Unit-1 and Rooppur Unit-2, each with a capacity of 1.2GW.

The foundation stone for the Rooppur NPP was laid in October 2013 and the first concrete for the main construction phase was poured in November 2017. The main construction of Unit-2 began in July 2018, with the pouring of the first concrete.

The installation of the reactor pressure vessel for Unit-2 was completed in October 2022 and the outside containment concreting for Rooppur Unit-1 was completed in March 2023.

The two units are scheduled for commissioning in 2024 and 2025.

The Rooppur NPP will use cutting-edge technologies and will follow the safety guidelines of the International Atomic Energy Agency (IAEA). The IAEA supported Bangladesh in the assessment of sites and the development of a radioactive waste management system for its nuclear power program.

The project will provide low-cost electricity to more 1.5 million families and create new jobs in Bangladesh. The country's power production currently exceeds 24GW a year. The new plant will increase production and enable Bangladesh to achieve energy independence.

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