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ANDRITZ Hydro received a contract for the supply and installation of the entire electro-mechanical equipment for Kiru hydropower plant.

India – The Kiru hydroelectric power project is a run-of-river scheme on the river Chenab near the village Patharnakki in the Kishtwar District of Jammu & Kashmir UT, about 42 km from the city of Kishtwar.

The hydropower project will include the construction of a concrete gravity dam with a height of 135 m and an underground powerhouse located on the left bank of the river that will comprise four vertical Francis turbines with a capacity of 156 MW each. The project will provide much needed power for the grid in northern India. The design of the project is in compliance with the requirements of the Indus Water Treaty 1960.

After a long period of evaluation, the environmental clearance was issued by the Ministry of Environment Forests and Climate Change (MoEF&CC) in 2016. The foundation stone for the Kiru hydropower plant was laid by Hon'ble Prime Minister Shri Narendra Modi in 2019. Shortly afterwards, Cabinet Committee on Economic Affairs also approved the investment sanction for construction of the 624-MW Kiru project by Chenab Valley Power Projects Private Limited (CVPPPL), a joint venture company amongst NHPC, Jammu & Kashmir State Power Development Corporation (JKSPDC) and PTC.

ANDRITZ Hydro received an order from Indian utility company Chenab Valley

The run-of-river scheme on the river Chenab will provide much needed power for the grid in northern India.

TECHNICAL DETAILS

Kiru:

Total output: 624 MW
Scope output: 4 × 156 MW
Head: 118 m
Voltage: 13.8 kV
Speed: 166.57 rpm
Runner diameter: 4,100 mm

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Power Projects (P) LTD. to supply the complete electro-mechanical equipment. The order comprises the supply, design, manufacturing, erection, testing and commissioning of all four units, including turbines and generators, auxiliary electrical and mechanical equipment, as well as 400 kV GIS and 400 kV outdoor pothead yard equipment. This project will be executed by ANDRITZ Hydro's Indian subsidiary with its state-of-the-art manufacturing facilities in Mandideep (near Bhopal) and Prithla (near Faridabad).

Kiru will address energy deficiencies in the northern part of India while reducing dependence on fossil-fuelled energy sources. Electricity from Kiru will also enable industrial development while simultaneously improving the education, medical, and road transportation network in the region. Local small-scale and cottage industries will also benefit, creating revenue streams and hence providing more jobs for more people.

By securing this prestigious contract, ANDRITZ Hydro has yet again confirmed its position as a leading player in the hydropower market in India. We are happy to support the UT of Jammu and Kashmir to develop hydropower as a means to reach ambitious 2030 goals to significantly increase the use of renewable energy resources.

AUTHORS

Shashank Golhani
Mohit Gupta
hydronews@andritz.com

Electricity from Kiru will enable the industrial development in the region.

TO KNOW:

India's hydropower scenario

India's currently installed, 46 GW generation base is growing incrementally. Its goal to achieve 175 GW of renewables by 2021 will now include hydropower too.

By adding much-needed reactive power to the national grid, hydropower such as pumped storage will also play a major role mitigating grid stability risks associated with large volumes of variable output renewables.

Large projects are planned in the northern region of the country, notably Ratle (850 MW) and Kwar (540 MW). Additionally, India's north-eastern region is endowed with a rich hydro potential. Arunachal Pradesh, which shares its northern border with China, has a hydro potential of 50,328 MW. To begin harnessing this, state-owned utility NHPC Ltd. has already begun tendering activities for the 2,880 MW Dibang hydropower project.

The government has also recently introduced some new concepts to the energy sector, such as Round-the-Clock (RTC) renewables, but this is viable only when storage is available. In such a scenario, pumped storage plants will be the most applicable long-term solution.