

Issyk 1

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Kazakhstan – Project company Hydro Power LLP has awarded ANDRITZ HYDRO an order for the small hydropower plant Issyk 1 in Kazakhstan.

The powerhouse of the new Issyk 1 hydropower plant will be located about 100 km east of the city of Almaty upstream of the existing site of HPP Issyk 2, which was successfully executed by ANDRITZ HYDRO in 2008.

ANDRITZ HYDRO's scope of supply includes the entire "from water-to-wire" package for the complete electromechanical equipment. This includes one horizontal Compact Francis turbine, the hydraulic power unit, one 5.7 MVA synchronous generator, 10 kV switchgear, and the entire electrical and control equipment.

Transportation to the site, supervision of installation, and commissioning complete the extent of the contract.

Start of commercial operations for HPP Issyk 1 is scheduled for summer 2017. The order for the Issyk 1 hydropower plant represents an important success for Compact Hydro in the Kazakh hydropower market.

TECHNICAL DATA

Output	5.3 MW
Net Head	144.5 m
Speed	1,000 rpm
Runner diameter	715 mm



Serra da Mesa

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Brazil – A contract for the modernization of the excitation system at the Serra da Mesa hydropower plant in Brazil was awarded to ANDRITZ HYDRO by CPFL Energia and Furnas.

This hydroelectric power plant has an installed capacity of 1,275 MW and is situated on the Tocantins River near Minaçu, in Goiás state. HPP Serra da

Mesa creates, at 54.4 million m³, the largest reservoir by volume in Brazil. It is indispensable to the interconnected Brazilian energy system.

The contractual scope of supply comprises design, supply, delivery, and commissioning of three excitation systems, including the new HIPASE-E regulators with redundancy. Commissioning of the first unit took place at the end of 2016.

This order represents an important excitation reference for the new HIPASE platform developed by ANDRITZ HYDRO.

TECHNICAL DATA

Output	3 × 425 MW
Voltage	15 kV
Head	117.2 m
Speed	120 rpm
Runner diameter	6,000 mm
Av. annual production	6,300 GWh