



Pakistan

Islamic Republic of Pakistan

Teamwork for Impressive Hydropower Results

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Pakistan suffered a slow economic growth and has implemented a low cost power generation plan to harness its hydropower resources. Pakistan has an astounding annual hydropower potential of about 200,000 GWh, which is only explored by about 16%, but more than 30% of the electricity demand is covered by hydropower generation.

ANDRITZ HYDRO in Pakistan

ANDRITZ HYDRO has already executed equipment deliveries to Pakistan back in the 1940s (HPP Rasul). Through the years, ANDRITZ HYDRO installed or modernized more than 50 units with a total capacity of about 4.000 MW, which is more than half of the country's total capacity.

HPP Tarbela Dam: In 1978, ANDRITZ HYDRO received a contract from Pakistan's Water and Power Development Authority (WAPDA) for the supply of turbines and generators for the 3,478 MW Tarbela Power Station. Ten years later, ANDRITZ HYDRO delivered mechanical equipment, penstocks – the world largest penstocks listed in the Guinness Book of World Records – and gates for further units. 2009 ANDRITZ HYDRO was assigned to modernize governors of four units. Since 2014, ANDRITZ HYDRO refurbished the static excitation systems of eight units (out of 14), which will be commissioned sequentially, starting in 2016.

HPP Allai Khwar: ANDRITZ HYDRO supplied to WAPDA the complete electro-mechanical equipment and services for two 60.5 MW Pelton turbines, including generators and auxiliary systems. In March 2013, the hydropower station was officially inaugurated.

HPP Duber Khwar: ANDRITZ HYDRO's scope of supply included two 65 MW Pelton turbines, generators and auxiliary systems. In March 2014, the plant was successfully handed over to WAPDA.

Golen Gol: In 2014, WAPDA awarded a contract to ANDRITZ HYDRO for the manufacturing and installation of three Pelton turbine-generator units and the electro-mechanical equipment for the Golen Gol hydropower plant. The start of commercial operation is scheduled for 2016.

These projects underline the excellent position of ANDRITZ HYDRO in Pakistan. ■

› Manufacturing of Pelton runner for HPP Duber Khwar



NEPAL FACTS

185 Mio.
93.6%
7,250 MW
2,837 MW
34%
32,350 GWh
240,000 GWh

Population
Access to electricity
Installed hydro capacity
Hydro capacity under construction
Share of generation from hydropower
Hydro generation
Technically feasible hydro generation potential

Hydropower & Dams World Atlas 2015 and The World Bank