

Shardarinskaya

First major contract for ANDRITZ HYDRO in Kazakhstan

In December 2013 ANDRITZ HYDRO signed a contract with JSC "Shardarinskaya HPP", subsidiary of the state-owned Kazakh utility company Samruk Energy, to upgrade the electromechanical equipment at the Shardarinskaya hydropower plant, which was originally commissioned in 1967.

HPP Shardarinskaya is located on the Syr-Darya River in southern Kazakhstan close to the border of Uzbekistan and Kyrgyzstan, where the mountains fade into the wide planes around the Aral Sea. The Shardara reservoir covers an area of 900 km² with a total storage volume of 5.2 km³.

The Shardara hydropower system is of utmost importance to secure stable power supplies to the south of Kazakhstan and it is vital for the irrigation of the same area. In December 2012, a loan agreement was signed between JSC Shardarinskaya and the European Bank for Reconstruction and Development (EBRD) to finance the project. As a result the relevant works were tendered in a two-stage bidding process. After a technical and commercial clarification

meeting ANDRITZ HYDRO won the project in the second stage. In December 2013 the contract came into force.

ANDRITZ HYDRO will replace four Kaplan turbines and extend the runner diameter from 5 m to 5.3 m. The power output will be increased by around 20% from the current 26 MW to 31.5 MW per unit. Furthermore, the order includes the supply of new generators and new equipment for automation, control and protection as well as the replacement of the entire electrical power system and other elements of the auxiliary installations within the powerhouse.

This is the first major contract in Central Asia, a region with great expectations of further business opportunities in the near future, and a milestone for ANDRITZ HYDRO.

During Soviet times, large hydropower plants were built in Central Asia, which now need rehabilitation. The positive economic development of the region during recent years has also contributed to making rehabilitation financially feasible.



▲ Contract signing

The challenge for ANDRITZ HYDRO will be to implement an efficient local set up within a short period of time. Site mobilization is scheduled for October 2014 and dismantling of the first unit will start within the year after contract signature. Completion of the refurbished hydropower plant is scheduled for June 2017.

This project will help clients and business partners in the region to recognize the reliability of the ANDRITZ HYDRO equipment and services.

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TECHNICAL DATA

Output: 4 x 31.5 MW/35 MVA

Voltage: 10.5 kV

Head: 22 m

Speed: 115.4 rpm

Runner diameter: 5,300 mm

▼ Powerhouse

