

Mexico San Rafael



In September 2013, ANDRITZ HYDRO Spain received an order from Acciona Ingeniería S.A.U. to supply three hydraulic Kaplan turbines for the newly constructed San Rafael hydropower plant in Mexico.

HPP San Rafael will be located on the Santiago River, near the town of San Rafael in the Nayarit province of western Mexico. ANDRITZ HYDRO Spain is responsible for the supply of turbines, generators and associated equipment, including detailed engineering, procurement, manufacturing, transportation to site, erection and commissioning.

The manufacturing and preassembly of the main turbine components will be carried out at the ANDRITZ HYDRO workshop in Algete, Spain. An exception is the spiral case, which will be produced at the ANDRITZ HYDRO workshop in Morelia, Mexico. Indar, based in Guipúzcoa, Spain, is in charge of the generator supply. Currently, the manufacturing of the main components is in progress.

HPP San Rafael will be handed over to the customer in July 2015.

Ricardo Castillo
Phone: +34 914251618
ricardo.castillo@andritz.com

TECHNICAL DATA

Output: 3 x 8.54 MW
Head: 15 m
Speed: 180 rpm
Runner diameter: 3,100 mm

Turkey Cileklitepe

IC İçtas Enerji awarded a contract for the supply of electromechanical equipment for the Cileklitepe hydropower plant in Turkey to a consortium of ANDRITZ HYDRO France and Turkey, following the development of HPP Girlekik Mercan (13 MW) in 2007 and HPP Yukari Mercan (15 MW) in 2003.

HPP Cileklitepe is located in the province of Espiye, about 40 km south of the town of Ericek, in the eastern Black Sea region of Turkey. To produce energy from 2 x 12.4 MW vertical four jets Pelton turbines, the hydropower plant will use the water of the

Kavaduva River. The waterway consists of a 3.2 km canal, a 2.3 km tunnel of 3 m in diameter and it ends in a 1,000 m long penstock of 1.25 m in diameter. With this contract IC İçtas Enerji, one of the major Turkish hydropower companies, confirms its confidence in ANDRITZ HYDRO's efficient and reliable equipment.

Dominique Leleux
Phone: +33 (4) 75230 508
dominique.leleux@andritz.com

TECHNICAL DATA

Output: 2 x 12.44 MW
Head: 456.33 m
Speed: 750 rpm
Runner diameter: 1,150 mm

Switzerland Russein



In 2013 Axpo AG awarded a contract to ANDRITZ HYDRO for the supply of electromechanical equipment for HPP Russein.

After 67 years of operation HPP Russein (built in 1946/47) will be extended. The hydropower plant is located between the towns of Disentis and Sedrun in the canton of Grisons, in southeastern Switzerland. The Russein creek runs on the left-hand side of the Rhine River. Between the dam reservoir Barcuns and the electrical power station the creek's resources are used to produce energy.

Axpo Hydro Surselva AG, together with the communities of Sumvig and Disentis as well as the canton of Grisons are involved in this project. ANDRITZ HYDRO's scope of supply

includes the delivery, erection and commissioning of two 12.1 MW vertical six-jet Pelton turbines, including turbine governor, cooling water system, bifurcation pipe, DN800/PN50 ball valve (Adams) and a 13.5 MVA generator. The extension will increase the water flow from 4m³/s to 7m³/s. Furthermore, the height of the existing dam, located at Barcuns, shall be elevated by 5 m and the penstock will be renewed at the same time. After realization of this project the output will be increased from 11.6 MW to 24.2 MW.

This project represents a further step in the implementation of renewable energy supply. About 17,000 households will benefit from renewable energy after the inauguration, due in spring 2015.

Ralph Zwingli
Phone: +41 (71) 929 36 44
ralph.zwingli@andritz.com

TECHNICAL DATA

Output: 2 x 12.1 MW/2 x 13.5 MVA
Voltage: 6.3 kV
Head: 392 m
Speed: 750 rpm
Runner diameter: 1,045 mm