KAWARSI II, INDIA

Challenging terrain

In February 2017, ANDRITZ Hydro signed a contract with Jagdambey Hydro Projects LLP for the complete electro-mechanical equipment on a "from water-to-wire" basis for the Kawarsi II hydropower project. Commissioning of the project in Himachal Pradesh in northern India has now been completed.

The contract included design, engineering, manufacturing, testing and installation of two turbines. In addition, electrical and mechanical balance of plant equipment, 66 kV switchyard, generator, transformer and auxiliary equipment also formed part of the scope of supply.

This is the first five-jet vertical Pelton project from Compact Hydro India. Located in very difficult terrain, the weather conditions can be hard with winter temperatures of about -5 °C. There are also frequent landslides during monsoon season, often blocking the roads. Given the challenging road conditions, a major difficulty during execution was transportation of oversized cargos to the site.

Our highly motivated team collaborated brilliantly with all involved parties, showcasing the excellent work of our engineers and allowing the project to be completed on time and as per the contract terms.

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TECHNICAL DETAILS

Total Output: 15 MW
Scope output: 2 × 7.5 MW
Head: 304.31 m
Speed: 600 rpm
Runner diameter: 1,150 mm

KARGALY, KAZAKHSTAN

Investment into hydropower

After earlier successes in Kazakhstan with projects such as Issyk 2 in 2008 and Issyk 1 in 2016, ANDRITZ Hydro has now been awarded another contract in Central Asia. ANDRITZ Hydro received a contract for the supply of electro-mechanical equipment for the 2.97 MW Kargaly hydropower plant, located some 2 hours' drive southwest of the former Kazakh capital Almaty. Although the project owner has previously made successful investments in wind power, Kargaly is the company's first waterpower project.

The scope of supply for ANDRITZ Hydro comprises the complete electro-mechanical package, including a horizontal Francis turbine, the hydraulic power unit, synchronous generator and the main inlet valve. Along with the turbine control, automation and visualization systems, the supervision of installation and the commissioning will complete the scope of contract. The installation and commissioning of the turbine is planned for mid-2021.

Central Asia is an important and emerging hydropower market. With an office in Almaty as a regional hub, ANDRITZ Hydro has a finger on the pulse of regional hydropower development.

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TECHNICAL DETAILS

Total output: 2.97 MW
Scope output: 1 × 2.97 MW
Head: 92.6 m
Speed: 750 rpm
Runner diameter: 737 mm

Example of a horizontal Francis turbine