

# Aldeadávila

Six new Francis runners for a Spanish hydropower plant

**A**NDRITZ HYDRO has signed a contract with Iberdrola Generación, S.A.U. for the supply of six new Francis runners for the Aldeadávila hydropower plant in Spain.

With a total of eight units and an installed capacity of more than 1,200 MW, HPP Aldeadávila is the largest hydropower plant in Spain and one of the

t View of turbine components



largest in Southwestern Europe. It is located on the Douro river basin at the border between Spain and Portugal. Due to the importance of HPP Aldeadávila, Iberdrola Generación, S.A.U. decided to extend its lifetime by installing new runners from ANDRITZ HYDRO. Reference projects, especially those in partial load operation, played a significant role in awarding the contract to ANDRITZ HYDRO and the successful execution of HPP San Pedro II project.

As a fundamental element in the regulation of the Spanish national grid, the units operate over a very wide operation range, alternating from very low partial load to full load on a frequent basis and exposing the units to severe operational conditions. The extensive range allows the plant to stabilize the grid and compensate variations in both generation and demand.

The existing Francis runners have been operating for more than 50 years, accumulating more than 200,000 operation hours per unit. They will now be replaced by improved runners as part of a major revision. The new runners will be designed and manufactured by ANDRITZ HYDRO Germany, the hydraulic design and homologous model test will be carried out by ANDRITZ HYDRO Canada. After manufacturing, the first runner will be delivered in 2016 and the first unit will start operation in 2017.

This rehabilitation will allow HPP Aldeadávila to provide sustainable green energy for the Spanish market for many years. ANDRITZ HYDRO is strengthening its presence in the Spanish market with the execution of this project.

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s View of the reservoir from control building

## TECHNICAL DATA

Output: 140 MW
Head: 140 m
Speed: 187.5 rpm
Runner diameter: 4,000 mm

