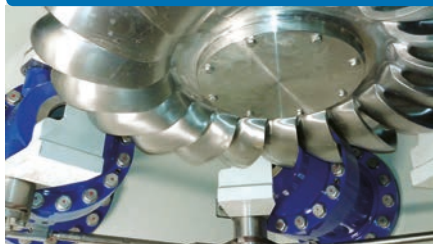


## France, St. Christophe, Reallon, Charmaix



By Rudy Yvrard  
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In December 2015, ANDRITZ HYDRO successfully commissioned two Mini Compact hydropower plants in France: HPP Saint Christophe and HPP Reallon. Both hydropower plants are located in the French Alps and are owned by SERHY Ingénierie, a company very active in hydropower development.

The Saint Christophe hydropower plant required rehabilitation of one existing unit and the installation of an additional horizontal Pelton turbine. HPP Reallon, equipped with a six-jet Pelton turbine, was a new plant with integration constraints since it is located in the middle of a village. Both projects were realized simultaneously and put into operation in less than one year. ANDRITZ HYDRO provided turbines,

generators, inlet valves, and a high pressure unit (HPU).

The long-term and successful cooperation between SERHY Ingénierie and ANDRITZ HYDRO will also continue in 2016. A new Mini Compact contract for the supply of a five-jet, vertical Pelton turbine for HPP Charmaix was signed at the beginning of the year 2016.

Commissioning of all projects is scheduled for the end of the same year. ■

### TECHNICAL DATA

#### St. Christophe:

Output	2.31 MW
Head	400 m
Speed	1,000 rpm
Runner diameter	790 mm

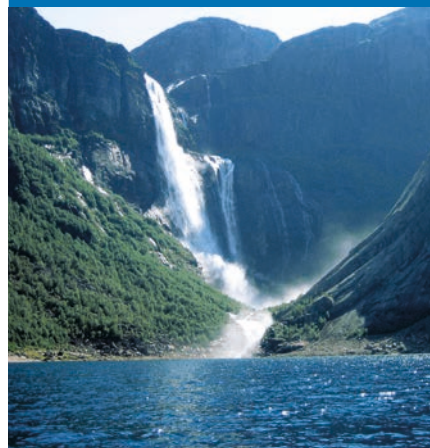
#### Reallon:

Output	2.72 MW
Head	154 m
Speed	600 rpm
Runner diameter	820 mm

#### Charmaix:

Output	1.51 MW
Head	155.6 m
Speed	750 rpm
Runner diameter	670 mm

## Norway, Ringedalen



By Kristian Glemmestad  
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Statkraft has awarded a contract to ANDRITZ HYDRO for the supply of the electro- and hydro-mechanical equipment for the Ringedalen hydropower plant in Norway.

HPP Ringedalen is located in the municipality of Odda in Hordaland County and will utilize the head between lakes Mosdalsvatnet and Ringedalsvatnet, which is the reservoir of the existing Oksla Power Plant.

The scope of supply for ANDRITZ HYDRO includes two Pelton turbine units with associated generators and a total combined capacity of 23 MW. ANDRITZ HYDRO Germany in cooperation with ANDRITZ HYDRO Norway will provide the turbine equipment, whereas ANDRITZ HYDRO Bhopal, India will deliver two 13.5 MVA generators.

Completion of HPP Ringedalen is scheduled for 2017, providing then an average annual production of about 60 GWh to supply about 3,000 Norwegian households with electricity. ■

### TECHNICAL DATA

Output	2 × 11.5 MW
Head	511.7 m
Speed	750 rpm
Runner diameter	1,230 mm
Av. annual generation	60 GWh

## Ecuador, Due

By Sergio Contreras  
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After the successful project execution of the 2 × 9 MW Calope hydropower plant in Ecuador (see Hydro News 08) in 2006, Hidroalto Generación De Energía S.A. awarded ANDRITZ HYDRO a new contract for the supply of electro-mechanical equipment for the Due hydropower plant in 2015.

The project is located on the Due River in the Province of Sucumbios, Ecuador. ANDRITZ HYDRO's scope of supply comprises two horizontal Francis turbines with an output of 25 MW each, as well as generators, inlet butterfly valves (DN2200), pressure relief valves (DN1100), hydraulic power units, cooling system, control and au-

tomation, MV switchgear, and electrical auxiliaries. This project is being executed by an international team from ANDRITZ HYDRO France delivering the turbines, ANDRITZ HYDRO India supplying the generators, and ANDRITZ HYDRO Colombia responsible for control and electrical equipment.

This contract confirms again the confidence this customer places in ANDRITZ HYDRO and strengthens its position in the Ecuadorian market. Final commissioning is expected by mid-2017. ■

### TECHNICAL DATA

Output	2 × 25 MW 2 × 28 MVA
Head	111.12 m
Speed	450 rpm
Runner diameter	1,681 mm