Making hydro a real longseller: Voith to modernize Italian hydropower plants that have been on the grid for generations

Heidenheim, Germany/Milano, Italy: Voith Hydro has been awarded to overhaul three hydro power plants in Italy till the mid of 2016. The value of the three awards sums up to a total of around 16 million Euros. The modernization projects will safeguard 13 megawatts of renewable capacity to the Italian grid for many decades in the future.

Modernization of complete electromechanical equipment

For ACEA S.p.A., Voith will modernize the plant “Alessandro Volta” in Castel Madama, Rome province, which went to the grid first in 1915. Voith will supply the complete equipment for the two power generating units (4.5 and 2.7 megawatts respectively): Francis spiral turbines, generators, the respective governors, automation and balance of plant.

Two modernization projects have been awarded by BKW Italia S.p.A., member of the BKW Group, one of Switzerland’s largest energy companies: Pompegno, in the province of Brescia and Pont St. Martin in the province of Aosta. Pompegno project will have its two vertical Kaplan-turbines, of which the first was installed in 1927 (1.1 megawatt each) overhauled by Voith. Moreover the company will supply new according generators, hydraulic governors, the automation and electrical balance of plant. For the Pont St. Martin plant, Voith will replace the four horizontal Francis units, generating 2.53 megawatts of electricity since 1932, with one new vertical seven-bladed Kaplan turbine (3 megawatts) unit and one horizontal Francis machine (600 kilowatts). Again, Voith’s scope of supply includes turbines, generators, hydraulic governors, the automation and electrical balance of plant. The revamping projects represent a further strengthening of BKW’s hydro power commitment in Italy.
Potential for Europe’s future energy supply

It is the outstanding longevity of the plants that is the core of hydro’s remarkable long term profitability and makes hydro stand out as a longseller for its investors. Modernization and overhaul will allow these plants to generate electricity from renewable sources for decades again. A great asset is the possibility to use the already existing civil structures: practically no new infrastructure is needed. This keeps low both environmental impact and need for new investment.

Hydroelectricity has powered not only Italian, but also overall European economy and its industrial rise since the turn from the 19th to the 20th century. Through modernization this fleet can continue to supply electricity for the future. As a recent survey highlights, 90 percent of the European Energy experts think modernization and expansion of existing hydro schemes should be the priority for politics in promoting hydro power adequately. (More about the survey: www.wasserkraft.info)

The Importance of Hydropower

Hydropower is the largest, oldest and also most reliable form of renewable energy generation. Worldwide it makes an indispensable contribution to stable power supplies and hence to economic and social development – both in industrial countries and in emerging markets. At the same time, hydropower significantly contributes to climate-protecting energy generation. Voith has been a leading supplier of this technology since the early beginning, and continuously develops it further.

About the Company

Voith sets standards in the markets of energy, oil & gas, paper, raw materials and transport & automotive. Founded in 1867, Voith today has more than 39,000 employees, sales of €5.3 billion and locations in more than 50 countries, making it one of the largest family-owned companies in Europe.

Pictures/Captions

P1000775: Outside view of Castel Madama hydropower plant.

IMG_1731: Will be revamped for many decades of operation: the power units of Castel Madama.

(Pictures: Voith)