

# Bjurfors Nedre and Bjurfors Övre

Modernization of two units in Sweden

**ANDRITZ HYDRO received an order from Statkraft Sverige AB for upgrading of unit #3 at HPP Bjurfors Nedre and of unit #3 at HPP Bjurfors Övre in Sweden.**

Statkraft Sverige AB owns and operates more than 100 hydropower plants in Norway, Sweden, Germany and Finland. A considerable number of the hydropower plants in Sweden were built between 1940 and 1950 and now require rehabilitation as well as an increase in efficiency.

HPP Bjurfors Nedre was originally commissioned in 1961. As part of the modernization program, ANDRITZ HYDRO will refurbish the Kaplan turbine at unit #3 and equip it with a new runner (diameter of 4,700 mm). As a result its output will be increased from 28 MW to 32 MW.

HPP Bjurfors Nedre machine hall



s HPP Bjurfors Övre machine hall



s Bjurfors Nedre hydropower plant

Also in 1961 HPP Bjurfors Övre was commissioned. Here ANDRITZ HYDRO's scope of delivery includes the refurbishment of one Kaplan turbine at unit #3 by equipping it with a new runner (diameter of 4,880 mm). Output from this unit will be increased from 17 MW to 20 MW.

Additionally, ANDRITZ HYDRO will supply a fully homologous model test, an oil-free Kaplan runner, new hydraulic oil equipment, full rehabilitation / modification of the distributor as well as the painting of all dismantled parts and waterways for both hydropower projects.

The majority of the existing turbines in Sweden were originally built by KMW and NOHAB and some of the current generators were supplied by ELIN, ASEA and General Electric.

Today all of these companies are part of ANDRITZ HYDRO and over the last few years ANDRITZ HYDRO has successfully modernized one to two units (turbines and generators) per year.

Both hydropower projects will be executed by ANDRITZ HYDRO Sweden, which is located in Nälden, only 400 km from HPP Bjurfors Nedre and HPP Bjurfors Övre. Our ANDRITZ HYDRO location in Finland will perform the model test for both projects. The HPP Bjurfors Nedre upgrade is planned to be completed by the end of 2017. HPP Bjurfors Övre will be completed in 2016.

Stefan Olsson  
Phone: +46 (640) 17726  
stefan.olsson@andritz.com

## TECHNICAL DATA

### Bjurfors Nedre:

Output: 32 MW  
Head: 21.8 m  
Speed: 125 rpm  
Runner diameter: 4,770 mm

### Bjurfors Övre:

Output: 20 MW  
Head: 13.5 m  
Speed: 107 rpm  
Runner diameter: 4,880 mm

