▲ Aerial view of hydropower plant

▲ Powerhouse

Safe Harbor

First hydropower project on the Susquehanna River in the USA

In September 2013, Safe Harbor Water Power Corp. assigned a contract to ANDRITZ HYDRO for the refurbishment of two generators, which are greater than 80 years old, at the Safe Harbor hydropower plant in Pennsylvania, USA.

Power generated from the Safe Harbor project is used primarily to meet peak demands for electricity in the grid and to operate the railroad system in the area. Continuous operation occurs when the river flow equals or exceeds the plant's maximum water-handling capacity of 3,115 m^3/s.

HPP Safe Harbor is located on the Susquehanna River, which starts in Lake Otsego, New York, and flows through the entire state of Pennsylvania into the Atlantic Ocean via the Chesapeake Bay in Maryland. 448 km in length, the Susquehanna River is one of the largest rivers in the northeastern US.

Throughout history, the Safe Harbor area has always played an important role in the lives of those living nearby. Many intriguing reminders have been left of these early inhabitants. Petroglyphs (inscriptions and carvings) are still visible on the Big and Little Indian rocks in the river, about half a mile below the Safe Harbor dam.

This is the first large scale hydro service contract for ANDRITZ HYDRO on the Susquehanna River System. The generator modernizations will be completed on two of the 14 units in the powerhouse. ANDRITZ HYDRO will supply new generator stator frames, cores and windings, new rotor spiders and rims, new packing boxes, refurbished rotor poles and bearings, complete unit disassembly, installation and the reassembly.

Furthermore, ANDRITZ HYDRO is the original equipment manufacturer of these units. ANDRITZ HYDRO Canada provides the best value for the customer given their knowledge of the original design. Safe Harbor Water Power Corp's goal is to extend the life of unit 3 and unit 7. ANDRITZ HYDRO will assure a preeminent refurbishment.

The award of this project shall also give a substantial reference to ANDRITZ HYDRO for future work on the Susquehanna River System.

John Parker
Phone: +1 (704) 731 8878
john.parker@andritz.com

TECHNICAL DATA
Output: 2 x 36 MVA
Voltage: 13.8 kV
Speed: 109 rpm
Stator diameter: 7,925 mm