

Name of Plant: Stiles Oconto Electric

**Year in Service:** Since around 1947

**Horsepower of Turbine:** Two 500 kW vertical shaft turbines

**Equipment Used:** Two 500 kW vertical shaft turbines that use

the Lignum-Vitae bearing blocks as the lower guide bearings.

Water Conditions: River water is used for lubrication and cooling

Bearings Used: Lignum-Vitae was and still is the bearing of choice

**Longevity of Bearing:** Lignum-Vitae used for decades

## **Information of Note:**

The old bearing blocks were in use for over 20 years. Our Stiles Hydro project is about 65 years old and it has two 500 kW vertical shaft turbines that use the Lignum-Vitae bearing blocks as the lower guide bearings. River water is used for lubrication and cooling. The first picture shows the old blocks attached to the steel backing plates. The blocks with backing plates attached are held to the shaft by adjusting the jacking screws against the backing plates. The blocks purchased from you were cut into slabs such that the end grain of each piece faces the shaft. Waterproof epoxy and screws hold the blocks to the backing plates. Four blocks are positioned around the shaft 90 degrees apart.