



Nooksack Falls Hydroelectric Project

Location and Drainage Basin

Nooksack Falls Project is located on the North Fork of the Nooksack River, about one-half mile below Nooksack Falls, in Whatcom County, Washington. The river above the project drains 96 square miles, with the source of the river rising in the Mt. Baker area 15 miles from the powerhouse intake.

Construction

The project was placed in operation in 1906.

Intake Dam

The intake dam is of a plank type construction resting on a concrete toe. The distance from intake to powerhouse is approximately 2622 feet. The water channel from intake to powerhouse is novel, in that construction is of four different type sections. The first section consists of 467 feet of concrete flume, which leads into a second section of 566 feet of wood stave pipe. Following are 1,025 feet of 7 to 8 foot diameter unlined tunnel. From the tunnel to powerhouse is a steel penstock varying from 6 feet diameter at the tunnel to a 5-foot diameter at the powerhouse.

Turbines

One Pelton type impulse horizontal turbine develops 2,547 horsepower under an effective head of 195 feet.

Generator

The generator is a 3-phase, 60 cycle, 1,500 kw Westinghouse. Excitation is by separate excitors driven by a motor or belt driven from the water wheel shaft.

Transmission Lines

Power from the project is transmitted by a 55,000 volt line from Nooksack to Bellingham, Washington.

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