

The Bonneville Lock and Dam Fact Sheet

Bonneville Dam is located 145 river miles from the mouth of the Columbia River and approximately 40 miles east of Portland, Oregon. It was named for Captain Benjamin Bonneville, a soldier, trader, and explorer. The following lists technical data about Bonneville Lock and Dam to help you compare it to other facilities.



Captain Benjamin Bonneville
1796 - 1878

Location Map Bonneville Dam



Comparing The Powerhouses

	First Powerhouse	Second Powerhouse
Construction:	1933 - 1938 (Phase I) 1938 - 1942 (Phase II) 1940 - 1943 (Phase III)	1972 - 1974 (Preparation) 1974 - 1982
Turbine Generators:	1 = 43,200 KW (1938) 1 = 51,000 KW (Upgraded 1985) 8 = 54,000 KW (1940's)	2 = 13,100 KW 8 = 66,500 KW
Turbine/ Generator Speed:	75.0 rpm	69.2 rpm
Total Rated Capacity:	526,200 KW	558,000 KW
Generator Voltage:	13,800 volts	13,800 volts
Transmission Voltage:	115,000 volts & 230,000 volts	230,000 volts
Average Turbine Water Discharge:	13,000 cubic feet/second** 96,667 gallons/second**	16,000 cubic feet/second 230,649 gallons/second
Cost of Each Facility:	\$88.4 million ¹	\$664.0 million ²

Total Generation Capacity of Both Facilities: 1,084.2 Megawatts or 1,084,200 Kilowatts

** This is enough water to fill an average, three bedroom home in one second.

¹ Included Powerhouse I, fish ladders, spillway, and Navigation Lock construction – 1933-1943.

² Included Powerhouse II, visitor complex, and fish facilities construction – 1972-1982.



**US Army Corps
of Engineers**
Portland District

Turbine Tidbits

We use a special type of turbine called a Kaplan Adjustable Turbine. Many dams use a paddle wheel type of turbine. Ours looks like a propeller with adjustable pitch blades.

