



Chippewa Reservoir FERC PROJECT #8286

CONSTRUCTION AND KEY DATES

Owner..... Northern States Power
 Lac Courte Oreille Band of Lake Superior Ojibwe
 Lessee... Flambeau Hydro, LLC
 Date of Lease..... 2011
 Date Originally Built..... 1923
 Online Date..... 1986
 Exemption Effective Date..... September 28, 1984
 License Expiration Date..... Exempt

HYDROLOGIC DATA

River..... Chippewa River
 County..... Sawyer, WI
 Nearest City..... Winter, WI
 Drainage Area Square Miles..... 763
 Reservoir Acres..... 15,800
 Storage Volume Acre Feet..... 223,000
 100-Year Flood CFS..... 7,000
 Probable Maximum Flood CFS..... 56,900

OPERATIONAL DATA

Normal Headwater Elevation..... 1313
 Minimum Headwater Elevation..... 1308
 Maximum Headwater Elevation..... 1313
 Normal Operating Head..... 34 ft.
 Number of Units..... 3
 Maximum Generating Capacity..... 3,100 KW
 Annual Generation..... 9,034 MWH
 Hazard Rating..... High
 Run-Of-River Minimum Flow..... 250 CFS

STRUCTURAL DATA

Dam Type..... Concrete Gravity
 Overall Length and Height..... 1,290 ft. long x 45 ft. high
 Penstock..... 2 – 96 Inch Diameter, 300 ft. long
 Spillway Description...
 80 ft. long reinforced concrete, 2 radial gates

PLANT DATA

Turbine Manufacturer.....
 Turbine Identification:
 Unit #1..... 34 in. Francis
 Unit #2..... 70.5 in. Francis
 Unit #3..... 70.5 in. Francis
 Turbine CFS @ 100% Gate:
 Unit #1..... 100
 Unit #2..... No Data
 Unit #3..... No Data
 Generator Identification:
 Unit #1..... Siemens - Allis
 Unit #2..... Siemens - Allis
 Unit #3..... Siemens - Allis
 Generator Nameplate Rating KW:
 Unit #1..... 250
 Unit #2..... 1600
 Unit #3..... 1600
 Generator Horsepower:
 Unit #1..... No Data
 Unit #2..... No Data
 Unit #3..... No Data
 Generator Speed RPM:
 Unit #1..... 1215
 Unit #2..... 906
 Unit #3..... 906
 Generator Voltage:
 Unit #1..... 4160
 Unit #2..... 4160
 Unit #3..... 4160