



ARPIN FERC PROJECT #2684

CONSTRUCTION AND KEY DATES

Owner.....Flambeau Hydro, LLC
 Date of Purchase.....2001
 Date Originally Built.....1937
 Online Date.....1971
 License Effective Date.....June 1, 1969
 License Expiration Date.....April 1, 2019

HYDROLOGIC DATA

River.....Chippewa
 County.....Sawyer
 Nearest City.....Radisson
 Drainage Area Square Miles.....800
 Reservoir Acres.....294
 Storage Volume Acre Feet.....980 Acre Feet
 100-Year Flood CFS.....10,250 CFS
 Probable Maximum Flood CFS.....36,000 CFS

OPERATIONAL DATA

Normal Headwater Elevation.....1227.33
 Minimum Headwater Elevation.....1226.32
 Maximum Headwater Elevation.....1231.43
 Normal Operating Head.....34'
 Number of Units.....3
 Maximum Generating Capacity.....1,450 KW
 Annual Generation.....6.9 GWH
 Maximum Turbine Discharge CFS.....664 CFS
 Spillway Capacity CFS.....22,000 CFS
 Hazard Rating.....Low

STRUCTURAL DATA

Dam Type..... Stone Masonry Dam
 Overall Length and Height..... 3 – 1,466' Long x 12' High
 Power Canal.....3,200'
 Penstock.....8' Diameter Steel
 Spillway Description.....Overflow Spillway and 2 Gated

PLANT DATA

Turbine Manufacturer.....The James Leffel and Co.
 Turbine Identification:
 Unit #1..... Canadian Francis 30" Type S
 Unit #2..... Canadian Francis 30" Type S
 Unit #3..... Leffel 30 1/2" Type F
 Turbine CFS @ 100% Gate:
 Unit #1.....265 CFS
 Unit #2.....265 CFS
 Unit #3.....134 CFS
 Generator Identification:
 Unit #1.....Westinghouse
 Unit #2.....Westinghouse
 Unit #3.....Electric Machinery
 Generator Nameplate Rating KVA:
 Unit #1.....750 KVA
 Unit #2.....750 KVA
 Unit #3.....312 KVA
 Generator Horsepower:
 Unit #1.....804
 Unit #2.....804
 Unit #3.....335
 Generator Speed RPM:
 Unit #1.....360 RPM
 Unit #2.....360 RPM
 Unit #3.....327 RPM
 Generator Voltage:
 Unit #1.....2400
 Unit #2.....2400
 Unit #3.....2400