

environmental values of the project area or (b) other
beneficial public uses of the waterway.

Staff's environmental assessment (EA) evaluated the
effects of continued project operation on the environmental resources
of the project area and provides a discussion of measures that
should be continued and implemented to protect and enhance
these environmental resources. These measures include: (1) a
minimum flow release of 5 cubic feet per second (cfs) in the bypassed
reach between the Saxon Falls dam and powerhouse; (2)
minimizing reservoir surface elevation fluctuations; (3) specifying
reservoir drawdown rates; (4) protection of cultural resources
discovered during the operation of the project or prior to any

future land-disturbing activities in the project area; and (5) improving the safety of recreational facilities.

upgrading
enhancing

The relocation of a boat ramp and access road and informational signs would have the beneficial effect of the recreational values of the project area. Because these beneficial effects are considered important, the agencies and the staff have recommended the improvement of the recreational facilities.

No alternative was identified that would make better use of the project resources in terms of providing power and environmental benefits without significant environmental cost. One alternative to licensing the Saxon Falls Project -- denial of license -- was considered by the staff. The staff concluded that denial of the project application is not the recommended alternative for two reasons: (1) the environmental effects of continuing to operate the project would be minor and (2) the electricity generated from this renewable resource would maintain the use of existing fossil-fueled, steam-electric generating plants at their present levels and not contribute to air quality problems and global warming.

also

Section 10(a)(2) of the Act requires the Commission to consider the extent to which a proposed project would be consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. Under section 10(a)(2), federal and state agencies filed three comprehensive plans that address various resources in Michigan and 29 plans that addressed resources in Wisconsin. Of these, the staff identified and reviewed one Michigan plan and three Wisconsin plans relevant to this project. 1/ No conflicts were found.

filed
pursuant
for

Based upon a review of the agency and public comments on the project, and on the staff's independent analysis to sections 4(e) and 10(a) of the Act, the proposed Saxon Falls Hydroelectric Project is best adapted to a comprehensive plan the Montreal River.

Michigan 1/ Building Michigan's Recreation Future: the 1985-90
Recreation Plan, 1985, Michigan Department of Natural
Resources; Statewide Comprehensive Outdoor Recreation
Plan, 1986-91, 1985, Wisconsin Department of Natural Resources;
Wisconsin Water Quality: Report to Congress, 1986,
Wisconsin Department of Natural Resources; and Montreal
River Canyon Management Plan, Undated, Wisconsin Coastal
Management Program.

Recommendations of Federal and State Fish and Wildlife Agencies

include
state
Falls
wildlife

Section 10(j) of the Act requires the Commission to license conditions, based on recommendations of federal and fish and wildlife agencies, for the protection, mitigation, and enhancement of fish and wildlife. In the EA for the Saxon Project, attached to and made part of this license, the staff addresses the concerns of the federal and state fish and wildlife agencies and makes recommendations consistent with those of the agencies. These recommendations are being included in this license.

Term of License

case
policy,
terms

Section 15 of the Act, although not applicable in this case because it was waived in the original license, specifies that any license issued shall be for a term which the Commission determines to be in the public interest, but not less than 30 years, nor more than 50 years from the date the license is issued. This provision is similar to pre-ECPA Commission policy, which was to establish from the expiration date of the existing license, 30-year terms for those projects which proposed no new construction or capacity, 40-year terms for those projects that proposed a moderate amount of new development, and 50-year terms for those projects that proposed a substantial amount of new development. 2/

project

Northern States Power Company proposes no modifications to the existing project facilities or changes in operation of the project. However, the existing license will not expire until December 31, 1989. Accordingly, the new license for the project will be for a term of 30 years from the expiration of the existing license.

Summary of Findings

An EA was prepared for this project. 3/ Background

- 2/ See Montana Power Company, 56 F.P.C. 2008 (1976).
- 3/ The following corrections are made to the environmental assessment issued for this project on October 13, 1989:

section D.4.C.: National Register status: x None

section D.4. Remarks: The phrase "project shoreline and other project lands" is changed to read "project's area of potential environmental impact...."

section F.2.g. Description: Is replaced with

information, analysis of impacts, support for related license articles, and the basis for a finding of no significant impact on the environment are contained in the EA attached to this order. Issuance of this license is not a major federal action significantly affecting the quality of the human environment.

The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if operated and maintained in accordance with the requirements of this license. Analysis of related issues is provided in the Safety and Design Assessment attached to this order.

The Director, Office of Hydropower Licensing, concludes that the project would not conflict with any planned or authorized development, and would be best adapted to comprehensive development of the waterway for beneficial public uses.

The Director orders:

Company
1990,
is
to
the

(A) This license is issued to Northern States Power (licensee), for a period of 30 years, effective January 1, 1990, to operate and maintain the Saxon Falls Project. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

in
G:

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by exhibit

Exhibit G- FERC No. 2610 - Showing
Sheet 1 4 Project Map

and

(2) Project works consisting of: (a) a dam 40 feet high

510 feet long; (b) a reservoir with a storage capacity of 550 acre-feet and a surface area of 69 acres; (c) a 6-foot-diameter steel conduit 1,607 feet long; (d) a steel surge tank 23.5 feet

"The existing project dam and associated works are not eligible for listing on the national register of historic places; the Flambeau Trail is not involved in the project at all."

section G.2. paragraph 3: The phrase "project lands and shorelines" is changed to read "the project's area of potential environmental impact, particularly the reservoir shoreline...."

in diameter and 59.5 feet high; (e) two 4.5-foot diameter steel penstocks each 156 feet long; (f) a reinforced concrete powerhouse containing two equally sized generating units for a total installed capacity rated at 1,500 kW; (g) a substation with a step-up transformer; (h) a 2.4-kV overhead transmission line, 0.25 miles long from the powerhouse to the substation, and a 34.5-kV overhead line, 12 miles long from the substation to the applicant's interconnected transmission system; and (i) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of exhibits A and F recommended for approval in the attached Safety and Design Assessment.

(3) All of the structures, fixtures, equipment or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project and located within or outside the project boundary, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The exhibit G described above and those sections of exhibits A and F recommended for approval in the attached Safety and Design Assessment are approved and made part of the license.

(D) The following sections of the Act are waived and excluded from the license for this minor project:

4(b), except the second sentence; 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the Act that are waived here; 10(c), insofar as it relates to

insofar depreciation reserves; 10(d); 10(f); 14, except
as the power of condemnation is reserved; 15; 16;
19; 20; and 22.

(E) This license is subject to the articles set forth in
Form L-12, (October 1975), entitled "Terms and Conditions of
License for Constructed Minor Project Affecting the Interests
of Interstate or Foreign Commerce", and the following additional
articles:

Article 201. The licensee shall pay the United States the
following annual charge, effective January 1, 1990.

For the purpose of reimbursing the United States for the
cost of administration of Part I of the Act, a
reasonable amount as determined in accordance with the

provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 2,000 horsepower.

Article 401. The licensee shall operate the Saxon Falls Hydroelectric Project to minimize fluctuations of the reservoir surface elevation for the protection of water quality and fish and wildlife resources in the Montreal River. The licensee

shall

at all times maintain a minimum reservoir surface elevation of 997 feet above mean sea level (msl), as measured immediately upstream of the project dam, during the period from ice-out to June 1 each year. In addition, the licensee shall maintain the reservoir surface elevation during the period after June 1 to ice-out each year within a maximum and minimum elevation of 997 msl and 996.5 msl, respectively, as measured immediately

upstream

from the project dam, for the protection of water quality and fish and wildlife resources in the Montreal River.

This mode of operation may be temporarily modified if required by operating emergencies beyond the control of the licensee and for short periods upon mutual agreement among the licensee, the Wisconsin Department of Natural Resources, and

the

Michigan Department of Natural Resources.

Article 402. The licensee shall maintain a continuous minimum flow of 5 cubic feet per second (cfs) in the bypassed reach of the Montreal River, as measured immediately downstream of the Saxon Falls dam, during the ice-free season (i.e. from ice-out through October 31), or inflow, whichever is less, to protect aquatic and aesthetic resources in the Montreal River. The prescribed minimum flow may be modified on a temporary

basis,

if required by operating emergencies beyond the control of the licensee, or for short periods upon mutual agreement with the Wisconsin and Michigan Departments of Natural Resources.

Article 403. In the event the licensee must draw down the project reservoir below the reservoir surface elevations prescribed in Article 401, for purposes such as maintenance and repair, the licensee shall limit the drawdown rate to a maximum of 1 foot per 24 hours for the first 2 feet and 0.5 foot per 24 hours thereafter. The licensee shall limit such drawdowns to

the

period after June 1 of each year for the protection of fish and wildlife resources in the Montreal River. The licensee shall initiate such drawdowns only after notifying the Wisconsin Department of Natural Resources (WDNR), the Michigan Department of Natural Resources (MDNR), and the Commission's Chicago Regional Office, and after consultation with the MDNR and WDNR. The licensee may initiate project reservoir drawdown at any

time

of the year if dam safety warrants such action and after notifying the Commission's Chicago Regional Office.

Article 404. In accordance with the licensee's plan for meeting gaging requirements at the Saxon Falls Dam, as contained in a letter filed with the Commission on May 31, 1989, the licensee shall maintain staff gages and a recording headwater gage in the Montreal River to monitor compliance with the maintenance of reservoir surfaces elevations as stipulated in Article 401 and with the minimum flow as stipulated by Article 402. The upstream staff gage(s) shall be clearly visible to the public and shall indicate the specific full pond and low pond water surface elevations. The downstream staff gages shall indicate the elevation corresponding to a minimum flow of 5 cfs in the bypassed reach of the Montreal River. The licensee shall maintain the records from the recording gage and make the data available within 30 days upon request from the Wisconsin and Michigan Departments of Natural Resources.

Article 405. The licensee, before starting any land-clearing or land-disturbing activities within the project area, or operating the project according to modes other than those specifically authorized in this license, shall consult with the State Historic Preservation Officer (SHPO).

If the licensee discovers previously unidentified archeological or historic properties during the course of project construction or operation -- either as the result of accident or deliberate monitoring -- the licensee shall stop all land-clearing and land-disturbing activities in the vicinity of the properties, protect the properties from further adverse effect, and consult with the SHPO.

In either instance, the licensee shall file for Commission approval a cultural resource management plan prepared by a qualified cultural resource specialist after having consulted with the SHPO.

The management plan shall include (1) a means to gain access to the eligible site, (2) a description of each discovered property indicating whether it is listed on or eligible to be listed on the National Register of Historic Places, (3) a

description of the potential effect on each discovered
property,
(4) proposed measures for avoiding or mitigating effects, (5)
documentation of the nature and extent of consultation, and (6)
a
schedule for mitigating effects and conducting additional
studies. The Commission may require changes to the plan.

The licensee shall not begin land-clearing or land-
disturbing activities, other than those specifically authorized
in this license, nor increase the level of the reservoir behind
the project dam or the volume of water released below the
project
dam, nor resume land-clearing or land-disturbing activities in
the vicinity of a property, discovered during construction,
until

article informed by the Commission that the requirements of this article have been fulfilled.

Article 406. Within one year of the effective date of this license, the licensee shall submit for Commission approval a cultural resources monitoring plan that the Michigan and Wisconsin State Historic Preservation Officers (SHPO) have reviewed and commented on, and that contains provisions for systematically and periodically monitoring the area of the project's potential environmental impact, particularly the project shoreline, so that (1) archeological sites may be found as they become exposed, (2) they may be tested, and (3) they may be protected according to section 106 if they are eligible.

monitoring The licensee shall submit the cultural resources monitoring plan to the SHPOs and shall ask the SHPOs to comment by concurring with a determination of either No Effect or No Adverse Effect based on the specific provisions of the plan. The licensee shall submit both the cultural resources monitoring plan and the SHPOs' comments for Commission approval. The Commission reserves the authority to require changes to the cultural resources monitoring plan.

and Article 407. The licensee, after consultation with the Department of the Interior, and the Michigan and Wisconsin Departments of Natural Resources, shall construct a boat ramp, access road, and associated signs (canoe take-out, dam warning, and no portage) within 2 years of the effective date of this license. The licensee shall consider the needs of handicapped individuals in the final design and location of the facilities. The licensee shall within 90 days of completion of construction file, for approval by the Commission, revised Exhibits A, F, and G to describe and show the project as built. In addition, the licensee shall operate and maintain or arrange for the operation and maintenance of the recreation facilities during the term of the license.

Article 408. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project

lands and waters and to convey certain interests in project
lands and waters for certain types of use and occupancy, without
prior Commission approval. The licensee may exercise the authority
only if the proposed use and occupancy is consistent with the
purposes of protecting and enhancing the scenic, recreational,
and other environmental values of the project. For those
responsibility purposes, the licensee shall also have continuing
to supervise and control the use and occupancies for which it
grants permission, and to monitor the use of, and ensure
compliance with the covenants of the instrument of conveyance
for, any interests that it has conveyed, under this article.
If

a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and water for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time and where said facility is intended to serve single-family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the

issuing licensee may, among other things, establish a program for
permits for the specified types of use and occupancy of project
lands and waters, which may be subject to the payment of
a reasonable fee to cover the licensee's costs of administering
the permit program. The Commission reserves the right to
require the licensee to file a description of its standards,
guidelines, and procedures for implementing this paragraph (b) and to
require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way
across, or leases of, project lands for: (1) replacement,
expansion, realignment, or maintenance of bridges and roads for
which all necessary state and federal approvals have been obtained;
(2) storm drains and water mains; (3) sewers that do not discharge
into project waters; (4) minor access roads; (5) telephone,
gas, and electric utility distribution lines; (6) non-project
overhead electric transmission lines that do not require erection of
support structures within the project boundary; (7) submarine,

overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of

Hydropower Licensing, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation

agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved exhibit R or approved report on recreational resources of an exhibit E; or, if the project does not have an approved exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to insure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised exhibit G or K drawings would be filed for approval for other purposes.

(g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

(F) The licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the

Commission.

the (G) This order is issued under authority delegated to
Director and is final unless appealed to the Commission by any
party within 30 days from the issuance date of this order.
Filing an appeal does not stay the effective date of this order
or any date specified in this order. The licensee's failure to
appeal this order shall constitute acceptance of the license.

Fred E. Springer
Director, Office of
Hydropower Licensing

ENVIRONMENTAL ASSESSMENT 1/
FEDERAL ENERGY REGULATORY COMMISSION
OFFICE OF HYDROPOWER LICENSING
DIVISION OF PROJECT REVIEW

Date: October 13, 1989

Project name: Saxon Falls Hydroelectric Project

FERC Project No. 2610 -002

A. APPLICATION

1. Application type: Minor existing project
2. Date filed with the Commission: December 16, 1988
3. Applicant: Northern States Power Company
4. Water body: Montreal River River basin: Montreal
5. Nearest city or town: Hurley, Wisconsin
6. County: Iron/Gogebic State: Wisconsin/Michigan

B. PURPOSE AND NEED FOR ACTION

1. Purpose. The project would continue to provide 12,283 megawatthours (MWh) of electric energy per year to assist in meeting the applicant's customer's power requirements.

2. Need for power. The power from the proposed project would be useful in meeting a small part of the need for power projected

by Mid-America Interconnected Network (MAIN) Regional Electric Reliability Council. The project would continue to displace fossil-fueled power generation in the MAIN Region, thereby conserving nonrenewable fossil fuels and reducing the emissions of noxious byproducts caused by the combustion of fossil fuels.

C. PROPOSED PROJECT AND ALTERNATIVES

1. Description of the proposed action (see figure 2., page 17). The project consists of: (a) an existing 40-foot-high and 510-foot-long mass concrete dam; (b) an existing 69-acre reservoir having an estimated storage capacity of 550 acre-feet; (c) a 1,607-foot-long, 6-foot-diameter steel pipe conduit between the

dam and powerhouse; (d) a steel surge tank; (e) a reinforced concrete powerhouse housing two 750-kilowatt (kW) units for a total installed capacity of 1,500 kW; (f) an outdoor substation

1/ Due to reproduction requirements, referenced figures have been omitted.

located south of the powerhouse; (g) a .25-mile long, 34.5-kV transmission line; and (h) appurtenant facilities.

2. Applicant's proposed mitigative measures.

a. Construction. None.

b. Operation. The applicant proposes to provide minimum flows of approximately 5 cubic feet per second (cfs) through the dam during the ice-free seasons for the protection of invertebrates and for aesthetic reasons in the bypassed reach of the Montreal River. The applicant proposes, further, to operate the project in a run-of-river mode and to relocate, for safety reasons, a boat ramp and access road for the boat ramp.

3. Federal lands affected.

X No. Yes; ; acreage =
; (agency)
Federal Conditions pursuant to Section 4(e) of the
Power Act have been provided by letter dated
/ / (attachment A) for the adequate
protection and utilization of federal lands.
Conditions have not been provided.

4. Alternatives to the proposed project.

a. X No reasonable action alternatives have been found.
Action alternative:

b. Alternative of no action.

No action would result in continued project operation on its annual license. This is not a reasonable alternative.

D. CONSULTATION AND COMPLIANCE

1. Fish and wildlife agency consultation (Fish & Wildlife

Coordination Act).

No.	a. U.S. Fish & Wildlife Service (FWS):	X	Yes.	
No.	b. State(s):	X	Yes.	
No.	c. National Marine Fisheries Service (NMFS):	Yes.		X

2. Section 7 consultation (Endangered Species Act).

a. Listed species: None. X Present:

b. Consultation: X Not required.
Required; completed: / / .

Remarks: Bald eagles (federally listed threatened species in Wisconsin and Michigan/Wisconsin listed endangered species), occasionally visit the project. No endangered or threatened species would be affected by continued project operation.

3. Section 401 certification (Clean Water Act).

Not required.

X Required; applicant requested certification on 5/4/88, from Wisconsin and on 2/10/88, from Michigan .

Status: Granted by the certifying agency on .

Natural

X Waived by the Wisconsin Department of Resources on 5/4/88 .

Natural

X Waived by the Michigan Department of Resources; section 401 certification is waived if not acted upon by the certifying agency within 1 year from the date of the certifying agency's receipt of the request (See Commission order no. 464, issued February 11, 1987).

The

Undetermined; 1 year has not yet elapsed since the applicant's request and the state agency has not yet acted on the request.

1-year period would expire on / / .

4. Cultural resource consultation (Historic Preservation Act).

No.

a. State Historic Preservation Officer (SHPO): X Yes.

No.

b. National Park Service (NPS): Yes. X

listed. c. National Register status: None. X Eligible or

d. Council: X Not required. Completed: .

Required. e. Further consultation: Not required. X

Remarks: Further consultation with the Wisconsin SHPO is
project required to work out the details of a plan to monitor the
shoreline and other project lands.

The applicant did not respond to the comments on motion(s) to intervene.

F. AFFECTED ENVIRONMENT

1. General description of the locale.

a. Description of the Montreal River Basin.

The Montreal River is the boundary between northwestern Wisconsin and the southwestern part of Michigan's Upper Peninsula. The river is 16 miles long, rising at the confluence of the East and the West Forks of the Montreal River and flowing into Lake Superior. The watershed area is approximately 264 square miles, mainly in Wisconsin, and is mostly forested land, with an estimated 10% cleared for agricultural and urban development. The small size of the watershed, steep gradient of the river (34 feet per mile), and rocky nature of the terrain produce rapid changes in streamflow. There are several small, coldwater tributaries that flow into the Montreal River upstream from the project site, but none within or downstream from the project's boundary.

The climate of the area is continental, characterized by cold winters and cool summers. Winter temperatures get as low as -20 F (Fahrenheit), while summer temperatures occasionally reach 90 F. The first snow generally occurs in October and snow normally covers the ground until late April. Precipitation averages 25.9 inches per year.

b. Existing licensed projects and exempted projects (indicated by an " * " after the FERC Project No.) in the river basin, as of 6/29/89.

Project No.	Project name	Water body
2587	Superior Falls	Montreal

River

c. Pending license applications and exemption applications in the basin, as of 6/29/89). (Exemption applications are indicated by an " * " after the FERC Project No.)

Project No.

Project name

None

d. Cumulative impacts

environment

added

Cumulative impacts are defined as impacts on the

that result from the incremental impacts of an action when

to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time (40 CFR, Part 1508.7).

A target resource is an important resource that may be cumulatively affected by multiple development within the basin. There are no target resources that would be adversely affected

by

continued operation of the Saxon Falls Project.

2. Descriptions of the resources in the project impact area (Source: Northern States Power Company, 1988, application, exhibit E, unless otherwise indicated).

a. Geology and soils: The project is underlain by hard crystalline igneous and metamorphic rocks. In the area of the dam, 50 to 100-foot thick ground moraine is overlain by

terminal

moraine, overlain, in turn, by red glacial lake clay. Soils include sandy soils formed over glacial drift sands and loams formed over glacial sand and gravel.

b. Streamflow:

low flow: 29 cfs
high flow: 650 cfs
average monthly flow: 325 cfs.

Remarks: Flow parameters are based on USGS records for station 04030000 located 2 miles downstream of the project in Gogebic County, Michigan. Data were obtained at this station from 1938-1970. Low flows are exceeded 90% of the time and

high

flows are exceeded 10% of the time.

c. Water quality: Dissolved oxygen concentrations are

high,

seldom dropping below 8.5 milligrams per liter (mg/l) and 87% saturation. Water temperature follows normal seasonal patterns of a cool water stream with summer maxima of less than 80 Fahrenheit. Hardness, nitrogen, and phosphorus are all low to moderate in concentration, and pH is slightly alkaline. There are indications, however, of human contamination as fecal coliform bacteria counts have exceeded the Wisconsin and

Michigan

state standard of 200 counts per 100 milliliter. The probable source of this contamination was untreated wastes from the upstream cities. Recently, this problem seems to have been

corrected and bacteria counts have dropped to acceptable levels.

d. Fisheries:

Anadromous:	X	Absent.	Present.
Resident:		Absent.	X Present.

15

fishery

The Wisconsin Department of Natural Resources identified species of coolwater fish species in the Saxon Falls Flowage. They concluded that the flowage provides a quality sport fishery for muskellunge, northern pike, and walleye, as well as several panfish species. The most abundant panfish included black

species
creek
and

crappie, pumpkinseed, and yellow perch. Additional fish included smallmouth bass, rock bass, logperch, johnny darter, black bullhead, white sucker, common shiner, golden shiner, chub, longnose dace, blacknose dace, hornyhead chub, sculpin, and brown trout. Muskellunge and smallmouth bass have been stocked in the upstream Gile Flowage, but the majority of the fish species present reproduce naturally in the Montreal River.

e. Vegetation:

	Cover type	Dominant species
	northern hemlock-white pine-hardwoods	sugar maple, hemlock, basswood, yellow birch, white and red pine, quaking aspen, paper birch, jack pine
water	aquatic and emergent vegetation	arrowhead, bulrushes, cattails, burreed, lilies, pond weed,

f. Wildlife: Common mammal and bird species indigenous to the project area include: beaver, black bear, red squirrel, muskrat, raccoon, red and gray fox, short-tailed weasel, skunk, snowshoe hare, white-tailed deer, bobcat, shrew, vole, ruffed grouse, broad-winged hawk, and osprey.

g. Cultural:

X National Register (listed and eligible) properties have not been recorded.

of

There are properties listed on, or eligible for listing on, the National Register of Historic Places in the area of the project's potential environmental impact.

works,
Description: The existing project dam and associated
and the Flambeau Trail are eligible for listing on the National
Register of Historic Places as an historic district.

high.
river.
h. Visual quality: The visual quality of the area is
The surrounding landscape is dominated by forests and the
Hydroelectric generating structures have been part of the
landscape since the 1910's. The most conspicuous manmade
features in the area are the project's structures.

due
i. Recreation: The project site offers opportunities for
canoeing, kayaking, fishing, hunting, and sightseeing. Use is
low because of the remoteness of the area and limited access
to steep terrain. Recreation facilities provided by the

applicant include a boat ramp and parking area near the project dam that provide access to the impoundment, and a parking area and steep stairway that provide access to the tailwater area

and

downstream whitewater opportunities in Montreal Canyon. Some canoeists use the powerhouse road as a portage route.

j. Land use: Land within the project boundary is mostly forested and undeveloped. Land use is limited to hydropower generation and recreation.

k. Socioeconomics: The population of Iron and Gogebic Counties during the 1980 census was 6,730 and 19,686, respectively. The economy of the area is agriculturally oriented.

G. ENVIRONMENTAL ISSUES AND PROPOSED RESOLUTIONS

There are 3 issues addressed below.

1. Project operation: The applicant proposes to continue to operate the project in a run-of-river mode. While operating in this manner, the applicant would maintain the normal reservoir surface elevation at 997 feet (ft.) above USGS mean sea level (msl).

The Department of the Interior (Interior), the Wisconsin Department of Natural Resources (WDNR), and the Michigan Department of Natural Resources (MDNR) recommend that: (1) the applicant operate the project in an instantaneous run-of-river mode; (2) the reservoir surface elevation be maintained at 997 ft. above mean sea level (msl) during the period from ice-out

to

June 1 each year; (3) the reservoir surface elevation be maintained between 997 msl and 996.5 msl during the period

after

June 1 to ice-out each year (Interior recommended maintaining

997

msl year-round); (4) the reservoir be drawn down, if necessary for project maintenance, repair, or other purposes, only after June 1, with written concurrence from the WDNR and MDNR, and be ramped down no more than 1 ft./24 hours for the first 2 feet, then 0.5 ft./24 hours; (5) a minimum flow of about 5 cubic feet per second (cfs) be maintained in the bypassed reach between

the

project dam and tailrace during the ice free season, i.e. from ice-out through October 31, and 48 cfs be released at all times through the powerhouse; and (6) staff gages be installed to demonstrate compliance with the recommended reservoir levels

and

minimum flows. Interior and the MDNR also recommend that the spillway gate be opened 0.5 inch to maintain the 5 cfs flow in the bypassed reach of the river.

The applicant generally agreed with the resource agencies' recommendations but notes that maintaining instantaneous run-

of-

river operation would require expensive monitoring equipment.

The applicant states that it would maintain the reservoir level as close to 997 ft. msl as possible, with no more than a 6-inch fluctuation during the period after June 1 to ice-out each year.

The applicant requests that it be allowed to spill 48 cfs, or inflow, through the dam instead of the powerhouse when it is not generating, because it is not possible to spill water through the powerhouse when it is not generating. The applicant also requests that minimum flows be limited to inflows and that provisions for flows and minimum reservoir levels be waived during emergencies beyond the applicant's control. The applicant requested, further, that the method for maintaining 5 cfs minimum flow from the dam not be specified because the 0.5 inch spillway gate opening would only be used on an interim basis until a valve or slide gate can be installed.

The applicant's exceptions to agencies' recommendations would not detract from those recommendations for enhancement of the aquatic habitat in the Montreal River. The staff concludes that the project should be operated to stabilize the reservoir surface elevation at 997 ft. In addition, the project should maintain a surface elevation between 997 msl and 996.5 msl during the period from June 1 to ice-out each year. Minimizing reservoir elevation fluctuations is important to enhance spawning habitat. The applicant should be required to consult with the WDNR and MDNR before altering this mode of operation.

The project should also continuously discharge a minimum flow of 5 cfs from the project dam for the protection of aquatic and aesthetic resources in the bypassed reach of the Montreal River. The agencies' recommendation for the minimum flow of 48 cfs from the powerhouse is unnecessary with a recommendation to maintain reservoir surface elevations at required levels. The river flow below the project powerhouse would equal the incoming flows and thus should protect downstream aquatic habitats in the

Montreal River.

The staff concludes, further, that any reservoir drawdown should be limited to the period after June 1 each year and to ramping rates of no more than 1 ft./24 hours for the first 2 feet, then 0.5 ft./24 hours to protect the aquatic resources in the project reservoir and the Montreal River downstream of the project.

In order to monitor compliance with the maintenance of reservoir surface elevation and minimum flow discussed above,
the

applicant agrees to maintain existing upstream and downstream staff gages and a recording headwater gage in the Montreal
River.

Interior concurred with the applicant's plan noting that the staff gages need to be clearly visible to the public. The
staff

agrees with Interior and concludes that the upstream staff gage needs to indicate the specific full pond and low pond water surface elevations. Similarly, the downstream staff gages need

in to indicate elevation corresponding to a minimum flow of 5 cfs
the bypassed reach of the Montreal River. Records from the recording gage ought to be maintained and data made available, upon request, to the Wisconsin and Michigan Departments of Natural Resources.

2. Cultural resources: Although the Michigan State Historic Preservation Officer (SHPO) is satisfied with Northern States discovery effort and says the project would have no effect, the Wisconsin SHPO, says: "There are no known archaeological sites on the Wisconsin portion of the project lands, but these areas have never been surveyed for such resources. Prehistoric and historic Indian sites are expected to be common on the Montreal River."

project
significance
of
fact, the applicant has surveyed those areas that would be immediately affected by the proposal.

applicant
for
period
of the license, i.e., the applicant should consult further with the Wisconsin SHPO on a plan to monitor project lands and shorelines for archaeological sites, and to protect National Register and eligible properties. Monitoring should begin as soon as the plan is approved.

review
and comment on the plan.

the
around
3. Recreation facilities: The applicant proposes to relocate existing boat ramp so that recreationists do not have to drive across the project's earthen dike, extend the access road

recreation the end of the dike to the new boat ramp, and upgrade
and safety signs within 3 years of issuance of license.

the The MDNR agrees with the applicant's proposal, but wants
signs upgraded within 18 months of issuance of license. The

WDNR

recommends that the applicant install and maintain dam warning signs, a no portage sign, and hazard warning signs that conform to the WDNR Administrative Code. The WDNR also recommends that the project be consistent with the Montreal River Canyon Management Plan.

recommended The applicant has already installed a hazard warning sign near the tailwater and a buoy line to restrict access above the dam. The applicant agrees to provide the other signs
by WDNR and to construct all signs to WDNR standards (personal

communication, Lloyd Everhart, Administrator of Hydro
Licensing,
Northern States Power Company, Eau Claire, WI, August 30,
1989).

The Montreal River Canyon Management Plan (MRCMP)
identifies
the Montreal Canyon Corridor, located immediately downstream of
the project powerhouse, as a unique scenic resource highly
sensitive to development. The MRCMP recommends that the
corridor
remain a largely undeveloped area with limited access for small
numbers of visitors (Wisconsin Coastal Management Program,
undated).

The applicant's recreation plan is consistent with the
MRCMP
and would provide an appropriate amount of safe public access
to
the project area and to Montreal Canyon. Therefore, the
licensee
should construct the boat ramp, access road, and signs (canoe
take-out, dam warning, and no portage signs) within 2 years of
issuance of the license.

H. ENVIRONMENTAL IMPACTS

1. Assessment of impacts expected from the applicant's proposed project (P), with the applicant's proposed mitigation and any conditions set by a federal land management agency; the proposed project with any additional mitigation recommended by the staff (Ps); and any action alternative considered (A). Assessment symbols indicate the following impact levels:

O = None; 1 = Minor; 2 = Moderate; 3 = Major;
 A = Adverse; B = Beneficial; L = Long-term; S = Short-term.

Resource	Impact			Resource	Impact		
	P	Ps	A		P	Ps	A
a. Geology-Soils	O			f. Wildlife	O		
b. Streamflow	1BL			g. Cultural: Archeological	O		
c. Water quality: Temperature	O			Historical	O		
Dissolved oxygen	O			h. Visual quality	O		
Turbidity and sedimentation	O			i. Recreation	1BL		
d. Fisheries: Anadromous	O			j. Land use	O		
Resident	1BL			k. Socioeconomics	O		
e. Vegetation	O						

Remarks: Relocating the boat ramp and upgrading the informational signs would provide safe public access to the project area.

2. Impacts of the no-action alternative.

Under the no-action alternative of continuing to issue

has

annual licenses, the project would continue to operate as it
and existing environmental impacts would continue.

3. Recommended alternative (including proposed, required, and
recommended mitigative measures):

X Proposed project. Action alternative. No action.

4. Reason(s) for selecting the preferred alternative.

Issuing a new license for the existing project is the preferred alternative because electricity generated from a renewable resource would be used, thus lessening the use of existing fossil-fueled, steam-electric plants, without significant environmental effects.

I. UNAVOIDABLE ADVERSE IMPACTS OF THE RECOMMENDED ALTERNATIVE

The Saxon Falls Hydroelectric Project would not result in adverse environmental impacts.

J. COMPREHENSIVE DEVELOPMENT

Sections 4(e) and 10(a)(1) of the Federal Power Act (Act) require the Commission to consider and balance, in the public interest, all uses of the waterway on which a project is proposed to be located.

Neither the resource agencies nor the staff have identified any significant conflicts between development and operation of the Saxon Falls Hydroelectric Project, as proposed by the applicant, and (a) the environmental values of the project area or (b) other beneficial public uses of the waterway.

This assessment evaluates the effect of continued project operation on the environmental resources of the project area and

provides a discussion of measures that should be continued and implemented to protect and enhance these environmental resources.

These measures include: (1) a minimum flow release of 5 cfs in the bypassed reach between the Saxon Falls dam and powerhouse; (2) minimizing reservoir surface elevation fluctuations; (3) specifying reservoir drawdown rates; (4) protection of cultural resources discovered during the operation of the project or prior to any future land-disturbing activities in the project area; and (5) improving the safety of recreational facilities.

The relocation of a boat ramp and access road and upgrading informational signs would have the beneficial effect of enhancing the recreational values of the project area. Because these beneficial effects are considered important, the agencies and the staff have recommended the improvement of the recreational facilities.

No alternative was identified that would have a higher or better use of the project resources in terms of providing power and environmental benefits without significant environmental cost. One alternative to licensing the Saxon Falls Project -- no-action -- was considered by the staff. The staff concluded that denial of the project application is not the recommended

alternative for two reasons: (1) the environmental effects of continuing to operate the project would be minor and (2) the electricity generated from a renewable resource would reduce

the

use of existing fossil-fueled, steam-electric generating plants and thereby conserve non-renewable primary energy resources and reducing atmospheric pollution and global warming.

also

Section 10(a)(2) of the Act requires the Commission to consider the extent to which a proposed project would be consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. Under section 10(a)(2), federal and state agencies filed three comprehensive plans that address various resources in Michigan and 29 plans that addressed resources in Wisconsin. Of these, the staff identified and reviewed one Michigan plan and three Wisconsin plans relevant

to

this project.^{4/} No conflicts were found.

filed

Based upon a review of the agency and public comments

pursuant

on the project, and on the staff's independent analysis to sections 4(e), 10(a)(1), and 10(a)(2) of the Act, the staff concludes that the proposed Saxon Falls Hydroelectric Project would permit the best comprehensive development of the Montreal River.

K. CONCLUSION

major

X Finding of No Significant Impact. Approval of the recommended alternative [H(3)] would not constitute a

federal action significantly affecting the quality of the human environment; therefore, an environmental impact statement (EIS) will not be prepared.

Intent to Prepare an EIS. Approval of the recommended alternative [H(3)] would constitute a major federal action significantly affecting the quality of the human environment; therefore, an EIS will be prepared.

Michigan 4/ Building Michigan's Recreation Future: the 1985-90
Recreation Plan, 1985, Michigan Department of Natural
Resources; Statewide Comprehensive Outdoor Recreation
Plan, 1986-91, 1985, Wisconsin Department of Natural Resources;
Wisconsin Water Quality: Report to Congress, 1986,
Wisconsin Department of Natural Resources; and Montreal
River Canyon Management Plan, Undated, Wisconsin Coastal
Management Program.

L. LITERATURE CITED

- 1,500 Northern States Power Company. 1988. Application for license for the Saxon Falls Hydro Project, a minor project of kilowatts, FERC No. 2610, Wisconsin. December 16, 1988.
- Wisconsin Coastal Management Program. Undated. Montreal River Canyon Management Plan. Saxon, Wisconsin. 37 pp.

M. LIST OF PREPARERS

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SAFETY AND DESIGN ASSESSMENT
SAXON FALLS HYDROELECTRIC PROJECT
FERC NO. 2610-002 - WISCONSIN

DAM SAFETY

dam
an
Of the 510-foot length of Saxon Falls Dam, the concrete portion is 250 feet long and the earth portion 260 feet. The
Was originally constructed in 1912 and rebuilt in 1940, raising the crest by 15 feet. It is comprised of a spillway abutment,
overflow ambursen spillway, a gated gravity spillway, a non overflow ambursen structure, an intake, a non-overflow gravity structure, and an earth embankment. The dam is founded on bedrock.

the
The Commission's Chicago Regional Director classified existing Saxon Falls Dam as low hazard on August 4, 1987. The classification was based on field observations and on other information available to the Regional Office staff. The field inspection revealed a lack of development downstream of the dam from which the staff concluded that any failure, under critical loading conditions, would not pose a safety hazard to life or property. The staff also reported that the project facilities appeared to be structurally sound with no significant safety related problems.

In addition to inspection by the Commission staff, the project facilities are inspected once a week by the plant operator employed by the applicant.

The applicant is also required to submit safety inspection reports prepared by an independent consultant every five years under Part 12, Subpart D of the Commission's Regulations. The latest consultant safety inspection report was submitted in December 1985. In the report, the consultant re-analyzed and updated the stability of the earth embankment and the concrete structures and found them to be stable. It also evaluated the liquefaction potential of the earth embankment and found some portions to be susceptible to possible settlement of up to 3 feet. But with a freeboard of 8 feet, it determined that there was no likelihood of any sudden releases. Since the dam has a low hazard potential, the staff concludes that even if sudden releases were to occur, there would be no significant safety related impacts downstream.

On September 11, 1985, the applicant had requested an exemption from the requirement to continue submitting the consultant safety inspection reports because the only inhabitable structure creating a hazard downstream of the dam, occupied by the plant operator, had been vacated. The applicant further stated that even after the exemption was granted, it would continue having the safety inspections performed by a consultant to assure the safe and continued operation of the project.

of By letter dated February 26, 1986, the Director, Division
Dam Safety and Inspections, in light of the reduced hazard,
exempted the project from the requirement of filing additional
consultant safety inspection reports.

PROJECT DESIGN

550 The existing project consists of: (1) a dam 40 feet high
and 510 feet long; (2) a reservoir with a storage capacity of
acre-feet and a surface area of 69 acres; (3) a 6-foot diameter
steel conduit 1,607 feet long; (4) a steel surge tank 23.5 feet
in diameter and 59.5 feet high; (5) two 4.5-foot diameter steel
penstocks each 156 feet long; (6) a reinforced concrete
powerhouse containing two equally sized generating units for a
total installed capacity rated at 1,500 kW; (7) a substation
with a step-up transformer; (8) a 2.4-kV overhead transmission line
0.25 miles long from the powerhouse to the substation and a
34.5 kV overhead line 12 miles long from the substation to the
applicant's interconnected transmission system; and (9)
appurtenant facilities.

The applicant has proposed no new construction or
improvements to the existing project and the inspection reports
do not cite any deficiencies in project safety or operation;
therefore, the project license does not include any special
engineering articles regarding the safety or operation of the
project.

conditions The staff concludes that the project would be safe and
adequate if operated in conformance with the terms and
of the new license.

WATER RESOURCE PLANNING

area The project site is located on Montreal River about 4
miles from its confluence with Lake Superior. The drainage
at the site is 264 square miles. The area is mostly wooded or
wild land with an approximately 10 percent cleared for
agricultural and urban development.

The flow data used are based upon records from the USGS Gaging Station No. 04030000 located about 2 miles downstream from the project site. The records represent a flow period from 1938 to 1970 and are considered representative. The gaging station has since been discontinued.

The U.S. Department of the Interior, and the Wisconsin and Michigan Departments of Natural Resources recommended a minimum flow of 5 cubic feet per second (cfs) to be released at the dam in the 1,600 feet long reach of the bypassed river channel to provide aquatic habitat during the ice-free season. No minimum

agreed flow was required during the winter months. The applicant to release a flow of 5 cfs in the formerly dewatered river channel.

The project would continue to operate run-of-river. The powerplant would operate between the hydraulic flows of 48 cfs and 170 cfs at a design head of 130 feet. It generates an estimated 12,283,000 kilowatt-hours (kWh) annually (1977-1986). The staff estimates that with the required minimum flow of 5 cfs the energy not produced would be insignificant and the average annual generation would essentially remain the same.

A streamflow of 175 cfs which is the combined minimum and hydraulic capacity of the powerplant is equalled or exceeded 67 percent of the time on the flow-duration curve. The streamflow at 25 percent of the flow-duration curve which is generally accepted as optimum development is 282 cfs. The 25 percent flow is not substantially greater than the 67 percent flow because the higher flows are concentrated in the months of April through June with below average flows occurring rest of the year. The average streamflow is 325 cfs which is 20 percent on the flow-duration curve and above the optimum development flow, not considered typical. This indicates that the potential for adding new capacity and consequently increasing the average annual generation would be limited.

The applicant investigated installing additional capacity by considering 13 technically feasible alternatives ranging from 633 kW to 1,340 kW with corresponding hydraulic capacities of 247 cfs to 325 cfs and resulting in increased annual generation of 2,041,000 kWh to 3,294,000 kWh. Because of limited additional generation, none of the alternatives were found to be acceptable.

The St. Louis River Basin Planning Status Report includes no projects, either proposed or constructed, on Montreal River or

its tributaries that this project would impact. Therefore, the project is not in conflict with any project in the basin.

No specific state and federal agency comments or recommendations were made addressing flood control, navigation, water supply or irrigation requirements in the basin. However, additional releases from the Gile Reservoir upstream might be required by the Wisconsin Department of Natural Resources for a wastewater treatment plant located at the City of Montreal.

The

additional releases could reduce the availability of water for increasing generation at the project site.

The staff identified 32 comprehensive plans related to water resources. These plans do not affect any aspect of waterway management in relation to the proposed project, as

part

of a broad public interest examination under section 10(a)(2)

of

the Act. There are no competing applications for the site currently pending before the Commission.

Based on a review of the agency and public comments filed in this proceeding, and on the staff's independent analysis, the Saxon Falls Project is best adapted to a comprehensive plan for the Wisconsin River.

In summary, the staff's analysis shows that the existing project is properly designed to develop the hydropower potential of the site.

ECONOMIC EVALUATION

The proposed project would be economically beneficial, so long as the projected levelized cost is less than the levelized cost of alternative energy and capacity.

In the case of Saxon Falls Project, the applicant evaluated the economic feasibility of 3 most promising alternatives out of the 13 considered to be technically feasible.

The applicant concluded that all 3 alternatives are uneconomical.

The staff's analysis indicates that for the 3 alternatives considered, the net annual benefits for Alternative 1 would be -\$186,000 with a 100 percent equity rate of return of 4.8 percent, for Alternative 2, -\$87,000 with a rate of return of 7.8 percent and for Alternative 3, -\$167,000 with a rate of return of 2.7 percent. At these rates of return the proposed capacities would be extremely risky and not attractive to investors. Therefore, the staff agrees with the applicant's conclusion.

The applicant has proposed no new construction. Hence, the levelized project costs would be the operation and maintenance costs, and administrative and general expenses. These costs are insignificant compared to the value of power.

The applicant currently feeds the project power into its distribution system and would continue to do so.

The staff concludes that the existing project is economically beneficial.

CONSERVATION PLANNING

The applicant has submitted a well-prepared and comprehensive response to staff's request for information describing its on-going and planned programs to encourage and assist end-use customers in a national effort to conserve electricity and to reduce demand peaks.

the
 The applicant's response is lengthy and indicates that
 opportunities to conserve electricity and to reduce peak demand
 which most utilities have found to be cost-effective have been
 studied and implemented. The applicant has made a serious
 effort
 to reach all categories of end-use consumers.

the
 The Wisconsin Public Service Commission has recognized
 applicant's integrated program as one of the most comprehensive
 and well implemented programs in the state.

Based on a study of the information submitted by the
 applicant, it is the conclusion of staff that the applicant has
 done an excellent job of conservation.

EXHIBITS

The following portions of Exhibit A and the following
 Exhibit F drawings conform to the Commission's rules and
 regulations and are included in the license.

Exhibit A: Item 1.1 entitled "Number of Generating Units."
 Item 2.0 entitled "Type of Hydraulic Turbines."
 Item 8.0 entitled "Project Components-Transmission
 Lines."

Exhibit F Drawing	FERC No. 2610	Description
F-1	1	General-Plan, Elevation, and Sections
F-2	2	Powerhouse-Plan, Profile, and Elevation
F-3	3	Powerhouse-Floor Plan

PREPARES

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 C. Frank Miller, Electrical Engineer

Document Content(s)

P-2610.001.TXT.....1-61