79 FERC 1 61,1.8 1

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Elizabeth Anne Moler, Chair; Vicky A. Bailey, James J. Hoecker, and Donald F. Santa, Jr.

Wisconsin	Power a	and	Liqht)	Project No. 710-000	
Company			-		and Docket No. DI96-4-000	

ORDER ISSUING NEW LICENSE

(Issued May 16, 1997)

Wisconsin Power and Light Company (Wisconsin Power) filed an application, pursuant to Part I of the Federal Power Act (FPA), for a new license authorizing the continued operation and maintenance of the 700-kilowatt (kW) Shawano Hydroelectric Project No. 710, located on the Wolf River in Shawano County, Wisconsin, and in part within the Menominee Indian Reservation (Menominee Reservation). Wisconsin Power, an electric utility, would continue to use the electricity generated by the project for its customers. It proposes no new capacity.

The original license for the Shawano Project was issued on July 20, 1927, 1/ and expired on July 19, 1977. An annual license was issued on July 15, 1977, and since then project operations have continued pursuant to annual licenses pending the disposition of Wisconsin Power's application for a new license. 2/ For the reasons discussed below, we issue a new license to Wisconsin Power.

1/ 8 Ann. Rept. 191 (1928).

2/ Although the project was originally issued a minor license, no part of the FPA (then the Federal Water Power Act) was waived, and Sections 14 and 15 (including annual licenses) accordingly apply at relicensing. By filing of February 5, 1996, Wisconsin Power specifically requested that Sections 14 and 15 not be waived in the new license. See 18 C.F.R. § 4.60(c) (1996).

FERGEOUKETED

9705220207

DC-A-4

- 2 -

BACKGROUND

Wisconsin Power filed its relicense application for the Shawano Project on November 8, 1976, and amended it on June 30, 1992. Notice of the amended application was issued on August 28, 1992. <u>3</u>/ Timely motions to intervene were filed by the Wisconsin Department of Natural Resources (Wisconsin DNR), the U.S. Department of the Interior (Interior), and the City of Shawano. <u>4</u>/

On June 11, 1996, the Menominee Indian Tribe (Menominee Tribe) filed a motion requesting clarification of its status and, if it was not already a party, that it be permitted to intervene. While the Commission has received no specific motion requesting intervention status for the Menominee Tribe, the Tribe clearly has an interest in this proceeding, in which it has fully participated. We will therefore grant it intervention.

An Environmental Assessment (EA) for this project was issued February 23, 1993. A Safety and Design Assessment was also prepared and is available in the Commission's public file associated with this project. All comments received from interested agencies and individuals have been fully considered in determining whether, or under what conditions, to issue this license.

3/ In response to the original notice of application, the City of Shawano, Wisconsin, filed in August 1978 a competing application (Project No. 2865), for which it claimed municipal preference under Section 7(a) of the FPA, 16 U.S.C. § 800(a). The Shawano proceeding was held in abeyance while the Commission considered the applicability of municipal preference in relicensing proceedings.

FPA Section 7(a) was amended by Section 2 of the Electric Consumers Protection Act of 1986 (ECPA) to clarify that the municipal preference does not apply to Section 15 relicensing proceedings, and on March 2, 1987, the City withdrew its competing application.

In November 1988, Commission staff asked Wisconsin Power to update its 1976 license application to conform to the Commission's post-ECPA regulations. Wisconsin Power filed the additional information on June 30, 1992.

A/ Interior filing of October 27, 1992; Wisconsin DNR filing of September 16, 1992. The City of Shawano was granted intervention on September 20, 1978; it has not participated in the proceeding since 1987.

- 3 -

PROJECT DESCRIPTION

The existing Shawano Project consists of (from left to right looking downstream): a 155-foot-long and 12.5-foot-high earth dam section with crest elevation at 823.5 feet; a reservoir with storage capacity of 2,860 acre-feet, extending about four miles upstream and with a maximum depth of 15 feet; a 41-foot-long by 68-foot-wide powerhouse section with a capacity of 700 kW; a 115foot-long reinforced-concrete gated spillway section with six 14foot-wide by 14-foot-high electrically-operated Taintor gates. and an 8-foot-wide by 73-foot-long rubbish sluiceway controlled with an 8-foot-8-inch by 19-foot-7-inch sluice gate; a 143-footlong and 18-foot-high earth dam section with crest elevation at 823.5; and appurtemant electrical and mechanical facilities. Because the powerhouse is integrated as a part of the dam and discharges directly into the river, there is no bypass reach. The project produces approximately 3,810,000 kilowatthours of electricity annually.

PRELIMINARY ISSUES

A. Jurisdiction

On February 12, 1996, Wisconsin Power filed a motion for investigation of the jurisdictional status of the Shawano Project, arguing that it does not meet any of the criteria for which licensing is required under Section 23(b)(1) of the FPA. <u>5</u>/ On February 23, 1996, Interior filed an answer maintaining that a license is required, because a part of the project occupies the Menominee Reservation.

Pursuant to Section 23(b)(1) of the FPA, a license is required for a hydroelectric project if it: (1) is located on navigable waters of the United States; (2) occupies lands or reservations of the United States; (3) uses the surplus water or

5/ 16 U.S.C. § 817(1). Wisconsin Power asserts that, since the Shawano Project does not meet any of the criteria for mandatory licensing under FPA Section 23(b)(1), Wisconsin Power has the option of accepting or rejecting a non-mandatory license under FPA Section 4(e), 16 U.S.C. § 797(e). However, Wisconsin Power's pleading asserts absence of even the predicates for Commission jurisdiction under Section 4(e), which require that the project occupy federal lands, use surplus water or water power from a Government dam, or be located on a Commerce Clause water. We note that, even were the Wolf River not navigable, it is most certainly a Commerce Clause stream, in that it is a headwater of the Fox River, which the Supreme Court declared navigable in The Montello, 87 U.S. (20 Wall.) 430 (1874).

water power from a government dam; or (4) is located on a nonnavigable Commerce Clause stream, affects the interests of interstate or foreign commerce, and has undergone construction or major modification after August 26, 1935. A project need only meet one of these criteria for a license to be required.

A part of the Shawano Project's reservoir occupies a portion of the Menominee Reservation, which is held in the name of the United States in trust for the Menominee Tribe. <u>6</u>/ Thus, the project occupies lands of the United States. <u>7</u>/

Wisconsin Power concedes that the project reservoir is located in part on the reservation, but asserts, without elaboration, that the reservoir is not a project work within the meaning of Section 3(11) of the FPA and therefore is not a part of the project for jurisdictional purposes. $\underline{8}$ / Section 3(11) defines a project as including reservoirs, the use and occupancy of which are necessary or appropriate in the maintenance and operation of such project. $\underline{9}$ / The reservoir provides hydrostatic

- 6/ <u>See</u> Pub. L. No. 93-197, 87 Stat. 770 at p.773 (December 22, 1973).
- 2/ See also Section 3(2) of the FPA, 16 U.S.C. § 796(2), defining "reservation" for purposes of the FPA.
- <u>8</u>/ In a November 28, 1989 letter to Interior's Bureau of Land Management responding to a request for a legal land description of the lands within the project boundary, Wisconsin Power stated:

Only the land directly associated with the dam and powerhouse is defined as making up the project boundary. The term "project area" is used in [Wisconsin Power's] Additional Information Package to indicate the area of influence of project operation, including the upstream pool in the Wolf River at the same elevation as the river at the dam and its associated shoreline.

Wisconsin Power's attempt to bifurcate the unit of development in this manner is plainly wrong in light of FPA Section 3(11).

2/ Section 3(11), 16 U.S.C. § 796(2), states in part:

"project" means complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and (continued...)

head for the production of hydropower at the project. Thus, the reservoir comes squarely within the definition set forth in Section 3(11). This is why Article 2.C. of Wisconsin Power's original license for the Shawano Project included the reservoir among the project works. <u>10</u>/

In addition, the Wolf River at the project site is a navigable water of the United States. A Commission staff report establishes that for over half a century the Wolf River was extensively used to drive billions of logs to mills on the Fox River, whence timber was transported via the Fox and Wisconsin Rivers to markets in the Great Lakes and Mississipi River basins. 11/

(...continued)

structures including navigation structures which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, . . . and all water-rights, rights-of-way, ditches, dams, reservoirs, lands, or interest in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit.

See also Montana Power Company and Granite County, Montana, 71 FERC ¶ 61,119 at pp.61,392-93 (1995).

10/ Article 2 of the license states:

The project covered by and subject to this license is located in Shawano County, Wisconsin and consists of--

C. All project works consisting of a tainter gate spillway dam and power house in Wolf River, two earth wing dams, with corewalls, [and] a reservoir of approximately 180 acres surface area

Indeed, Wisconsin Power's 1976 relicense application showed the project boundary as encompassing the reservoir, most of which is on Reservation land. See November 4, 1976 application, Exhibit K Sheet 2. It was only when it filed its 1992 application amendment that Wisconsin Power submitted a map showing the project boundary as encompassing only the dam and powerhouse. June 30, 1992 filing, Exhibit G.

<u>11</u>/ <u>See</u> Navigation Status Report, Wolf River, Wisconsin, FERC (continued...)

в. Request for More Time to File Conditions Pursuant to Section 4(e) of the FPA

1. Background

Section 4(e) of the FPA 12/ requires that Commission licenses for projects located on United States reservations include all conditions that the Secretary of the department under whose supervision the reservation falls shall deem necessary for the adequate protection and utilization of such reservation. As noted above, a portion of the Shawano Project is located on the Menominee Reservation, which is under the supervision of the Department of the Interior.

The notice of application issued August 18, 1992, in this proceeding provided for, inter alia, mandatory conditions pursuant to FPA Section 4(e) to be filed by October 27, 1992. Conditions filed after the deadline (but before the license order) would be considered under the public interest standard of FPA Section 10(a)(1). 13/ Interior did not file Section 4(e) conditions by the deadline. Some 17 months later, on March 28, 1994, it filed a letter stating that it had only recently discovered that a portion of the project reservoir is located on the Menominee Indian Reservation. 14/ In light of this, Interior

- (...continued) 11/ Office of Hydropower Licensing, Division of Project Compliance and Administration, Project Evaluation Branch (August 1996). This report was placed in the public record on October 2, 1996. <u>See also</u> The Montello, supra n. 5, and North American Hydro, Inc., 54 FERC ¶ 61,131 (1991) (describing navigability of the Wolf River from a point downstream of the Shawano Project).
- 12/ 16 U.S.C. § 797(e).
- <u>13</u>/ 18 C.F.R. § 4.34(b).
- Interior cited a December 1993 engineering report prepared 14/ for the Bureau of Indian Affairs and the Menominee Tribe by the U.S. Army Corps of Engineers, titled Alternatives for Flood Control and Study Plan Formulation, Ice Jam Flooding on the Wolf River at Keshena, Wisconsin. The study was filed with the Commission on April 26, 1996.

As part of the pre-filing consultation on its June 1992 application amendment, Wisconsin Power on May 12, 1989. mailed additional information regarding project environmental impacts to 23 recipients, including the (continued...)

- 7 -

asserted its right to submit Section 4(e) conditions after the 1992 deadline, and stated that it needed a minimum of 18 months to do so.

By letter dated June 24, 1994, the Commission staff gave Interior another 90 days (until September 22, 1994) to submit Section 4(e) conditions. 15/ By filing of September 22, 1994, Interior reiterated its position that it needed 18 months to develop conditions. 16/ As part of its demand for more time, Interior asserted that the Commission staff's Environmental Assessment (EA) for the project did not contain a comprehensive evaluation of project impacts on the reservation. Interior also argued that the Commission lacks the authority to set a deadline on Section 4(e) condition submittals, and that the assertion of such authority in this case contravenes the Government's trust responsibility to protect the lands and resources of Indian tribes.

- 14/ (...continued) Menominee Indian Tribe and Interior's Fish and Wildlife Service, National Park Service, Bureau of Land Management, Office of Environmental Project Review, Regional Environmental Officer, and Bureau of Indian Affairs (BIA). BIA responded (letter of July 26, 1989) that the Menominee Indian Tribe is under its jurisdiction, and expressed support for the Tribe's concerns regarding fish passage.
- 15/ It declined to grant a longer extension, in view of the extensive review and discussions of the Shawano Project that had already taken place among Commission staff, Interior, the Menominee Tribe, FWS, and Wisconsin DNR.
- On December 28, 1994, Interior proposed five interim <u>16</u> Section 4(e) conditions to be applied to the project through its annual licenses pending the development of final Section 4(e) conditions, citing Platte River Whooping Crane Trust v. FERC, 876 F.2d 109 (D.C. Cir. 1989), and Platte River Whooping Crane Trust v. FERC, 962 F.2d 27 (D.C. Cir. 1992). In the Platte River cases, the court directed the Commission to consider the need, in light of extensive documentation of environmental degredation, for "rough and ready" interim measures to prevent irreversible environmental damage to endangered species pending relicensing, and, if found to be needed, to impose such measures if the annual license gave it authority to do so, and absent such authority to seek the licensee's voluntary cooperation. 876 F.2d at 116-17. No such urgent environmental threat exists at the Shawano Project.

- 8 -

2. Discussion

Interior states that it did not timely file Section 4(e) conditions because it did not discover that a portion of the Shawano Project reservoir is located on the Menominee Reservation until a December 1993 U.S. Army Corps of Engineers report "established" that the project extends into the reservation.

The Shawano Project reservoir has in fact always occupied part of the Menominee Indian Reservation. 17/ The Federal Power Commission Annual Report of 1928 reports issuance of the original Shawano license for a project that would back water up to Keshena Falls within the Menominee Reservation, and states that about 60 percent of the project area would occupy Indian lands. 18/ Wisconsin Power's 1976 relicense application shows the reservoir (and the project boundary) as including Reservation land. 19/ Inasmuch as Interior was served with the license application amendment in May 1989 and filed comments with respect to the project reservoir's effects on the Reservation on October 29, 1992, 17 months before it states it learned of the reservoir's partial location on the Reservation, it is difficult to understand its asserted lack of this knowledge, and therefore difficult to see how it had a valid basis for obtaining additional time to supply Section 4(e) conditions.

- 17/ What has changed over the years has been the legal status of the Reservation, a separate issue that we discuss below.
- <u>18</u>/ 8 Ann. Rept. 64.
- See n. 10, supra. While all parties now acknowledge that 19/ the project's reservoir is located in part on the reservation, it is not clear precisely how much of the reservoir is located there. In the relicense proceeding, various figures have been submitted for the size of the reservoir and for the degree to which it occupies the Reservation. The December 1993 Corps of Engineers flood control study (see n. 13, supra) states that the reservoir extends to just upstream of the Fairgrounds Bridge in the Village of Keshena, on the Reservation. The Menominee Indian Tribe maintains that the project pool inundates approximately 71 acres of the Reservation (filing of January 30, 1997), and Interior asserts that the project extends two miles into the Reservation (filing of September 22, 1994). Article 202 requires Wisconsin Power to file a revised Exhibit G to identify more precisely the portion of the project boundary that is within the Reservation.

Be that as it may, even if we assume that Interior was first aware of the project's location on the Menominee Reservation as of December 1993, Interior has failed to justify its continued failure to submit Section 4(e) conditions. As noted, the Commission's regulations provide for Section 4(e) conditions to be filed by 60 days after issuance of public notice that the license application is ready for environmental analysis. Since the Section 4(e) conditions are to precede, and provide information for, the EA, Interior cannot argue that its formulation of Section 4(e) conditions was hindered by what it perceives is an inadequate EA.

The regulations provide further that, if agency proceedings to determine license conditions are not completed by the due date, the agency must file by that date either a statement that no conditions will be submitted, or preliminary conditions and a schedule showing the status of agency proceedings and when the conditions are expected to become final. 20/ Interior's September 1994 letter stated that it needed at least 18 months -until the end of September 1995 -- to develop the conditions. That date passed 19 months ago. By filing of August 7, 1995, Interior revised this schedule, stating its intention to submit Section 4(e) conditions "in time for inclusion within [the Commission staff's] environmental analysis and subsequent drafing of the EIS" that Interior argues is required.

Interior's assertion that the Commission lacks authority to establish deadlines for the submittal of mandatory conditions was addressed in the rulemaking which established those deadlines and will not be repeated here. 21/ As we noted therein, deadlines are necessary for the proper conduct of virtually any type of proceeding, and serve to ensure that parties cannot, through undue delay in fulfilling their roles, unilaterally block action on pending matters. However, we emphasized, and this case certainly illustrates, that we would be receptive and flexible with regard to a resource agency's demonstrated need for more time to prepare its submittals. 22/

20/ 18 C.F.R. § 4.34(b)(1).

- 21/ See Regulations Governing Submittal of Proposed Hydropower License Conditions and Other Matters, 56 Fed. Reg. 23108 (May 20, 1991), III FERC Stats. & Regs., Regs. Preambles ¶ 30,921 at pp. 30,141-45 (May 8, 1991) (Order No. 533).
- 22/ Id. See also Order No. 513-A, 56 Fed. Reg. 61137 (December 2, 1991), Regs. Preambles ¶ 30,932 at pp. 30,349-50 (November 22, 1991). It appears this case is the first time the Commission has proceeded to licensing without (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 10 - /

It is, however, now over three years since Interior's March 28, 1994 letter asking that the clock be restarted for its Section 4(e) submittals. At this point, we conclude the time has come to proceed with issuance of a new license for the Shawano Project, which has been operating under annual license for nearly 20 years, and to delay no further the imposition of new, environmentally beneficial conditions on that operation.

Interior also argues that imposing a deadline for submittal of Section 4(e) conditions for tribal reservations contravenes the Commission's trust responsibility to Indian tribes to always act in their interests. We recognize this responsibility, which we exercise in the context of the FPA and our implementing regulations. 23/ We do not, however, see how it is in the Tribe's interest to delay any further this 20-year-old relicense proceeding, particularly since issuance of a new license does not preclude Interior, or the Tribe itself, from filing requests for any needed modifications to the project pursuant to the Commission's reserved authority.

с. Motion to Compel Preparation of an EIS

On August 7, 1995, Interior and the Menominee Tribe filed a motion to compel preparation of an environmental impact statement (EIS), on the ground that the EA failed to consider the project's impacts on the Menominee Reservation. 24/ The movants cite the Commission's obligation under FPA Section 4(e) to ensure that any project occupying a federal reservation will not interfere or be inconsistent with the purpose for which such reservation was created or acquired. Interior argues that the EA's failure to recognize the Menominee Reservation as federal land meant that "information relevant to the environmental concerns and bearing on the proposed action was overlooked." 25/

- See City of Tacoma, Washington, 71 FERC ¶ 61,381 at 23/ pp. 62,492-93 (1996).
- Wisconsin Power's 1976 application (at 2) had stated that 24/ the project occupied no lands of the United States. On August 22, 1995, Wisconsin Power filed an answer to Interior's motion.
- 25/ August 7, 1995 motion at 6.

^{22/} (...continued) having received Section 4(e) conditions, or the agency's waiver thereof.

- 11 - [·]

Despite the EA's failure to recognize that the Menominee Reservation was once more federal, 26/ the BA clearly recognized that a portion of the project is located on the Reservation. 27/ It certainly knew and addressed the issues of concern to the Tribe, notably restoration of the lake sturgeon fishery, the problem of frazil ice formation, and protection of cultural resources (all discussed below). This is not surprising, since the Tribe (as well as Interior's Fish and Wildlife Service) was consulted extensively during the three-year consultation and study process that preceded Wisconsin Power's submittal of its six-volume 1992 application amendment. The Tribe and Interior were among the parties to whom Wisconsin Power in May 1989 submitted its updated application for prefiling consultation, and they responded in June and October, respectively, of that year. In addition, the Tribe and Interior 28/ attended several meetings 29/ prior to public notice of the application amendment,

26/ The Treaty with the Menominee Indians of May 12, 1854, established a reservation for the Tribe on the Wolf River in Wisconsin, and the original license for the Shawano Project recognized that most of the Shawano Project was to occupy the Menominee Indian Reservation, held and administered by the United States in trust for the Menominees. 8 Ann.Rept. at 64 and 182.

However, under the Menominee Termination Act of 1954, Pub. L. No. 83-399, 68 Stat. 250 (June 17, 1954), Congress provided that federal supervision over the Menominee Tribe would end, and that state law would then apply to the Tribe and its members. Section 8 of the Termination Act directed the Secretary of the Interior to transfer to the Tribe the title to all property, real and personal, held in trust by the United States for the Tribe. In a proclamation made pursuant to the Termination Act, 26 Fed. Reg. 3726, Interior transferred title to the reservation lands and ended supervision effective as of April 30, 1961.

In 1973, Congress passed the Menominee Restoration Act, Pub. L. No. 93-197, 87 Stat. 770 (December 22, 1973), which repealed the Termination Act, reinstated all rights and privileges of the Tribe under federal treaties and statutes, and reestablished the Menominee Reservation.

- 27/ See EA at C.1 and C.3.
- 28/ Interior's participation included representatives of both FWS and the Bureau of Indian Affairs.
- 29/ Interior and the Tribe attended a joint agency meeting for (continued...)

- 12 -

and they filed comments on the amendment. The Menominee Tribe commented $\underline{30}/$ and participated in discussions $\underline{31}/$ concerning a programmatic agreement to protect cultural resources. Finally, both Interior and the Tribe participated in 10(j) negotiations, including meetings on April 29 and May 24, 1993, concerning the fish and wildlife agencies' Section 10(j) recommendations (discussed below). At these meetings, the parties also specifically discussed the Tribe's concerns related to annual charges, passage of lake sturgeon, flooding, and historic preservation. In sum, the EA reflects staff's awareness of and attention to all the issues of concern to Interior and the Tribe, and properly serves as a part of the record of this proceeding on which to make a determination regarding the project's consistency with the Reservation, which we do below.

Interior also argues that an EIS is necessary because, allegedly, the EA failed to examine the cumulative impacts of the Shawano Project together with the Little Rapids Corporation's Shawano Paper Mill Project No. 8015, located 5.3 miles downsteam from the Shawano Dam, <u>32</u>/ on the Wolf River fishery, notably lake sturgeon, an historically important resource for the Menominee Tribe.

Although there is a spring spawning run of lake sturgeon up to the Paper Mill Project, that project, which is located approximately 5.3 miles downstream of the Shawano Project,

<u>29</u>/ (...continued)

the project held in Green Bay, Wisconsin, on December 13 and 14, 1989, which included a visit to the project site and a conference addressing such issues as recreation, threatened and endangered species, fish and wildlife resources, water quality, operations, entrainment and turbine mortality, fish passage (including passage of sturgeon), and river flow releases. The Tribe and Interior also participated in a Stage II consultation agency meeting on April 18, 1990, addressing entrainment and turbine mortality, fish passage, and sturgeon restoration, and FWS participated in a resource agency meeting on August 1, 1990, addressing the scope of studies covering water quality, wildlife resources, threatened and endangered species, recreation, and documentation of operational compliance.

- 30/ The Tribe filed comments on April 6 and July 30, 1993.
- 31/ Discussions were conducted by telephone conference on September 9, 1993.
- 32/ Project No. 8015 was issued an exemption from licensing in 1985. 30 FERC ¶ 62,344.

Project No. 710-000 and Docket No. DI96-4-000 - 13 -

currently is an absolute barrier to the upstream migration of lake sturgeon, and the exemptee has no current plans for, nor did any agency reserve authority to require, the installation of fish passage facilities at the project. In light of this, the EA finds that the Shawano Project does not contribute to an adverse effect on the upstream migration of lake sturgeon. As the EA also notes, if fish passage is accomplished at the downstream Paper Mill Project, the license reserves Interior's authority under FPA Section 18 to prescribe fishways at the Shawano Project.

WATER QUALITY CERTIFICATION

Under Section 401(a)(1) of the Clean Water Act, <u>33</u>/ the Commission may not issue a license for a hydroelectric project unless the state certifying agency has issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable time, not to exceed one year.

On November 8, 1976, Wisconsin Power applied to Wisconsin DNR for water quality certification for its relicense proposal. By letter dated April 20, 1979, Wisconsin DNR waived certification. In 1981, as part of the process of updating its license application to conform with ECPA, Wisconsin Power filed a second request for water quality certification, and by letter dated October 30, 1991, the Wisconsin DNR again waived certification.

SECTION 18 OF THE FPA

Section 18 of the FPA <u>34</u>/ states that the Commission shall require construction, maintenance, and operation by a licensee of such fishways as the Secretaries of Commerce and the Interior may prescribe. Interior has requested that the Commission reserve its fishway prescription authority. <u>35</u>/ Article 407 reserves that authority.

- 33/33 U.S.C. § 1341(a)(1).
- <u>24/</u> 16 U.S.C. § 811.
- <u>35</u>/ Letter from Interior to Secretary of the Commission, filed November 2, 1992.

- 14 -

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES PURSUANT TO SECTION 10(j) OF THE FPA

Section 10(j) of the FPA <u>36</u>/ requires the Commission, when issuing a license, to include license conditions, based on recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act, 16 U.S.C. §§ 661 <u>et seq</u>., for the protection of, mitigation of adverse impacts to, and enhancement of fish and wildlife resources, unless such conditions would conflict with the FPA or other applicable law.

If the Commission believes that any such recommendation may be inconsistent with the purposes and requirements of Part I of the FPA or other applicable law, Section 10(j)(2) requires the Commission and the agencies to attempt to resolve any such inconsistency, giving due weight to the recommendations, expertise, and statutory responsibilities of such agencies. If the Commission then does not adopt a recommendation, it must explain how the recommendation is inconsistent with applicable law and how the conditions selected by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife.

A number of recommendations were filed by Interior and by Wisconsin DNR pursuant to Section 10(j). <u>37</u>/ The license contains conditions consistent with Interior's and Wisconsin DNR's recommendations that Wisconsin Power: (1) operate the project in an instantaneous run-of-river mode, maintaining a surface reservoir elevation of 818.0 feet plus or minus 0.3 feet National Geodetic Vertical Datum (Article 402); (2) monitor the instantaneous run-of-river operation (Article 403); (3) discontinue the sluicing of logs and debris through the dam (Article 404); <u>38</u>/ (4) implement a streamflow gaging plan

<u>36</u>/ 16 U.S.C. § 803(j)(1).

- 37/ The Menominee Tribe also filed purported Section 10(j) recommendations. However, only fish and wildlife agencies have authority to make recommendations under FPA Section 10(j). In any event, many of the Menominee Tribe's recommendations are the same as those of Interior and Wisconsin DNR. To the degree that its recommendations differ, they are examined pursuant to Section 10(a), infra.
- 38/ Article 404 requires the licensee to limit water level fluctuations in the tailwater and downstream river reach during log and debris sluicing to no more than 0.2 feet. Article 404 also requires the licensee to maintain pertinent (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 15 -

(Article 403); <u>39</u>/ (5) pass river inflow through the project in the event of project shut-down (Article 403); <u>40</u>/ (6) develop and implement a plan to maintain dissolved oxygen levels at five milligrams per liter (mg/l) or greater (Article 405); (7) monitor purple loosestrife <u>41</u>/ in project waters (Article 409); and (8) develop a plan to preserve bald eagle nesting sites (Article 410). <u>42</u>/

- 38/ (...continued) operational data regarding compliance with this article, and to provide such data to the agencies upon request. The resource agencies and the licensee, based on the negotiations pursuant to Section 10(j)(2), agreed to these measures in lieu of the agencies' recommendation to discontinue log and debris sluicing.
- Article 403 requires the licensee to develop and implement a <u>39/</u> plan to monitor compliance with run-of-river operation and downstream water level fluctuations during debris sluicing The plan is to include provisions for using an activities. existing telemetered downstream USGS gaging station, existing control features, staff gages, and/or other appropriate monitoring/control features. The resource agencies initially had recommended that Wisconsin Power fund the installation, operation, and maintenance of a USGS gaging station upstream of the project, as well as maintain the existing downstream USGS gaging station. However, based on the negotiations pursuant to Section 10(j)(2), the resource agencies agreed instead to these measures along with the limitation of water fluctuations set out in Article 404.
- 40/ In order to pass through river flow during project shutdown, the agencies recommended that Wisconsin Power have on stand-by an emergency gasoline generator or battery power source with the capability of immediately opening a Taintor gate by remote control. However, the upgrade of Wisconsin Power's operations from manual to automatic (including full automation and remote monitoring of the turbine, generator, and one Taintor gate), included in Article 403, will serve the same function, making the project consistent with the pass-through recommendation.
- 41/ Purple Loosestrife is a noxious weed which tends to invade wetlands.
- 42/ Interior and Wisconsin DNR also made a number of recommendations that are outside the scope of Section 10(j) because they are not measures to protect, mitigate damages (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 16 -

One recommendation requires further discussion. To mitigate for fish entrainment and turbine mortality, 43/ Interior and Wisconsin DNR recommended that Wisconsin Power provide for downstream fish protection facilities, such as angled trashracks or fish screens. The EA estimated that the levelized annual cost of installing a new trashrack at the project intake would be over \$19,000. 44/ The EA also concluded, based on the results of Wisconsin Power's entrainment study, that the estimated entrainment and turbine mortality rate would be only about 2.2 percent, i.e., some 1,000 fish annually. 45/ Because the costs for fish protection noted above would have a significant adverse effect on project economics, while the benefit to fishery resources resulting from imposition of the recommendation would be fairly small, a preliminary determination was made that the recommended downstream fish protection plan is inconsistent with the purposes and requirements of Part I of the FPA. 46/

(...continued)
 to, or enhance fish and wildlife. These recommendations
 have been considered under FPA Section 10(a), and are
 discussed below.

- 43/ As noted in the EA (Section G.3.c), a variety of fish (including bluegill, bass, black crappie, pumpkinseed, trout, pike, muskellenge, bullhead, perch, white sucker, minnows, and shiners) are entrained at the project.
- 44/ The EA estimated that the cost of a new replacement trashrack with 1-inch bar spacing, including a mechanical cleaning device, would be about \$113,000, and that the associated annual operating and maintenance cost would be about \$1,500. Furthermore, the mechanical components of the trashrack would have to be replaced every ten years, at an estimated cost of \$10,000. See EA, Section I.B.
- 45/ See EA, Section G.3.c.
- 46/ After issuance of the EA, the Commission examined and rejected as infeasible the installation of a barrier net to reduce fish entrainment, as posited by Interior and Wisconsin DNR. We conclude that, given the size of the intake area (approximately 55 feet long) and the recommended velocities for use of barrier nets (0.2 feet per second), the net would have to be some five times the length of the intake. The size and necessary lay-out of such a net would make it difficult or impossible to install. Moreover, because the river has high debris-loading, maintenance of such a net would be very difficult.

Project No. 710-000 and Docket No. DI96-4-000 - 17 -

In accordance with the requirements of Section 10(j)(2), staff notified Interior and the Wisconsin DNR of its preliminary inconsistency determination regarding this recommendation. After receiving the agencies' responsive comments, staff held a telephone conference with Interior and Wisconsin DNR, and a meeting in Keshena, Wisconsin, to attempt to resolve the conflict. 47/ As a result of these meetings, the agencies agreed that, in lieu of their initial recommendation, they would accept a requirement that Wisconsin Power provide a yearly payment of \$4,100, adjusted annually, to a special fund set up and administered by Wisconsin DNR to finance resource-based fishery enhancement activities in the project area, or, if cost-effective measures are developed, facilities to reduce turbine-induced fish mortality or injury.

We see no need to disturb the agreement reached in this proceeding between the Commission staff and the fish and wildlife agencies in the context of the requirements of FPA Section 10(j). However, inasmuch as we must retain regulatory authority over actions that we require of our licensees, we will provide, as we have in other cases, <u>48</u>/ that the continuation of funding be subject to Commission approval of the use of such funds (Article 408).

RECOMMENDATIONS UNDER SECTION 10(a) OF THE FPA

As noted above, we consider pursuant to FPA Section 10(a) those recommendations that are outside the scope of Section 10(j). Interior and Wisconsin DNR recommend that Wisconsin Power conduct a fishery assessment (involving the monitoring of DO and surveys of the fishery) of the river 1/2 mile downstream of the dam, and additional surveys at ten-year intervals thereafter. Wisconsin DNR states that periodic monitoring of DO levels is necessary in order to develop prompt remedial action for DO level violations, and that periodic surveys are necessary to assess the quality of the fishery, so that it can implement appropriate fish management practices to maintain a quality fishery for the sport fishing public.

As noted above in our Section 10(j) discussion, the water quality monitoring plan required by license Article 405 already includes DO as a subject, and the agencies are to be consulted regarding the monitoring plan and results. Consequently, as pertains to DO levels, this recommendation is redundant and is

^{47/} Wisconsin Power and the Menominee Tribe participated in both meetings.

<u>48</u>/ <u>See</u> Consumers Power Corp., 68 FERC ¶ 61,077 (1994); City of Augusta, Ky., 72 FERC ¶ 61,114 at p. 61,602 (1995).

- 18 -

not adopted. Furthermore, the proposed periodic surveys would entail costs to the licensee but would not provide any benefit to the environment or serve any licensing needs.

Noting that two state threatened mussel species, the Salamander and the Slippershell mussels, have been found approximately 100 meters below the project dam, Wisconsin DNR recommends that a survey of aquatic insects and mussels be required in the reach of the Wolf River extending about 3.5 miles downstream from the project and states that if significant rare species are found, Wisconsin DNR may request more detailed studies to develop management recommendations for these species. However, Wisconsin Power has already performed an aquatic macroinvertebrate survey at sites both upstream and downstream from the project. Its survey found, upstream, four species of aquatic insects listed by the state as imperiled, rare, or uncommon, and found downstream, three species listed by the state as rare or uncommon and species with uncertain status. No federally listed threatened or endangered species were found. 49/ Wisconsin DNR. which reviewed the survey, has not recommended any measures related to the state-listed species in this proceeding, and the run-of-river mode of operation required by Article 402 provides stable environmental conditions approximating those to which fish and other aquatic life are adapted. Wisconsin DNR has made no showing of the need for further surveys. 50/

Wisconsin DNR requests a license article requiring Wisconsin Power to perform a dam-break analysis which meets the State's standards. We will not adopt the Wisconsin DNR's recommendation. Wisconsin Power is subject to the FPA and to federal dam safety standards. Pursuant to these federal standards, a dam-break analysis has already been performed, reviewed, and found acceptable. <u>51</u>/

- 49/ EA at G.6. The EA did recommend, and the license adopts, the requirement that trees suitable as potential nesting sites for bald eagles be preserved.
- 50/ In any event, under Standard Article 11 of the license, the Commission may, in the future, require modifications to the project in accordance with recommendations made by the Wisconsin DNR for conservation and development of fish and wildlife resources. See ordering paragraph E, below.
- 51/ The hazard potential rating for the Shawano Dam was determined by the Commission based on observations made during the staff's operation inspection and the dam-break analysis conducted for the project. The failure analysis indicated that, for a range of flows from normal through (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 19 -

Interior and Wisconsin DNR also recommended that Wisconsin Power be required to improve the boat launch facility on the west side of the flowage and to complete the canoe portage within two years. We will so require (Article 412). 52/

ADDITIONAL INTERVENOR ISSUES

A. <u>Sturgeon</u>

The Menominee Tribe states that lake sturgeon historically has been an important food resource for the Tribe but is no longer found within the Menominee Reservation because the Shawano Project's dam and the downstream Paper Mill Project No. 8015, described earlier, <u>53</u>/ prevent the sturgeon's passage upstream. It argues that the project, in interfering with upstream passage of the sturgeon, interferes with the purpose for which the Menominee Reservation was created, <u>54</u>/ and in the alternative it requests the imposition of license conditions (1) reserving to the Commission authority to require fishways and (2) requiring Wisconsin Power to negotiate with the Tribe an annual fee for the past and current loss to its fishery resource, including lake sturgeon.

As noted, fish passage at Shawano Dam will become relevant to the Tribe's fishery only when fish passage is obtained at the downstream Paper Mill Project, which is a complete barrier to upstream migration of lake sturgeon. However, the license reserves the Commission's authority to require at the Shawano

- 52/ The agencies' request to be consulted before the licensee removes any project lands from within the project boundary is addressed by license Article 413, the Commission's standard land use article, at subsection (e)(1).
- 53/ See discussion, Motion to Compel Preparation of EIS.
- 54/ Menominee Tribe's motion to intervene and protest, filed April 19, 1996, at p. 5.

^{51/ (...}continued) flood conditions, no inhabited structures would experience flooding. On December 19, 1988, based on this analysis, the Director, Chicago Regional Office, Division of Dam Safety and Inspections, sent Wisconsin Power a letter exempting it from the requirement to file an emergency action plan. However, as a condition of the exemption, Wisconsin Power is required to conduct an annual inspection of the areas upstream and downstream of the dam to ensure that conditions do not change.

Project No. 710-000 and Docket No. DI96-4-000 - 20 -

Project such fishways as Interior may prescribe, <u>55</u>/ so that once lake sturgeon can reach the project, upstream passage past it can be achieved. We will not require the licensee to negotiate a fee for the Menominee Tribe's "loss" of the sturgeon; it is well established that the Commission has no authority to adjudicate claims for, or require payment of, damages. 56/

B. <u>Flooding</u>

The Menominee Tribe argues that the Shawano Project, by creating reduced flow, slack water, increased sedimentation, siltation, and widening of the river above the project dam, contributes to the formation of frazil ice, which in turn results in occasional flooding in the upstream Village of Keshena, located on the Reservation, and therefore is the cause of that flooding. 57/ The Tribe submitted a flood control study prepared by the Corps of Engineers in support of its contention. 58/

Frazil ice is a type of ice which forms underwater when temperatures are very cold and water velocity is sufficient to prevent the formation of an ice sheet on the surface of the water. So long as the water velocity remains above a threshold level, the frazil remains entrained in the water column and will

- 55/ See Article 407 of the license. The Menominee Tribe stated that the Tribe, Wisconsin DNR, and Interior were working on a fisheries management plan, constituting a comprehensive plan under Section 10(a)(2)(A) of the FPA, to address the establishment of a resident population of lake sturgeon on the Wolf River in the area of the Shawano Project. This plan has not yet been filed with the Commission as a comprehensive plan. However, the license requires the licensee to cooperate with the resource agencies and the Tribe to develop a fish management plan for the Wolf River by providing information on operational considerations and design criteria for fishways at the Shawano Project. See Article 406.
- 56/ See Indiana Michigan Power Company, 72 FERC ¶ 61,153 (1995); Ohio Power Company, 71 FERC ¶ 61,092 at p. 61,312 n. 30 (1995); and South Carolina Public Service Authority v. FERC, 850 F.2d 788 (D.C. Cir. 1988).
- 57/ The Menominee Tribe asked for compensation for the flooding of Tribal lands. The Commission cannot require payment of damages; such redress is reserved to the courts. See South Carolina Public Service Authority v. FERC, 850 F.2d 788 (D.C. Cir. 1988).
- 58/ See n. 14, supra.

- 21 -

move downstream without rising to the top. However, where the water velocity decreases and becomes slackwater, the frazil ice will rise to the surface and adhere to the ice cover there or to whatever else is in its path, creating, in essence, an ice dam.

As discussed in the EA, frazil ice is a natural condition which occurs regardless of the presence or absence of hydroelectric projects. The rate of heat loss for reservoirs typically is lower than for the river environment. An ice cover is more likely to form in this slow water environment. Thus, reservoirs have less tendency to form frazil ice than the riverine environment. The Corps report submitted by the Menominee Tribe supports this view, stating that the frazil ice forms above Keshena and below Keshena Falls, in the Wolf River above the Shawano Project's impoundment.

However, while the Shawano Project does not cause the formation of frazil ice, the Corps study concludes that it probably exacerbates any resulting flooding. The Corps report finds that the Keshena Falls Dam, which had been located above Keshena, held back most of the frazil ice generated upstream of Keshena Falls until the dam failed in 1972. Without the Keshena Falls Dam to block it, the frazil ice now travels downstream until it reaches the backwater of the Shawano Project's dam, where it builds up, raising the water level upstream.

Although the Corps considers modification of project operations as a possible way to reduce flooding, it does not recommend any changes at the Shawano Project, stating that it would only move the ice jam initiation point further downstream, merely delaying any flooding by a day or two. The Corps notes that another way to reduce flooding is to reduce the volume of frazil ice generated, and discusses a number of ice control options. 59/ The Corps concludes that the most suitable ice control would be the reconstruction of the Keshena Falls Dam, and recommends additional studies and surveys to determine the optimum ice control method.

Since it does not appear that any alteration of the Shawano Project would, by itself, be an effective solution to the flooding problem, the license requires Wisconsin Power to consult with the Menominee Tribe and the Corps concerning any further studies the Corps conducts, and retains authority to require

^{59/} It considers, among other options, ice booms, weirs, and raising water temperature through addition of groundwater or some source of waste heat.

- 22 -

Wisconsin Power to take action to alleviate the flooding, if a feasible solution is found. $\underline{60}/$

C. <u>Cultural Resources</u>

On December 26, 1996, Interior filed a motion requesting reopening of the Programmatic Agreement developed in this proceeding pursuant to the requirements of Section 106 of the National Historic Preservation Act. <u>61</u>/ Interior maintains, without citation, that it should have been included in the preparation of the Agreement but was not included because the Commission was under the mistaken impression that there was no federal interest in the tribal lands within the project boundaries.

While the regulations adopted by the Advisory Council on Historic Preservation (Advisory Council) to implement Section 106 specifically require the participation of Indian Tribes in the consultation leading to the development of an Agreement, <u>62</u>/ they do not appear to set out any specific requirement for Interior's participation in such preparation where Indian land is involved. <u>63</u>/ Furthermore, Interior's argument that we somehow failed in consultation on cultural resources because we initially failed to recognize the Indian land as a reservation is groundless. The Menominee Tribe was invited to be a consulting party, was fully included in such consultation, and concurred in the Agreement on October 5, 1993.

D. Dam Removal

The Menominee Tribe has opposed relicense of the project, arguing that the project's dam should be removed, on the basis that the project is a barrier to the historical upstream passage

- 60/ See Article 401 of the license.
- <u>61</u>/ 16 U.S.C. § 470f.
- 62/ See 36 C.F.R. § 800.1(c)(2)(iii), which specifically provides that when an undertaking will affect Indian lands, the governing body of the responsible tribe shall be invited to be a consulting party and to concur in any agreement.
- 63/ 36 C.F.R. § 800.13(b) states generally, concerning the consultation process for programmatic agreements, that federal agencies may be invited to be consulting parties, as appropriate. In view of the absence of any mention of Interior in Section 800.1(c)(2)(iii), concerning Indian tribes, we do not consider Interior's lack of involvement to be error.

of lake sturgeon, and causes flooding of tribal lands. The above discussions on these matters demonstrate that these bases for dam removal are unpersuasive. Nevertheless, we have examined the option of denying the new license and requiring removal of the project dam.

Project retirement with partial removal of the dam would have a number of effects on environmental values. 64/ The natural flow regime of the Wolf River would be restored, and downstream flow patterns would be similar to the flows under the proposed run-of-river operating mode, but without the fluctuating water levels that result from debris sluicing activities. The surface waters of the Wolf River are well oxygenated, and the additional turbulence created by the restored free-flowing segment of the river probably would result in dissolved oxygen levels maintained at or above the State of Wisconsin's water quality standards. The Shawano-affected reach would change from a wide channel with fine substrates and relatively slow velocities to a somewhat steeper gradient channel with coarser substrates and more riffle and pool habitats. This would likely cause a shift in habitat characteristics, resulting in a shift in fish species composition in the area. 65/

Opening the spillway gate and drawing down the reservoir could also result in the conversion of palustrine impounded bottom to riverine unconsolidated bottom 66/ and the loss of

- Removal of all the project facilities would require disposal 64/ of spoil from the two earthen embankments and the concrete powerhouse and spillway, and dredging and removal of accumulated sediments from the project impoundment. Because the cost of spoil disposal resulting from removal of all the project facilities would be very high, we examine here the alternative of partial removal, which would still serve to remove an impediment to upstream and downstream fish passage. Partial removal could include removal of the six 14-foot-wide Taintor gates in the spillway section of the dam.
- The species composition would likely shift from a community <u>65/</u> dominated by bluegill, rockbass, largemouth bass, black crappie, and pumpkinseed to a community dominated by fastwater fish such as trout, walleye, and sculpin.
- 66/ Palustrine impounded bottom are those shallow areas along river or reservoir banks that may have emergent vegetation. Riverine unconsolidated bottom are areas of free-flowing river with no mud or sand bottom to which vegetation can root or otherwise attach. See Cowardin, L.M., V. Carter, F. (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 24 -

permanently or seasonally flooded emergent wetlands. <u>67</u>/ The sediment accumulation behind Shawano Dam has created a combination of shallow flats, braided stream channels, and wetlands. Although with dam removal the project reservoir's accumulated sediments would move downstream, this is not expected to create any significant wetlands downstream, nor is it expected that wetland formation along the channel upstream from the Shawano Dam will replace the wetland complex within the boundary of the historic impoundment. Thus, no new wetlands would be created to replace those lost. This could, among other things, degrade existing bald eagle habitat in and around the project area by eliminating resting, feeding, breeding, and nesting habitat, as well as a potentially important forage base. <u>68</u>/

The analysis of project economics also militates against project retirement and dam removal. As is described under Comprehensive Development, below, the EA evaluated two alternatives: the project as proposed by Wisconsin Power and the project as proposed by Wisconsin Power with operational, mitigation, and enhancement measures based on recommendations of the agencies and Commission staff. If the project is retired, the dam removed, and the site restored, the total cost would be about \$2,819,000. <u>69</u>/ The equivalent annual cost of alternative

- <u>66</u>/ (...continued) Golet, and E.T. LaRoe, Classification of Wetlands and Deep Water Habitats of the United States, U.S. Department of the Interior, FWS/OBS-79/31 (1979).
- 67/ If the dam is removed, eight miles of submerged shoreline at the Shawano reservoir would be exposed. Over time, river bank erosion or other ground-disturbing activities could adversely affect any archeological resources located beneath the once-inundated ground.
- 68/ There are several potential roosting or nesting trees along the Shawano flowage, and bald eagles have been known to migrate through the project area, making use of these roosting and nesting trees. Emergent wetlands and mudflats support prey species and provide a more open foraging area that increases the prey's vulnerability to capture. Shallows provide good feeding opportunities for bald eagles, because eagles are surface plunderers, feeding in the top three feet of the water column.
- 69/ Project removal would include mobilization and demobilization of construction forces; removal, hauling, and disposal of rip-rap, earth dam embankments, sheet piling, corewall, mass concrete, mechanical and electrical (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 25 -

power plus the cost of complete dam removal would be about \$466,860, or about 117.3 mills/kWh. This alternative would cost about \$297,250 more annually, or about 78 mills/kWh more than the licensing alternative adopted in this order. On balance, we believe that the benefits of relicensing the project with the mitigation and enhancement measures being required outweighs the increment of enhanced environmental values that license denial and dam removal would bring.

E. Annual Charges for Use of Tribal Lands

Section 10(e) of the FPA provides:

[W] hen licenses are issued involving the use of . . . tribal lands embraced within Indian reservations the Commission shall . . . in the case of such tribal lands, subject to the approval of the Indian tribe having jurisdiction of such lands . . . , fix a reasonable annual charge for the use thereof . . . , and such charges may with like approval be readjusted by the Commission at the end of twenty years after the project is available for service and at periods of not less than ten years thereafter upon notice and opportunity for hearing . . . [70/]

As described above, at the time the original license was issued for the Shawano Project, the Menominee Reservation was a federal reservation. Subparagraph B of Article 23 of the original license provided for the annual charge of \$1,500 for the

(...continued)

equipment, and reservoir silt; and seeding and mulching of the site. The total direct deconstruction cost would be about \$1,976,050. The engineering, construction management, overall project management, contingency, and overhead costs would be about \$50,000, \$50,000, \$10,000, \$420,000, and \$313,000, respectively. Wisconsin Power or its ratepayers would be required to replace the project power and pay the project's committed relicensing costs, as well as all additional costs necessary to remove the project facilities.

^{70/ 16} U.S.C. § 803(e). Pursuant to FPA Section 17(a), 16 U.S.C. § 810(a), "[a]ll proceeds from any Indian reservation shall be placed to the credit of the Indians of such reservation." Currently, the Commission is collecting tribal land use charges for only two licensed projects; certain other projects have been the subject of lump-sum settlement payments to tribes or of payment arrangements that do not involve the Commission.

Project No. 710-000 and Docket No. DI96-4-000 - 26 -

use of tribal lands within the Reservation. <u>71</u>/ Under Section 8 of the Termination Act, Interior ended federal ownership and supervision of the reservation effective April 30, 1961. At that point, the Menominee Tribe's right to Section 10(e) annual charges from the Shawano Project licensee ended. Wisconsin Power then entered into a private lease under which it paid the Tribe \$1,500 per year, and asked the Commission to delete Article 23 Subparagraph B. The Commission did so, effective September 1, 1962. <u>72</u>/ In December 1973, the Menominee reservation was reestablished.

71/ Article 23 stated in pertinent part:

The Licensee shall pay to the United States reasonable annual charges for the purpose of reimbursing the United States for the costs of the administration of the Act and for recompensing it for the use, occupancy and enjoyment of its lands or other property hereinbefore described. Such charges shall be determined in accordance with the provisions of Regulation 14 of said rules and regulations of the Commission, and for the purposes of such determination:

B. The charges for the use of tribal lands within Indian reservations shall be Fifteen Hundred (\$1500.00) Dollars per annum: <u>Provided</u>: That such charges may be readjusted at the end of twenty (20) years after the beginning of operations under this license and at periods of not less than ten (10) years thereafter upon the basis used in the original determination, as provided in Section 5 of said Regulation 14 and upon the facts as found by the Commission at such times of readjustment.

Regulation 14, Section 5, in effect from 1921 to 1937, stated:

When licenses are issued involving the use of tribal lands embraced within Indian reservations, the Commission will fix a reasonable annual charge for the use thereof, based upon the commercial value of the land for the most profitable purpose for which suitable, including power development. The charge shall commence upon the date the license is issued.

<u>72</u>/ 31 FPC 443 (1964).

Project No. 710-000 and Docket No. DI96-4-000 - 27 -

On October 22, 1996, the Menominee Tribe filed a petition requesting restoration, under the original license, of Subparagraph B of license Article 23, in light of the restoration of the Reservation's federal status, and back annual charges as of December 1973 for those years in which it asserts Wisconsin Power did not make its \$1,500 lease payments (1974-78 and 1984-85). 73/ The Tribe argues that, although the Commission removed the tribal land use provision (Subparagraph B) as of 1962, the original license incorporated by reference what is now Part I of the FPA, including Section 10(e), and that this is all the authority the Commission needs to reinstate retroactively an annual charge payment obligation. However, this theory of reserved authority was rejected in <u>City of Seattle</u>, Washington v. FERC, 883 F.2d 1084, 1088 ((D.C. Cir. 1989).

The Tribe also requests that any new license issued for the project be conditioned on payment of "a reasonable annual charge in line with current dollar terms" for the project's occupancy of Reservation lands. 74/ The Commission's regulations, 18 C.F.R. § 11.4, state that the Commission will determine annual charges for any project using tribal lands within an Indian reservation on a case-by-case basis. General Commission practice today is that annual charges on Indian reservation lands are to rest on agreements between the parties, whose terms (unless patently unreasonable) the Commission then incorporates into the license. 75/ Accordingly, as set forth in Article 203, we will afford the parties a period of time to negotiate an annual charge, subject to our approval. 76/

- 73/ The Tribe states that the Commission had the obligation to restore the tribal land use provision, or at least alert the Tribes that they should seek its restoration. However, it would appear that no one informed the Commission of the restoration of the Reservation.
- 74/ Petition at 3. Wisconsin Power filed a late answer to the Menominee Tribe's request, and the Tribe requested leave to file an answer to Wisconsin Power's answer. Although Wisconsin Power's answer was almost two months late and answers to answers generally are not entertained (see 18 C.F.R. § 385.213(a)(2) and (d)), in the interests of a complete record on this issue, both documents are accepted.
- 75/ See Public Utility District No. 1 of Pend Oreille County, Washington, 77 FERC ¶ 61,146 at p. 61,553 (1996). In a few cases where agreement could not be reached, the Commission has set the matter for hearing.
- <u>76</u>/ <u>See</u> Minnesota Power & Light Company, 75 FERC **§**61,131 at p. (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 28 -

CONSISTENCY OF THE PROJECT WITH THE PURPOSES OF THE MENOMINEE INDIAN RESERVATION

Section 4(e) of the FPA states that the Commission may issue licenses within a reservation of the United States "only after a finding . . . that the license will not interfere or be inconsistent with the purpose for which such reservation was created or acquired . . . " The Treaty of May 12, 1854, provided that, in exchange for the cession of certain lands, the United States would give to the Menominee Tribe, a specific tract of land lying upon the Wolf River in the State of Wisconsin. The treaty states that the land is given "as a home, to be held as Indian lands are held," and provides for the development of institutions associated with settlement, such as a grist and saw mill, and a blacksmith shop. 77/

The language in the Treaty of 1854, "to be held as Indian lands are held," has been interpreted to include the right to hunt and fish, 78/ and Interior and the Menominee Tribe state that, historically, the harvest of sturgeon from reservation waters of the Wolf River was an integral part of the Tribe's subsistence regime and figured in the Tribe's cultural and religious practices. Both Interior and the Tribe argue that the project dam prevents the passage of lake sturgeon to its historic spawning grounds at Keshena Falls, located on the reservation, and the Tribe maintains that the project therefore interferes with the purpose for which the Menominee Reservation was created. 79/

However, as discussed in this order, the Shawano Project does not prevent the sturgeon from passing into the part of the Wolf River that passes through the reservation: the barrier is the downstream Shawano Paper Mill Project dam. The Shawano

- 77/ 10 Stat. 1064 at p. 1065. Although, as noted supra, this treaty was abrogated by the Menominee Termination Act of 1954, the rights and privileges under the treaty were reinstated by the Menominee Restoration Act of 1973.
- 28/ Menominee Tribe v. United States, 391 U.S. 404 (1968).
- See Menominee Tribe's motion to intervene and protest, filed 79/ April 19, 1996 at p. 5.

^{(...}continued)

^{61,449 (1996).} Interior states that, as trustee of the Menominee Indian Reservation, it will submit reasonable annual charge recommendations for the project's use of Reservation lands. We note, however, that it is the Tribe. not Interior, which must agree to the charges.

Project No. 710-000 and Docket No. DI96-4-000 - 29 -

Project license reserves the Commission's authority to require a fishway at the Shawano Dam whenever Interior so prescribes. <u>80</u>/ Thus, we find that nothing in the license will interfere or be inconsistent with the purpose of the Menominee Reservation. <u>81</u>/

STATE AND FEDERAL COMPREHENSIVE PLANS

Section 10(a)(2)(A) of the FPA <u>82</u>/ requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. Federal and state agencies filed a total of 55 comprehensive plans for Wisconsin and seven for the United States. Of the 13 of these plans relevant to the Shawano Project, we find no conflicts. <u>83</u>/

- 80/ See discussion of Section 18 of the FPA, above. Furthermore, the license for the Shawano Project requires Wisconsin Power to consult with FWS, the Wisconsin DNR and the Tribe on a fisheries management plan.
- 81/ 10 Stat. 1064 at p.1065. Although, as noted <u>supra</u>, this treaty was abrogated by the Menominee Termination Act of 1954, the rights and privileges under the treaty were reinstated by the Menominee Restoration Act of 1973.
- $\underline{82}/$ 16 U.S.C. § 803(a)(2)(A).
- 83/ Statewide Comprehensive Outdoor Recreation Plan, 1986-1991, Nine volumes, Wisconsin Department of Natural Resources, September 1985; Wisconsin Statewide Comprehensive Outdoor Recreation Plan for 1991-96, Wisconsin Department of Natural Resources, October 1991; Wolf River Basin Areawide Water Quality Plan, Wisconsin Department of Natural Resources, January 1980; Wolf River Water Quality Management Plan, Wisconsin Department of Natural Resources, April 1991; Wisconsin Water Quality: Report to Congress, Wisconsin Department of Natural Resources, June 1986; Wisconsin Water Quality Assessment Report to Congress, Wisconsin Department of Natural Resources, April 1992; Wisconsin Peregrine Falcon Recovery Plan, Wisconsin Department of Natural Resources, January 1987; Wisconsin Red-Necked Grebe Recovery Plan, Wisconsin Department of Natural Resources, June 1988; Wisconsin Common Tern Recovery Plan, Wisconsin Department of Natural Resources, June 1988; Wisconsin Forester's Tern Recovery Plan, Wisconsin Department of Natural Resources. June 1988; Winnebago Comprehensive Management Plan, Wisconsin Department of Natural Resources, December 1989; North American Waterfowl Management Plan, U.S. Fish and (continued...)

Project No. 710-000 and Docket No. DI96-4-000 - 30 -

APPLICANT'S PLANS AND CAPABILITIES

Α. Consumption Improvement Program

The Wisconsin Public Service Commission has statutory and regulatory authority regarding least-cost planning and energy conservation in the State of Wisconsin. Wisconsin Power promotes electric conservation among its member systems in compliance with the requirements and policies of the State Commission.

Wisconsin Power's plans and activities to promote conservation of electric energy and to reduce the peak demand for generating capacity include the installation of automated control systems, the efficiency evaluation and upgrade of the distribution system, the implementation of demand-side management programs, and the dissemination of information on energy conservation to its customers. We conclude that Wisconsin Power is making a good faith effort to conserve electric energy.

Compliance History and Ability to Comply with в. the New License

We have reviewed Wisconsin Power's licence application in order to judge its ability to comply with the conditions of any license issued, and with applicable provisions of Part I of the FPA. We have also reviewed its record of compliance under its existing license. Our review shows that Wisconsin Power has made timely filings and submittals, and has maintained the project in a satisfactory manner under its existing license. Therefore, we conclude that Wisconsin Power will be able to comply with the terms and conditions of this subsequent license and other provisions of Part I of the FPA.

Safe Management, Operation, and Maintenance C.

Our Chicago Regional Office, in its inspection report dated September 10, 1991, concluded that the earth dam and the reinforced concrete powerhouse and spillway are in satisfactory condition. Both the left and right embankment have adequate vegetation cover. There was no evidence of any major sloughing or erosion on the crest or downstream slopes of the embankments. The upstream slopes of both embankments have adequate rip-rap for protection against wave action. No evidence of seepage was Also, the steel Taintor gates appeared to be in good observed. condition. No signs of any significant deterioration or other

(...continued)

Wildlife Service and Canadian Wildlife Service, May 1986; and the Nationwide Rivers Inventory, National Park Service, January 1982.

Project No. 710-000 and Docket No. DI96-4-000 - 31 -

signs of structural distress were noted. Efflorescence was observed on the spillway piers. The concrete of the piers in the tailrace area was not visible for inspection. The Regional Office classified the dam as having a low downstream hazard potential.

Based on Wisconsin Power's past safe management and operation of the project, we conclude that the project will be safe for continued operation during the new license term, and will pose no threat to public safety if operated and maintained according to good engineering practices and our regulations governing hydroelectric licenses.

D. <u>Ability to Provide Efficient and Reliable</u> <u>Electric Service</u>

We reviewed Wisconsin Power's plans in its license application and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. We conclude, based on our records of project inspection and compliance, that Wisconsin Power has been operating the project in an efficient manner within the constraints of the existing license, and that it will continue to provide efficient and reliable electric service in the future.

E. <u>Need for Power</u>

Wisconsin Power reports to the Mid-America Interconnected Network Regional Reliability Council (MAIN). Each year MAIN prepares a coordinated bulk power supply program report for the U.S. Department of Energy. The MAIN IE-411 Report, dated April 1, 1995, projects the average annual summer load growth rate from 1995 to 2004 to be 1.6 percent and the average annual growth rate in annual energy requirements for the same period to be 1.63 percent. We conclude from these projections that electric power will continue to be needed in the region.

Based on the staff's evaluation of the electric power demand forecasts for the region, we conclude that the power from the project would continue to be useful in meeting a small part of the current and growing demand.

F. Transmission Services

Wisconsin Power proposes no new power development at the project, and therefore proposes no changes to the transmission network affected by project operations. Wisconsin Power will continue to use its current transmission and distribution system to transmit and distribute the project's power. This system is adequate, and we conclude that licensing the project to continue

- 32 -

operations will have no significant effect on the existing transmission system.

G. <u>Cost-Effectiveness of Plans</u>

Wisconsin Power does not propose additional generating capacity, but it does propose environmental and recreational enhancements affecting existing project operation and environmental resources, including installation of an automation system to maintain headpond fluctuation within the plus and minus 0.3-foot tolerance limit; and improvement of the existing west bank fishing and boating access facility.

The EA discusses in detail the need for, usefulness of, and economics of the modifications proposed by Wisconsin Power, the resource agencies and the Commission staff. We conclude that the project, as currently constructed, and as Wisconsin Power proposes to operate it, with the agencies' and staff's modifications, fully develops and uses the hydropower potential of the site.

H. <u>Compliance Record</u>

We have reviewed Wisconsin Power's record of making timely filings and of complying with the terms and conditions of its existing license. We conclude that Wisconsin Power's overall record is satisfactory.

I. Actions Affecting the Public

The only action that would significantly affect the public would be beneficial: the public bank fishing and boating access improvements which will be required under the new license.

COMPREHENSIVE DEVELOPMENT

Sections 4(e) and 10(a)(1) of the FPA <u>84</u>/ require the Commission, in acting on applications for license, to give equal consideration to the power development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included *herein*, reflect such consideration.

^{84/ 16} U.S.C. §§ 797(e) and 803(a)(1).

- 33 -

The EA analyzed the effects associated with the issuance of the new license for Project No. 710. It recommends a number of measures to protect and enhance environmental resources, which we adopt, including: run-of-river operation and associated monitoring; limitation of water level fluctuations in the tailwater and downstream reach during debris sluicing; implementation of a stream flow gaging plan; maintenance of specified dissolved oxygen levels; monitoring of purple loosestrife in project waters; and development of a plan to preserve bald eagle nesting sites; as well as consultation with agencies on development of a fisheries enhancement plan and with the Corps of Engineers and the Menominee Tribe on studies to reduce flooding in the vicinity.

In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under our approach to evaluating the economics of hydropower projects, as articulated in <u>Mead Corp.</u>, <u>85</u>/ we use current costs to compare the costs of the project and of likely alternative power without regard to forecasts of potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of our analysis is to provide a general estimate of the potential power benefits and the costs of a project, and reasonable alternatives to project power. The analysis helps to support an informed decision concerning what is in the public interest with respect to a proposed license.

In addition, certain economic factors related to project decommissioning impinge on the decision to issue a new license that are not present in the licensing of new projects. If an existing project subject to mandatory licensing is not issued a new license, or if the licensee declines to accept the new license, the project will have to be retired, which could range from simply removing the generator to major environmental restoration, up to and including dam removal.

In applying this analysis to the Shawano Project, we have considered the project with the applicant's mitigative proposals, the project with the Commission's and agency's adopted mitigative proposals, and decommissioning of the project by sealing the powerhouse and opening the spillway gates, as described above. The project, if licensed as Wisconsin Power proposes, would produce about 3,810,000 kilowatt hours (kWh) of energy annually, at an annual cost of about \$145,510, or about 38.2 mills/kWh. This is about \$22,900, or six mills/kWh, greater than the current annual cost of alternative power of about \$122,610, or about 32.2 mills/kWh. If licensed with staff's recommended conditions, the

<u>85</u>/ 72 FERC ¶ 61,027 (1995).

Project No. 710-000 and Docket No. DI96-4-000 - 34 -

project would continue to produce about 3,810,000 kWh of energy annually, but at a cost of about \$149,610 annually, or about 39.3 mills/kWh. This is about \$27,000, or 7.1 mills/kWh, greater annually than the current cost of alternative power. As noted, the cost of alternative power, including the costs of project decommissioning (\$206,000 annually, or 54 mills/kWh), far exceeds the costs of continuing to operate the project.

Although we find that continued operation of the project would be more economical than project retirement, Wisconsin Power must make the business decision whether to pursue the license in view of what appear to be the net economic costs of the project. Project economics are, moreover, only one of the many public interest factors we consider in determining whether or not, and under what conditions, to issue a license. <u>86</u>/ Based on our review of agency and public comments filed on this project, our review of staff's evaluation of the environmental and economic effects of the proposed project and its alternatives, and our analysis pursuant to FPA Sections 4(e) and 10(a)(1), we find that the Shawano Project, with our mitigative and enhancement measures, will be best adapted to the comprehensive development of the Wolf River for beneficial public purposes.

TERM OF THE LICENSE

Section 15(e) of the FPA <u>87</u>/ specifies that any new 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 on which the license is issued. We apply this provision to subsequent licenses as well. The Commission's policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity or environmental measures; 40-year terms for projects with a moderate amount thereof; and 50-year terms for those projects with an extensive amount thereof. <u>88</u>/ Wisconsin Power proposes no redevelopment of existing project facilities, no new construction, and no change in project capacity. The staff's recommended conditions do not

<u>87</u>/ 16 U.S.C. § 808(e).

88/ See Southern California Edison Co., 78 FERC ¶ 61,110 (1997).

<u>86</u>/ See Duke Power Company, 73 FERC ¶ 61,330 (1995). In analyzing public interest factors, we take into consideration the fact that hydroelectric projects offer unique electric utility system operational benefits, and that proposed projects may provide substantial benefits not directly related to utility operations, benefits that would be lost if a license were denied solely on economic grounds. See City of Augusta, et al., 72 FERC ¶ 61,114 (1995).

Project No. 710-000 and Docket No. DI96-4-000 - 35 -

decrease the amount of power produced annually by the project. In light of the relatively modest environmental mitigation and enhancement being required, the new license for the Shawano Project will be for a term of thirty years, effective the first day of the month in which this license is issued.

SUMMARY

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

The design of the project is consistent with the engineering safety 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, which is available in the Commission's public file for this project.

The Commission orders:

(A) This license is issued to Wisconsin Power and Light Company (licensee) for a term of 30 years, effective the first day of the month in which this order is issued, to operate and maintain the Shawano Hydroelectric Project. This license is subject to the terms and conditions of the FPA, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, shown by Exhibit G:

<u>Exhibit G-</u>	FERC No. 710-	Showing
1	1011	Project Vicinity and Boundary Map
2	1012	Project Vicinity and Boundary Map

(2) Project works consisting of: (1) a 155-foot-long and 12.5-foot-high earth dam section with crest elevation at 823.5 feet National Geodetic Vertical Datum (NGVD); (2) a 41-foot-long by 68-foot-wide powerhouse section containing one 3-phase, 4,000-volt, 875-kVA generator driven by a vertical,

Project No. 710-000 and Docket No. DI96-4-000 - 36 -

4-blade, propeller type turbine, and rated at 700-kW; (3) a 115foot-long reinforced-concrete gated spillway section with six 14foot-wide by 14-foot-high electrically-operated Taintor gates, and an 8-foot-wide by 73-foot-long rubbish sluiceway controlled with an 8-foot-8-inch by a 19-foot-7-inch sluice gate; (4) a 143foot-long and 18-foot-high earth dam section with crest elevation at 823.5 feet NGVD; (5) 4,000-volt switchgear; and (6) appurtemant electrical and mechanical facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibits A and F below:

Exhibit A:

Pages A-1 through A-8 describing the existing mechanical, electrical and transmission equipment, and the proposed automation of the plant operation, filed June 30, 1992.

Exhibit F:

<u>Exhibit F drawings</u> Sheet 1	<u>FERC No.</u> 1001	<u>Description</u> General Layout
Sheet 2	1002	Earth Dam Section
Sheet 3	1003	Taintor Gate Section
Sheet 4	1004	Taintor Gate Details
Sheet 5	1005	Sluice Gate Section
Sheet 6	1006	Upstream Elevation
Sheet 7	1007	Section Thru Powerhouse
Sheet 8	1008	Section ElevationPlant
Sheet 9	1009	Generator RoomFloor Plan
Sheet 10	1010	Section PlanPlant

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

(C) The Exhibits A, F, and G described above are approved and made part of the license.

Project No. 710-000 and Docket No. DI96-4-000 - 37 -

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

6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the FPA that are waived here; 10(f); 16; 19; 20; and 22.

(E) The license is subject to the articles set forth in Form L-18 (October 1975), entitled "Terms and Conditions of License for Constructed Minor Project Affecting Navigable Waters and Lands of the United States", and the following additional articles:

Article 201. The licensee shall pay the United States an annual charge, effective on the first day of the month in which this license is issued, for the purpose of reimbursing the United States for the cost of administration of Part I of the Federal Power Act, as determined in accordance with the provisions of the Comission's regulations in effect from time to time. The authorized installed capacity for that purpose is 700 kilowatts. Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kilowatts are not assessed an annual administrative charge.

Article 202. Within 180 days from the date of issuance of this order, the licensee shall file, for approval, a revised Exhibit G showing a project boundary for those lands of the Menominee Indian Reservation occupied by the project. Exhibit G shall contain a map identifying those federal lands:

(A) By legal subdivisions of a public land survey of the affected area;

(B) By the federal agency, identified by symbol or legend if desired, that maintains or manages each subdivision of the public land survey within the project boundary; and

(C) In the absence of a public land survey, by the location of the federal lands according to the distances and directions from fixed monuments or physical features.

Exhibit G shall shall contain inset sketches showing: relationships of the project works, natural features and property lines; one or more ties by distance and bearing from a definite, identifiable point or points on project works or the project boundary to established corners of the public land survey or other survey monuments; and, if the project affects unsurveyed Federal lands, the protraction of township and section lines recognized by the Department of the Interior. Project No. 710-000 and Docket No. DI96-4-000 - 38 -

Article 203. The licensee shall, subject to approval by the Commission, negotiate with the Menominee Tribe a reasonable annual charge for the use of tribal lands. Within 180 days after the date of issuance of this license, the licensee shall file, for Commission approval, the negotiated agreement that stipulates the annual charge for use of tribal lands. The Commission reserves the right to make changes to this annual charge.

Article 204. Pursuant to Section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The Licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the Licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until The Licensee shall set aside one-half of the remaining absorbed. surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The Licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly includable in the licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10 year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 301. Within 180 days of completion of construction of facilities authorized by this license, including those facilities authorized in Article 412, the licensee shall file for approval, revised Exhibits F and G drawings, to show those project facilities as-built.

Article 401. The licensee shall cooperate in any future efforts by the U.S. Corps of Engineers (Corps) and the Menominee Indian Tribe of Wisconsin (Menominee Tribe) to study the formation of frazil ice and flood control in the Wolf River upstream of the Shawano Project dam and downstream from Keshena Falls on the Menominee Indian Reservation. The licensee's Project No. 710-000 and Docket No. DI96-4-000 - 39 -

involvement shall begin at such time that studies of the issue are deemed appropriate by the Corps and the Menominee Tribe, and shall be limited to study provisions pertaining solely to the facilities and operations of the Shawano Project.

The licensee shall file, with the Commission, semi-annual status reports regarding the Corps' and the Menominee Tribe's initiation of such studies, as identified above. Such filings shall begin 180 days after the issuance date of this license, and by April 1 and October 1 of each year thereafter. The licensee shall continue to file the semi-annual status reports with the Commission until such time the Corps and the Menominee Tribe conclude the ice/flood control study. The annual status reports shall include a description of progress made in the previous year and the expected goals to be reached in the upcoming year.

Upon completion of any future frazil ice/flood control study, the licensee shall consult with the Corps and the Menominee Tribe concerning any measures needed at the Shawano Project to reduce flooding in the Village of Keshena in the future. Based on these consultations, and within 120 days of the study's completion, the licensee shall file with the Commission, for approval, a report discussing the results of the study and any recommendations (including the economic and environmental effects of such recommendations) by the licensee, the Corps, or the Menominee Tribe for changes to project facilities and/or operations that would be needed for ice control at the Shawano Project. The report filed with the Commission shall also include all relevant documentation of the licensee's consultation with the Corps and the Menominee Tribe.

If the licensee, the Corps, and the Menominee Tribe identify a need for modifications of project facilities and/or operations to enhance flood control in the Village of Keshena, the Commission may direct the licensee to file with the Commission an amendment to the license to modify project facilities and/or operations, as appropriate.

Article 402. The licensee shall operate the project in a run-of-river mode for the protection of water quality and aquatic resources in the Wolf River. The licensee shall at all times act to minimize the fluctuation of the impoundment surface elevations by maintaining a discharge from the project so that, at any point in time, flows, as measured immediately downstream from the project tailrace, approximate the sum of inflows to the project impoundment. Under normal operating conditions, the licensee shall maintain the elevation of the Shawano Project impoundment at a target elevation of 818.0 feet National Geodetic Vertical Datum, with a fluctuation of no greater than ± 0.3 foot around the target elevation.

Project No. 710-000 and Docket No. DI96-4-000 - 40 -

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, or for short periods upon mutual agreement between the licensee and the Wisconsin Department of Natural Resources (Wisconsin DNR). If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than ten days after each such incident.

Article 403. Within 180 days after the date of issuance of this license, the licensee shall file with the Commission, for its approval, a plan to monitor compliance with the run-of-river mode of operation and downstream water level fluctuations requirements as stipulated in Articles 402 and 404. The monitoring plan shall include provisions for using the existing downstream U.S. Geological Survey (USGS) streamflow gaging station (USGS Gage No. 04077400) or some other similar gaging device installed in the project's tailrace, the existing control features, staff gages, and/or other appropriate monitoring/control features, to determine instantaneous headpond and tailwater elevations, and water surface elevations and flows in the Wolf River downstream of the project dam.

The plan shall include, but not be limited to, the proposed location, design, and calibration of the monitoring equipment. the method of flow data collection, a provision for providing flow data to the United States Fish and Wildlife Service (FWS), the USGS, and the Wisconsin Department of Natural Resources (Wisconsin DNR) within 30 days from the date of the agency's request for the data, and development of an annual report to be submitted to the FWS, USGS, and the Wisconsin DNR.

To provide for flow continuation during power outages and minimize extended periods without flow releases below the project, the plan shall include: (1) the development, in consultation with the FWS, USGS, and Wisconsin DNR, of any reasonable enhancement measures to minimize, to the extent possible, extended periods without flow releases downstream from the project; (2) the monitoring of downstream flow releases in accordance with this article; and (3) the development of a schedule for implementing any or all of the enhancement measures identified during consultation with the resource agencies.

The monitoring plan shall also include a schedule for:

(1) implementation of the program;

(2) consultation with the appropriate federal and state agencies concerning the data from the monitoring; and

(3) filing the data, agency comments, and licensee's response to agency comments with the Commission.

Project No. 710-000 and Docket No. DI96-4-000 - 41 -

The licensee shall prepare the plan after consultation with the FWS, the USGS, and the Wisconsin DNR. The licensee shall include with the plan documentation of consultation and copies of comments or recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agency comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 404. During debris sluicing operations, the licensee shall operate the project so that the tailwater and downstream reach of the Wolf River fluctuates by no more than 0.2-foot (2.4 inches), as measured at the existing downstream gaging station (USGS Gage No. 04077400), or some other similar gaging device installed in the project's tailrace, as provided for in Article 403 of this license.

The licensee shall maintain all records pertaining to compliance with this article, including, but not necessarily limited to, dates, times, and duration of all sluicing activities. The licensee shall also provide such data to the U.S. Fish and Wildlife Service, the U.S. Geological Survey, and the Wisconsin Department of Natural Resources, within 30 days from the date of the agency's request for the data.

Article 405. Within 180 days from the date of issuance of this license, the licensee shall file with the Commission, for approval, a plan to monitor dissolved oxygen concentrations (DO) and temperature in the Wolf River upstream and downstream of the Shawano Project for one year during the critical summer period of July 1 through September 15, and to maintain state water quality standards.

The purpose of this monitoring plan is to ensure that streamflows above and below the project, as measured upstream and immediately downstream of the Shawano Project, maintain a DO concentration of no less than 5.0 milligrams per liter (mg/l) and water temperatures of no greater than 89° Fahrenheit (F).

The monitoring plan shall include provisions for: {2} continuously monitoring DO and temperature upstream of the Shawano Project dam and downstream of the project powerhouse, and collecting DO and temperature profile data in the Shawano impoundment, with the sensor locations and monitoring frequency Project No. 710-000 and Docket No. DI96-4-000 - 42 - -

determined in consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR) and the U.S. Fish and Wildlife Service (FWS); and (2) the preparation of enhancement measures developed in consultation with the Wisconsin DNR and the FWS to address water quality conditions, mainly DO and water temperature, that deviate from the Wisconsin state standards.

The licensee shall prepare the plan after consultation with Wisconsin DNR and FWS. The water quality monitoring plan shall include a schedule for:

(1) implementation of the program;

(2) consultation with the Wisconsin DNR and the FWS concerning the results of the monitoring; and

(3) filing the results, agency comments, and the licensee's response to agency comments, with the Commission.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the DO concentration and water temperature monitoring plan, including any changes required by the Commission.

If the results of monitoring indicate that changes in project structures or operations are necessary to ensure maintenance of the state DO and water temperature standards downstream, the Commission may direct the licensee to modify project structures or operations.

Article 406. The licensee shall cooperate with the Wisconsin Department of Natural Resources (Wisconsin DNR), the U.S. Fish and Wildlife Service (FWS), and the Menominee Indian Tribe (Tribe) to develop and implement a comprehensive river/fisheries management plan for the Wolf River. The licensee's involvement shall begin at such time a plan is deemed appropriate by the Wisconsin DNR and the FWS, and shall be limited to providing information on operational considerations and design criteria for fish passage at the Shawano Project. Project No. 710-000 and Docket No. DI96-4-000 - 43 -

Annual status reports shall be filed with the Commission, beginning one year after the date this license is issued and by October 1 of each year thereafter. The licensee shall continue to file the annual status reports with the Commission until the final Wolf River fish management plan has been filed with the Commission. The annual status reports shall include a description of progress made in the previous year and the expected goals to be reached in the upcoming year.

If, upon completion of the final Wolf River fish management plan, the licensee, the FWS, the Wisconsin DNR, and the Tribe identify a need for modifications of project operations and/or structures to accomodate fish passage at the Shawano Project, the Commission may direct the licensee to file with the Commission an amendment to the license to modify project operations and/or structures.

Article 407. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of, such fishways, as may be prescribed by the Secretary of the Interior.

Article 408. Within 180 days from the date of issuance of this license, the licensee shall file with the Commission, for approval, a fishery enhancement plan for the Shawano Project. The purpose of this plan, which shall have an annual cost not to exceed \$4,100 (in 1993 dollars), through the term of this license, is to enhance the aquatic habitat and the fishery in the project impoundment.

The plan shall include, but not necessarily be limited to: (1) detailed descriptions of the type of structural or physical habitat improvement(s) carried out, or of any other type of fish enhancement measure(s) proposed, for the project impoundment; (2) a map identifying the location(s) of any structural or physical habitat improvements identified in the descriptions in (1), above; (3) descriptions of the methods to transport and install such habitat improvement(s), including a description of the measures used to minimize disturbance to the terrestrial and aquatic habitat; and (4) a schedule for implementing the fishery enhancement plan. The plan shall also include a provision for filing five-year status reports, with the Commission, beginning one year after issuance of this license, identifying the progress made in the previous five-year period, and the expected goals to be reached in the upcoming five-year period.

The licensee shall prepare the fishery enhancement plan after consultation with the U.S. Fish and Wildlife Service (USFWS), the Wisconsin Department of Natural Resources (Wisconsin DNR), and the Menominee Indian Tribe of Wisconsin (Menominee Tribe). The licensee shall include with the plan documentation Project No. 710-000 and Docket No. DI96-4-000 - 44 -

of consultation, copies of comments and recommendations on the completed plan after the plan has been prepared and provided to the agencies and the Menominee Tribe, and specific descriptions of how the agencies' and the Menominee Tribe's comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 409. Within six months from the date of issuance of this license, the licensee shall file with the Commission for approval a plan to monitor, at least annually, purple loosestrife (Lythrum salicaria) in project waters. The plan shall include, but not be limited to: (1) a description of the monitoring method; (2) a monitoring schedule; and (3) a schedule for providing the monitoring results to the Wisconsin DNR and the FWS.

The licensee shall prepare the plan after consultation with the Wisconsin DNR and the FWS. The licensee shall include with the plan documentation of consultation and copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the licensee does not adopt a recommendation the filing shall include the licensee's reasons based on project specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 410. Within six months from the date of issuance of this license, the licensee shall file with the Commission, for approval, a plan developed in consultation with the U.S Fish and Wildlife Service and the Wisconsin Department of Natural Resources, to preserve all suitable bald eagle nest trees, such as large white pines and red pines, located on project lands as potential sites for the bald eagle (<u>Haliaeetus leucocephalus</u>), a federally listed threatened species in Wisconsin.

Article 411. The licensee shall implement the provisions of the "Programmatic Agreement Among the Federal Energy Regulatory Commission, the Wisconsin State Historic Preservation Office, and Project No. 710-000 and Docket No. DI96-4-000 - 45 -

the Advisory Council on Historic Preservation, for the Management of Historic Properties That May Be Affected by a License Issuing to Wisconsin Power & Light Company to Continue Operating the Shawano Hydroelectric Project." The Commission reserves the authority to place such additional requirements upon this license as may be necessary to ensure the Commission's compliance with the National Historic Preservation Act and 36 CFR 800, at any time during the term of this license, in the event the Programmatic Agreement is terminated.

Article 412. Within two years from the date of issuance of this license, the licensee shall construct and provide for the operation and maintenance of the following improvements at the existing boat access area on the west bank of the flowage owned by the town of Richmond: (1) pave the access road; (2) provide parking for 2-3 vehicles with trailers; and (3) install a prefabricated concrete boat ramp.

The licensee shall construct the facilities after consultation with the Wisconsin Department of Natural Resources (DNR), the U.S. Fish and Wildlife Service (FWS), the National Park Service, and the town of Richmond. These facilities shall be shown on the as-built drawings filed pursuant to this license.

The licensee shall file a report with the as-built drawings which shall include the entity responsible for operation and maintenance of the facilities and access, and documentation of consultation and copies of comments and recommendations on the report after it has been prepared and provided to the agencies, including specific descriptions of how the agencies' comments are accommodated by the report. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the report with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

Article 413. (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 The licensee may exercise the authority Commission approval. 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 purposes, the licensee shall also have continuing responsibility 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

Project No. 710-000 and Docket No. DI96-4-000 - 46 -

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, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters 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 ten watercraft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement. 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 licensee may, among other things, establish a program for issuing 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 or roads where 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;

Project No. 710-000 and Docket No. DI96-4-000 - 47 -

(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.

The licensee may convey fee title to, easements or (d) rights-of-way across, or leases of projects 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 ten watercraft at a time and are located at least one-half mile (measured over project waters) 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 project waters at norman 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 60 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:

Project No. 710-000 and Docket No. DI96-4-000 - 48 -

(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 the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (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; and (iii) the grantee shall not unduly restrict public access to project waters.

(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.

The conveyance of an interest in project lands under (f) 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 Lands conveyed under this article will be excluded from land. 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.

Project No. 710-000 and Docket No. DI96-4-000 - 49 -

(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.

(G) This order is final unless a request for rehearing is filed within 30 days of the date of issuance of this order. Requests for rehearing may be filed within 30 days of the date of this order, pursuant to 18 C.F.R. § 385.813. The filing of a request for rehearing does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing shall constitute acceptance of this license.

By the Commission.

(SEAL)

for Al. Cashell

Lois D. Cashell, Secretary.