

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: James J. Hoecker, Chairman;  
William L. Massey, Linda Breathitt,  
and Curt Hébert, Jr.

Wisconsin Electric Power Company

Project No. 1980-009

ORDER ISSUING NEW LICENSE

(Issued January 12, 2001)

Wisconsin Electric Power Company (Wisconsin Electric) has filed an application for a new license pursuant to Sections 15 and 4(e) of the Federal Power Act (FPA),<sup>1</sup> for the continued operation and maintenance of the 21,500-kilowatt (kW) Big Quinnesec Falls Project, located on the Menominee River,<sup>2</sup> near Niagara in Dickinson County, Michigan, and Florence and Marinette Counties, Wisconsin.

Wisconsin Electric's application for Project No. 1980 is one of eight applications it filed to relicense eight hydropower projects in the Upper Menominee River Basin.<sup>3</sup> The company has also filed an application to surrender the license of a ninth project.<sup>4</sup>

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<sup>1</sup>16 U.S.C. §§ 808 and 797(e).

<sup>2</sup>The Menominee River is a navigable waterway of the United States. 3 FPC 449 (1943).

<sup>3</sup>Wisconsin Electric also filed relicense applications for the Way Dam and Michigamme Reservoir Project No. 1759; Peavy Falls Project No. 11830; Twin Falls Project No. 11831; Hemlock Falls Project No. 2074, Lower Paint Project No. 2072, Michigamme Falls Project No. 2073, and the Kingsford Project No. 2131. The applications were filed on October 1, 1999, except for the application for the Big Quinnesec Falls Project, which, because of its license's earlier expiration date, was filed on February 27, 1996.

<sup>4</sup>Wisconsin Electric filed its surrender application for the Sturgeon Project No. 2471 on October 1, 1999.

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We are concurrently issuing eight orders granting new licenses for the eight Upper Menominee Projects,<sup>5</sup> and a ninth order proposing to issue a nonpower license for the Sturgeon Project.<sup>6</sup>

## BACKGROUND

On May 15, 1997, Wisconsin Electric submitted a "Wilderness Shore Settlement Agreement" (Agreement) addressing issues pertaining to its Upper Menominee River Basin Projects.<sup>7</sup> With its relicense applications filed on October 1, 1999, Wisconsin Electric submitted a collaboratively-prepared draft environmental assessment (APEA),<sup>8</sup> and a number of resource management, mitigation, and enhancement plans required by the Agreement.

Parties to the Agreement are: Wisconsin Electric, the Wisconsin Department of Natural Resources (Wisconsin DNR), Wisconsin Department of Administration, Michigan Department of Natural Resources (Michigan DNR), Michigan Department of Environmental Quality (Michigan DEQ), Michigan Attorney General, U.S. Fish and Wildlife Service (FWS), National Park Service (NPS), River Alliance of Wisconsin, and Michigan Hydro Relicensing Coalition. The Agreement sets forth, for each of the eight projects, proposed changes to basic operational modes, minimum flow releases, rates of changes in flow releases (ramping rates), and reservoir elevations. In addition, the Agreement contains proposals for water quality maintenance, upstream and downstream fish passage, land use management, fish and wildlife protection and enhancement, woody debris management, and recreation. These measures are described in detail in the order on the Agreement and issuing a new license for the Way Dam and Michigamme

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<sup>5</sup>See Wisconsin Electric Company, 94 FERC ¶¶ 61,\_\_\_\_; 61, \_\_\_\_; 61,\_\_\_\_; 61,\_\_\_\_; 61,\_\_\_\_; 61,\_\_\_\_; 61,\_\_\_\_, and 61,\_\_\_\_.

<sup>6</sup>See Wisconsin Electric Company, 94 FERC ¶ 61,\_\_\_\_.

<sup>7</sup>The Agreement was executed on February 10, 1997.

<sup>8</sup>The Commission's regulations require that relicense applications include an Exhibit E (environmental report). The APEA is a substitute for the Exhibit E. See 18 CFR 4.51(f) and 16.8(f). The Agreement was included as Appendix A in volume 2 of the APEA.

Reservoir Project No. 1759 (lead order), one of the eight relicense orders issued today for the Upper Menominee projects.<sup>9</sup>

Notice was issued of the Agreement and of each license application. Timely motions to intervene in the multi-project proceeding were filed by FWS; the River Alliance of Wisconsin; Wisconsin DNR; the Chicago Whitewater Association; and jointly by the Anglers of the Ausable, Inc.; the Great Lakes Council, Inc., of the Federation of Fly Fishers, Inc.; the Michigan United Conservation Clubs; and the Michigan Council of Trout Unlimited.<sup>10</sup> The intervenors support the Agreement and the issuance of the eight relicenses consistent with its terms.<sup>11</sup>

On November 9, 2000, Commission staff issued an Environmental Assessment (EA) that evaluates the potential impacts of the eight projects pending relicensing and recommends issuance of new licenses for the eight Upper Menominee Projects and surrender (including dam removal) for the Sturgeon Project, as proposed in the Wisconsin Electric's applications and the Agreement.<sup>12</sup> Michigan DNR filed comments in support of the EA. The Commission has considered all the motions and comments filed in this proceeding in determining whether, and under what conditions, to issue the eight relicenses and propose issuance of a nonpower license for the ninth project.

## PROJECT DESCRIPTION

The Big Quinnesec Falls Project was originally licensed in 1948 to Wisconsin Electric's predecessor, Wisconsin Michigan Power Company,<sup>13</sup> with a term that expired at

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<sup>9</sup>94 FERC ¶ 61, . . . Cites herein to the lead order will refer to the pertinent section of the order, rather than to a specific page number.

<sup>10</sup>The motions were timely and unopposed, and therefore automatically granted, pursuant to Rule 214(c)(1) of the Commission's Rules of Practice and Procedure. 18 CFR 385.214(c)(1).

<sup>11</sup>Certain local residents and organizations filed comments in the Sturgeon Project surrender proceeding opposing the proposal to remove the Sturgeon Project dam. Those concerns are addressed in the Sturgeon Project order also issued today.

<sup>12</sup>On the same day, Commission staff issued an EA evaluating the impacts of decommissioning the Sturgeon Project No. 2471.

<sup>13</sup>7 FPC 544.

the end of February 28, 1998. Since the license expired, Wisconsin Electric has operated the project under annual license.<sup>14</sup>

The Big Quinnesec Falls Project is on the Menominee River about six miles below the Kingsford Project, at river mile 94.8. The project consists of an existing dam with two concrete non-overflow sections having a combined length of 305 feet; a 96-foot-long intake section; a 229-foot-long spillway section; two earthen dikes, with a combined length of about 200 feet; a 100-foot by 245-foot concrete forebay; four 12-foot-diameter steel penstocks, two 65 feet long and two 250 feet long; two powerhouses containing two generating units each, two rated at 1,850 kW, and two rated at 8,900 kW; and a 270-acre impoundment.<sup>15</sup> Wisconsin Electric plans to continue using the electricity generated by the project for its customers.

As currently licensed, the project operates in a daily peaking mode with summer and winter impoundment elevation levels. At the summer pool elevation of 1,033.9 to 1,034.9 feet National Geodetic Vertical Datum (NGVD), the reservoir has a surface area of 272 acres and a storage volume of 3,790 acre-feet. At the winter pool elevation of 1,033.4 to 1,034.4 feet NGVD, the reservoir has a surface area of 264 acres and a storage volume of 3,650 acre-feet.

As proposed in the Agreement, the project will be operated in run-of-river and daily peaking modes. Between April 10 and June 15, the project will operate in a run-of-river mode. The resulting benefit will be enhanced spawning opportunity for walleye and other riverine species.<sup>16</sup> During the remainder of the year, the project will operate in a modified peaking mode such that the minimum outflow is not less than 50 percent of the maximum outflow during a 24-hour period. Decreasing the range of flow fluctuations will result in greater relative abundance and diversity within the fish community downstream of the Big Quinnesec Falls Project.<sup>17</sup>

Currently, there is one public recreation area at the project, located immediately above the Big Quinnesec Falls Dam, which includes a concrete boat launch. Under the Agreement, fishing opportunities will be developed at this site, including a tailwater area

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<sup>14</sup>See Section 15(a)(1) of the FPA, 16 U.S.C. § 808(a)(1).

<sup>15</sup>A more detailed project description is contained in ordering paragraph B(2).

<sup>16</sup>See EA at 86-89.

<sup>17</sup>See EA at 87-89.

that will be developed especially for fishing. In addition, Recreation Site 6 and a canoe portage route with put-in and take-out will be maintained.<sup>18</sup>

## WATER QUALITY CERTIFICATION

On May 14, 1998, the Michigan Department of Environmental Quality (Michigan DEQ) issued, pursuant to Section 401(a)(1) of the Clean Water Act (CWA),<sup>19</sup> a blanket water quality certification for the eight Upper Menominee developments proposed to be relicensed.<sup>20</sup> The certification includes fourteen conditions, applicable to all eight projects, which are attached to this order as Appendix A and, pursuant to CWA Section 401(d),<sup>21</sup> are conditions of this license.

Twelve of the conditions incorporate by reference various sections of the Agreement pertaining to project operation, water quality, compliance monitoring, woody debris management, erosion control, upstream fish passage, and downstream fish protection and passage.<sup>22</sup> The thirteenth condition (Condition 8.0) reserves to the state the right to seek civil or criminal penalties, and the fourteenth condition (Condition 9.0) pertains to local permits and approvals.

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<sup>18</sup>See the Agreement, Appendix 8, Section 8.9 and the Preliminary Recreation Plan contained in the "Proposed Post License Compliance Plans," filed with the applications and dated September 29, 1999, at p.21.

<sup>19</sup>33 U.S.C. § 1341(a)(1).

<sup>20</sup>The project discharges water into the Menominee River both from a powerhouse located in Michigan and from a spillway located in Wisconsin. Therefore, Wisconsin is also empowered by Section 401(a)(1) of the CWA to issue water quality certification. Wisconsin DNR, the state's certifying agency, filed a letter on July 31, 2000, stating that it supports the conditions of Michigan's certification.

<sup>21</sup>33 U.S.C. § 1341(d).

<sup>22</sup>As these conditions merely incorporate by reference specified sections of the Agreement, we have included additional license articles that clearly specify the requirements for each project.

## COASTAL ZONE MANAGEMENT ACT

Under Section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),<sup>23</sup> the Commission cannot issue a license for a hydropower project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's federally-approved CZMA program, unless the state waives such concurrence.<sup>24</sup>

On August 14, 1997, Michigan DEQ issued a finding that the eight proposed projects are consistent with the state's CZMA program, provided that any new licenses issued for the projects are consistent with the provisions of the Agreement. On July 24, 1997, the Wisconsin Department of Administration issued a letter finding the three projects located partially in Wisconsin consistent with Wisconsin's CZMA program, provided that any licenses issued for the projects are consistent with the Agreement. Because the license issued herein is consistent with the Agreement, Project No. 1980 will be consistent with Michigan and Wisconsin's CZMA programs.

## HISTORIC PROPERTIES

On December 30, 1993, the Michigan and Wisconsin State Historic Preservation Officers, the Advisory Council on Historic Preservation, and the Commission executed a Wisconsin Statewide Programmatic Agreement for managing historic properties that may be affected by relicensing of the three Wisconsin Electric plants located in Michigan and on the Wisconsin-Michigan border (the Twin Falls, Kingsford, and Big Quinnesec Falls Projects). This served to satisfy the Commission's responsibilities under Section 106 of the National Historic Preservation Act.<sup>25</sup> Wisconsin Electric signed the Programmatic Agreement as a concurring party.

## THREATENED AND ENDANGERED SPECIES

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)<sup>26</sup> requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of

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<sup>23</sup> 16 U.S.C. § 1456(c)(3)(A).

<sup>24</sup> The CZMA certification provisions apply to coastal zones in the Great Lakes Region. See CZMA Section 304(1), 16 U.S.C. § 1453(1).

<sup>25</sup> 16 U.S.C. § 470s.

<sup>26</sup> 16 U.S.C. § 1536(a).

federally-listed threatened and endangered species, or result in the destruction or adverse modification of their critical habitat. The threatened bald eagle and the endangered eastern timber wolf are known to occur within the boundaries of the proposed project. The FWS has concluded that, if Wisconsin Electric implements the protection measures detailed in the Agreement and the APEA, the continued operation of the Upper Menominee projects included in the Agreement will not adversely affect federally-listed threatened and endangered species.<sup>27</sup> The relicense issued by this order for Project No. 1980 includes such conditions.

## SECTION 18 FISHWAY PRESCRIPTIONS

Section 18 of the FPA<sup>28</sup> provides that the Commission shall require the construction, operation, and maintenance by a licensee of such fishways as the Secretaries of Commerce and the Interior may prescribe. Interior timely asked the Commission to reserve in the Project No. 1980 license Interior's authority to prescribe fishways.<sup>29</sup> Consistent with our policy,<sup>30</sup> we do so in license Article 402.

## RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

Section 10(j)(1) of the FPA,<sup>31</sup> requires the Commission, when issuing a license, to include conditions based on recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,<sup>32</sup> to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including spawning grounds and habitat)" affected by the project.

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<sup>27</sup>See the letter dated February 3, 2000, from Interior's Office of the Secretary to the Commission's Secretary.

<sup>28</sup>16 U.S.C. § 811.

<sup>29</sup>See Agreement, section 4.2.2.7.

<sup>30</sup>See Wisconsin Public Service Corp., 62 FERC ¶ 61,095 (1993), aff'd, Wisconsin Public Corp. v. FERC, 32 F.3d 1165 (7th Cir. 1994).

<sup>31</sup>16 U.S.C. § 803(j)(1).

<sup>32</sup>16 U.S.C. § 661 et seq.

On February 3, 2000, FWS submitted recommendations under FPA Section 10(j), stating that adoption in the license of all the provisions of the Agreement that are within the Commission's jurisdiction would "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources and associated public use of the Upper Menominee River Basin."<sup>33</sup> Some of the provisions of the Agreement do not relate to fish and wildlife resources and thus are not within the scope of Section 10(j).<sup>34</sup> However, the license orders in any event adopt those provisions of the Agreement that are within our jurisdiction.

## COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA<sup>35</sup> requires the Commission to consider the extent to which a project is consistent with Federal and state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. Federal agencies filed nine comprehensive plans, and the State of Michigan filed 55 comprehensive plans. Of these, we identified and reviewed 15 plans relevant to the project, and found no conflict.<sup>36</sup>

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<sup>33</sup>See letter, n.27, supra.

<sup>34</sup>See 18 CFR 4.30(b)(9(ii)); and Wisconsin Public Service Corporation, 76 FERC ¶ 61,054 at p. 61,307 n.37 (1996). For example, the Agreement's recreation provisions, section 6.1, and the annual funding requirements, section 4.4., are not Section 10(j) fish and wildlife recommendations.

<sup>35</sup>16 U.S.C. § 803(a)(2)(A).

<sup>36</sup>Building Michigan's Recreation Future: the 1985-90 Michigan Recreation Plan, 1985, Michigan; 1991-1996 Michigan Recreation Plan, 1990; Fisheries Division Strategic Plan, 1994, Michigan; Menominee River Fisheries Plan, 1992, Michigan; Wisconsin Lower Menominee River Remedial Action Plan, 1990; Lower Menominee River Remedial Action Plan Update, 1996, Wisconsin; Statewide Comprehensive Outdoor Recreation Plan, 1986-1991, September 1985, Wisconsin; Statewide Comprehensive Outdoor Recreation Plan, 1991-1996, October 1991, Wisconsin; Upper Green Bay Basin Water Quality Management Plan, 1993, Wisconsin; Wisconsin Water Quality Assessment Report to Congress, 1992; Wisconsin's Biodiversity As A Management Issue, 1995; Wisconsin's Forestry Best Management Practices for Water Quality, 1995; North American Waterfowl Management Plan, Interior and Canadian Wildlife Service, 1986; Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service, undated; The Nationwide Rivers Inventory, National Park Service, 1982.



## APPLICANT'S PLANS AND CAPABILITIES

In accordance with Sections 10(a)(2)(C) and 15(a) of the FPA,<sup>37</sup> we have evaluated Wisconsin Electric's record as a licensee with respect to the following: (A) conservation efforts; (B) compliance history and ability to comply with the new license; (C) safe management, operation, and maintenance of the project; (D) ability to provide efficient and reliable electric service; (E) need for power; (F) transmission service; (G) cost effectiveness of plans; and (H) actions affecting the public.

A. Conservation Efforts

Conservation and load management programs are integral elements of Wisconsin Electric's plan for meeting the growing needs of its customers. In 1994, it was projected that Wisconsin Electric would benefit from 540 MW of demand reduction from customers who participated in demand-side management programs initiated prior to 1994. These customers' annual energy requirements will have been reduced by 1,184 GWh.

B and C. Ability to Comply with the New License and Safe Management, Operation, and Maintenance of the Project

We have reviewed the relicense application and Wisconsin Electric's record of compliance with the terms and conditions of the existing license. We find that Wisconsin Electric's overall record of making timely filings and compliance with its license is satisfactory, and that it should thus be able to comply with the terms and conditions of the license issued herein. In addition, Wisconsin Electric has the capacity to operate the project safely during the license term, if it operates the project in a manner consistent with the Commission's regulations, the license conditions, and sound engineering practices.

D. Ability to Provide Efficient and Reliable Electric Service

We have reviewed Wisconsin Electric's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Wisconsin Electric has been operating the project in an efficient manner within the constraints of the existing license, and we conclude that it would continue to provide efficient and reliable electric service in the future.

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<sup>37</sup> 16 U.S.C. §§ 803(a)(2)(C) and 808(a).

E. Need for Power

Since 1914, the operating history of the Big Quinnesec Falls Hydroelectric Project shows that there are short term and long term needs for the electricity generated by the project to serve the applicant's customers. We find the 86 years of operating history, when considered alongside the projected compound annual growth rates for summer and winter season peak-hour demands, support the applicant's short and long term needs for the electricity generated by the project.

F. Transmission Service

Wisconsin Electric proposes no changes or additions to its transmission facilities. If it were to not receive a license for the project, it would continue to supply power to its customers by purchasing replacement power, which would have no detrimental effects on line loading, line losses, or requirements of new construction of transmission facilities or upgrading of existing facilities.

G. Cost-Effectiveness of Plans

Wisconsin Electric proposes environmental and recreational resource enhancements to the project, the need for, usefulness, and economic impact of which are discussed above in this order and in the EA for the Upper Menominee River Basin Projects. We conclude that the project, as proposed by the applicant and so configured and operated, would fully develop and use the economical hydroelectric potential of the site.

H. Actions Affecting the Public

We have no reason to doubt that Wisconsin Electric will implement the various environmental and recreational enhancement measures proposed in the Agreement and approved in this license. These measures, discussed elsewhere herein and in the EA, as well as the power to be generated by the project, will benefit the public.

## COMPREHENSIVE DEVELOPMENT

Sections 4(e) and 10(a)(1) of the FPA<sup>38</sup> require the Commission, in acting on license applications, to give equal consideration to the developmental and environmental uses of the waterway on which a project is located. 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.

As explained in the lead order,<sup>39</sup> the measures contained in the Agreement that are within the Commission's jurisdiction will protect and enhance the projects' fish, wildlife, and aquatic resources. The Agreement further provides for protection of cultural resources affected by the project, and for enhanced recreational resources in the project vicinity.

As noted, Wisconsin Electric submitted (1) operation compliance plans; (2) reservoir drawdown plans; and (3) a water quality monitoring plan. Wisconsin Electric also submitted a terrestrial-based natural resources management plan that implements the Agreement as it pertains to management of project lands, specifically riparian buffer zones, wildlife enhancements, protection of the bald eagle and its habitat, and nuisance plant control. We are modifying the bald eagle protection measures to include a provision of the Agreement<sup>40</sup> requiring the licensee to reimburse Michigan DNR up to \$1,000 per year (adjusted annually) for airplane flights over the project to identify bald eagle nest locations and collect data. We have reviewed the provisions of these plans as modified, and find them to be reasonable and appropriate.

For the reasons discussed in the EA and the lead order, we conclude that the Big Quinnesec Falls Project, conditioned as discussed above,<sup>41</sup> will satisfy the comprehensive development/public interest standards of Sections 4(e) and 10(a)(1) of the FPA.

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<sup>38</sup> 16 U.S.C. §§797(e) and 803(a)(1).

<sup>39</sup> Lead order, Discussion section.

<sup>40</sup> Agreement, section 4.6.3.

<sup>41</sup> As explained in the lead order (Discussion section), we are not adopting the dispute resolution section (9.3) of the Agreement as a license term.

In determining whether a proposed project will be in the public interest, the Commission considers the economic benefits of project power.<sup>42</sup> The mitigation and enhancement measures for the eight license applications in this proceeding were developed as a package. Since at this point not all of the enhancement costs can be attributed to specific projects, we have calculated the project cost estimates as a group. The estimated average cost of power from these projects is 21.95 mills per kWh, compared to an estimated average cost of alternative power of 27.25 mills per kWh.

#### LICENSE TERM

Pursuant to Section 15(e) of the FPA,<sup>43</sup> relicensing terms shall not be less than 30 years nor more than 50 years from the date on which the license is issued. As discussed in the lead order,<sup>44</sup> we will coordinate the terms of the Upper Menominee projects that we relicense today with the term of the license for the Brule Project No. 2431.<sup>45</sup> Accordingly, the term of this license will be for 39 years and 8 months. The license will be effective the first day of the month in which this order is issued, and will expire at the end of July 31, 2040.

#### SUMMARY OF FINDINGS

The EA includes background information, analysis of impacts, discussion of enhancement measures, and support for related license articles. The project will not result in any major, long-term adverse environmental impacts.

The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if operated and maintained in accordance with the requirements of this license.

Based on our review of the agency and public comments, and our evaluation of the environmental and economic effects of the proposed project and its alternatives, we find that the Big Quinnesec Falls Project No. 1980, with the conditions set forth below, will be best adapted to the comprehensive development of the Menominee River for beneficial public uses.

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<sup>42</sup>See lead order, Comprehensive Development section.

<sup>43</sup>16 U.S.C. § 808(e).

<sup>44</sup>See lead order, License Term section.

<sup>45</sup>72 FERC ¶ 62,190 (1995).

The Commission orders:

(A) This license is issued to Wisconsin Electric Power Company (licensee), for a period of 39 years and 8 months, to operate and maintain the Big Quinnesec Falls Project. The license is effective the first day of the month in which this order is issued, and will expire at the end of July 31, 2040. This license is subject to the terms and conditions of the Federal Power Act (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, enclosed by the project boundary shown by Exhibit G, filed February 27, 1996:

<u>Exhibit G Drawing</u>	<u>FERC No.</u>	<u>Description</u>
G-1	1980-1007	Big Quinnesec Falls Project Boundary

(2) The project works consisting of: (a) an existing dam with a 157-foot-long, concrete non-overflow section, equipped with two control gates; (b) a 96-foot-long intake section; (c) a 229-foot-long spillway section, equipped with seven, 27-foot-wide, 15-foot-high taintor gates; (d) a 145-foot-long, concrete non-overflow section; (e) two earthen dikes, with a combined length of about 200 feet; (f) an impoundment with a surface area of 272 acres and a 3,790 acre-foot storage capacity at a summer pool elevation of 1,034.9 feet National Geodetic Vertical Datum (NGVD), and a surface area of 264 acres and a 3,650-acre-foot storage capacity at a winter pool elevation of 1,034.4 feet NGVD; (g) a 100-foot by 245-foot concrete forebay; (h) two 65-foot-long, 12-foot-diameter steel penstocks; (i) two 250-foot-long, 12-foot-diameter steel penstocks; (j) a powerhouse containing two generating units, each rated at 1,850 kW; (k) a powerhouse containing two generating units, each rated at 8,900 kW; and (l) appurtenant facilities.

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

Exhibit A: The following Exhibit A sections, filed on February 27, 1996:

Section 3 entitled The number, type, and rated capacity of any turbines or generators, whether existing or proposed, to be included as part of the project.

Exhibit F: The following Exhibit F drawings, filed on February 27, 1996:

<u>Exhibit F-</u>	<u>FERC No. 1980-</u>	<u>Showing</u>
1	1001	Site Plan, Dam Details
2	1002	Plan and Elevation, Concrete Dam
3	1003	Typical Sections
4	1004	Typical Sections
5	1005	92-Foot-Head Powerhouse
6	1006	Forebay, 61-Foot-Head Powerhouse

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

(D) The following plans are approved and made a part of this license:

(1) Big Quinnesec Operation Compliance Plan, contained in Upper Menominee River Basin Hydroelectric Projects, Proposed Post-License Compliance Plans, filed October 1, 1999;

(2) Big Quinnesec Reservoir Drawdown Plan, contained in Upper Menominee River Basin Hydroelectric Projects, Proposed Post-License Compliance Plans, filed October 1, 1999;

(3) Water Quality Monitoring Plan, filed April 12, 2000;

(4) the following portions of the Terrestrial-Based Resources Management Plan, contained in Upper Menominee River Basin Hydroelectric Projects, Proposed Post License Compliance Plans, filed October 1, 1999:

(a) Riparian Buffer Zones section;

(b) Nuisance Plant Control section;

(c) Wildlife Management section, pp. 24-27 (through Accessways subsection); and pp. 28 (beginning with Bald Eagle subsection) through 32.

(E) This license is subject to the conditions submitted by the State of Michigan Department of Environmental Quality under Section 401 of the Clean Water Act, as those conditions are set forth in Appendix A to this order.

(F) This license is subject to the articles set forth in Form L-3 (October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the United States," and the following additional articles.

Article 201. The licensee shall pay the United States the following annual charges, effective as of the first day of the month in which this license is effective:

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 Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 21,500 kW.

Article 202. Within 180 days after completion of construction of the facilities authorized by this license (e.g., recreation and access facilities), the licensee shall file, for Commission approval, revised Exhibits A, F, and G, to show those project facilities as-built. The licensee shall submit six copies to the Commission, one copy to the Commission's Chicago Regional Director, and one copy to the Director, Division of Hydropower Administration and Compliance, Office of Energy Projects.

Article 203. Within 45 days of the effective date of the license, the licensee shall file three original sets of aperture cards of the approved exhibit drawings. The drawings must be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. The licensee shall submit one copy of Form FERC-587 with the aperture cards.

Prior to microfilming, the FERC Drawing Number shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number must be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (e.g., F-1, G-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set of aperture cards shall be filed with the Commission's Chicago Regional Office.

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 absorbed. The licensee shall set aside one-half of the remaining 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 included 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 205. If the licensee's project is directly benefitted by the construction works of another licensee, a permittee, or of the United States of a storage reservoir or other headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed. The benefits will be assessed in accordance with Part II, Subpart B of the Commission's regulations.

Article 401. Within eighteen months of the effective date of the license, the licensee shall, after consultation with the U.S. Fish and Wildlife Service, Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Wisconsin Department of Natural Resources, and the National Park Service, file for Commission approval a soil erosion plan for the Big Quinnesec Falls Project to monitor and control stream and impoundment shoreline erosion at the project. The plan shall include, but not be limited to, the following (see Wilderness Shores Settlement Agreement, section 5.1.5., filed May 15, 1997: (1) a determination of the area(s) that may be subject to erosion; (2) an erosion site inventory; (3) measures proposed to control soil erosion and an assessment of such measures; (4) a specific implementation schedule and details for monitoring; and (5) periodic future shoreline erosion inventories and remediation, if necessary.



The licensee shall include with the plan documentation of agency consultation, copies of documents 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 conditions at the site.

The Commission reserves the right to require changes in the plan. Upon Commission approval, the licensee shall implement the plan.

Article 402. 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 pursuant to Section 18 of the Federal Power Act.

Article 403. As required by the water quality certification issued by the Michigan Department of Environmental Quality pursuant to Section 401 of the Clean Water Act, the licensee shall operate the project to maintain a minimum reservoir surface elevation of 1033.4 feet National Geodetic Vertical Datum (NGVD) and a maximum surface elevation of 1034.9 feet NGVD for the protection and enhancement of the reservoir's aquatic resources. During the ice-out season between May 1 and October 15, 90 percent of hourly reservoir surface elevation measurements shall be between 1033.9 feet NGVD and 1034.9 feet NGVD. During the ice-in period from November 15 through March 31, 90 percent of hourly reservoir surface elevation measurements shall be between 1033.6 feet NGVD and 1034.6 feet NGVD. The licensee shall transition from ice-in operations and ice-out operations between April 1 and April 30 and from ice-out operations and ice-in operations between October 16 and November 14 (see Wilderness Shores Settlement Agreement (Agreement), section 3.1.8.1., filed May 15, 1997). The licensee shall not operate the Big Quinnesec Falls Project such that a reduction of weekend flows occurs for the purpose of water conservation for weekday use (see Agreement, section 3.1.8.2.).

From April 10 through June 15, the licensee shall operate the Big Quinnesec Falls Project in a run-of-river mode for the protection of aquatic resources in the Menominee River. The licensee shall at all times act to minimize the fluctuation of the reservoir surface elevation by maintaining a discharge from the project so that, at any point in time, flows, as measured immediately downstream of the project, approximate the sum of inflows to the project impoundment (see Agreement, section 3.1.8.4.)

These operations and water surface elevation requirements may be temporarily modified, if required by operating emergencies or flow conditions beyond the control of

the licensee and for short periods, upon mutual agreement among the licensee, the Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service, and National Park Service. If the operations or water surface elevations are so modified, the licensee shall notify the Commission, and the agencies as soon as possible, but no later than 10 days after each such incident.

Article 404. As required by the water quality certification issued by the Michigan Department of Environmental Quality pursuant to Section 401 of the Clean Water Act, the licensee shall release from Big Quinnesec Dam a minimum flow that is not less than 50 percent of the daily maximum flow from June 16 through April 9 (see Agreement, section 3.1.8.3.).

Flows may be temporarily modified, if required by operating emergencies beyond the control of the licensee and for short periods, upon mutual agreement among the licensee, the Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service, and National Park Service. If the flows are so modified, the licensee shall notify the Commission, and the agencies as soon as possible, but no later than 10 days after each such incident.

Article 405. The licensee shall implement the project operations compliance plan, approved in ordering paragraph (D), including but not limited to the following measures:

(1) maintenance of a staff gage, which shall be visible to the public and installed on the dam structure. The staff gage shall indicate in red elevations greater than the maximum reservoir surface elevation of 1034.9 feet National Geodetic Vertical Datum (NGVD) and the minimum reservoir surface elevation of 1033.4 feet NGVD.

(2) maintenance of an automatic water level sensor. The reservoir surface elevation shall be checked manually once a week and compared to the automatic water level sensor reading. If the manual reading and the automatic reading differ by 0.2 feet, the automatic water level sensor shall be re-calibrated within 14 days of discovering such deviation.

(3) maintenance of the USGS gage on the Menominee River below the Little Quinnesec Project (FERC No. 2536).

(4) maintenance of an operations log that shall consist of hourly recordings of: a) reservoir surface elevation; b) tailwater elevation; c) net head to the nearest 0.1 foot, d) unit discharge; e) spillway discharge; and f) generator output to the nearest 0.1 of a megawatt. When requested by the Commission, Michigan Department of Natural

Resources, Michigan Department of Environmental Quality, Wisconsin Department of Natural Resources, or U.S. Fish and Wildlife Service, operation log records shall be available as provided in the plan.

Article 406. Within one year of the effective date of the license, the licensee shall file for Commission approval a three-year operations testing plan to evaluate the licensee's ability to coordinate the operations of the Big Quinnesec Falls Project with the operations of the Way Dam Project (FERC Project No. 1759), Hemlock Falls Project (FERC Project No. 2074), Lower Paint Project (FERC Project No. 2072), Michigamme Falls Project (FERC Project No. 2073), Peavy Falls Project (FERC Project No. 11830), Twin Falls Project (FERC Project No. 11831), Kingsford Project (FERC Project No. 2131), and Sturgeon Falls Project (FERC Project No. 2720) (see Wilderness Shores Settlement Agreement, section 3.2., filed May 15, 1997).

The plan shall include but not be limited to the test methodology and provisions for consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR), Michigan Department of Natural Resources (Michigan DNR), Michigan Department of Environmental Quality (Michigan DEQ), U.S. Fish and Wildlife Service (FWS), and National Park Service (NPS) during the testing period on interim test results and whether there is a need for operational changes.

The licensee shall prepare the plan after consultation with the Wisconsin DNR, Michigan DNR, Michigan DEQ, FWS, and NPS. 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 may require changes to the plan. Upon Commission approval, the licensee shall implement the plan.

Within 6 months of completion of the 3-year test, the licensee shall file for Commission approval a report detailing the results of the testing and any recommended operational changes. The Commission may require changes to the report.

Article 407. The licensee shall conduct any drawdowns of the Big Quinnesec impoundment beyond normal operating limits in accordance with the provisions of the reservoir drawdown plan approved in ordering paragraph (D).

Article 408. As required by the water quality certification issued by the Michigan Department of Environmental Quality pursuant to Section 401 of the Clean Water Act, the licensee shall ensure that project operation shall not result in the discharge of water with a dissolved oxygen (DO) concentration of less than 5.0 milligrams per liter (mg/l) or a temperature exceeding the following maximum monthly temperatures when flows in the Menominee River are greater than or equal to the 95 percent exceedance flow:

January, February --	38 F
March -----	41 F
April -----	56 F
May -----	70 F
June -----	80 F
July -----	83 F
August -----	81 F
September -----	74 F
October -----	64 F
November -----	49 F
December -----	39 F

The licensee shall not warm the Menominee River, as measured immediately downstream of the Big Quinnesec Dam, by more than 5°F above the water temperature measured upstream of the Big Quinnesec impoundment.

Article 409. The licensee shall implement the water quality monitoring plan approved in ordering paragraph (D) to measure water temperature and dissolved oxygen (DO), chemicals, sediments, and fish contaminants. The licensee shall monitor temperature and DO, at the location and for the time periods specified in the plan. The licensee shall prepare a report summarizing the results of the temperature and DO monitoring for the previous year. The report shall include, but not be limited to: 1) a determination of daily minimum, daily maximum, and daily average DO concentration and temperature; 2) a comparison between upstream and downstream DO concentrations and temperature; 3) the frequency and magnitude of any values that exceed or violate the limits set forth above; 4) an evaluation between any DO and temperature value exceeding the limits set forth above and any environmental factors, such as stream flow, time of day, and project operating characteristics; and, 5) all quality assurance or quality control data. By January 1 of each year, the licensee shall provide a copy of the report to the Commission and the Chief of the Surface Water Quality Division of the Michigan Department of Environmental Quality (Michigan DEQ Division Chief), or its successor, and Wisconsin Department of Natural Resources (Wisconsin DNR).

In the event that DO concentrations or water temperature violate or exceed the limits set forth in Article 408, the licensee shall file, within 24 hours of such event, a report with the Commission and the Michigan DEQ Division Chief, or its successor, and Wisconsin DNR, describing the circumstances of each event. At all other times, the licensee shall provide DO concentration and water temperature data to the Commission and the Michigan DEQ Division Chief, or its successor, and Wisconsin DNR, within 5 working days of receiving such request.

Within one year of the effective date of the license, and every five years thereafter, the licensee shall sample, on a quarterly basis, the Big Quinnesec impoundment water column as specified in the plan. The samples shall be analyzed for the parameters listed in the plan. The licensee shall prepare a report summarizing the data. By January 1 of the year following the sampling, the licensee shall provide a copy of the report to the Commission and the Michigan DEQ Division Chief, or its successor, and Wisconsin DNR.

Twenty years from the effective date of the license, the licensee shall sample the Big Quinnesec impoundment sediments as provided in the plan. The sediments shall be analyzed for the presence of the chemicals and contaminants specified in the plan. The licensee shall prepare a report summarizing the data. By January 1 of the year following the sampling, the licensee shall provide a copy of the report to the Commission, the Michigan DEQ Division Chief, or its successor, and the Wisconsin DNR.

As provided in the plan, within 3 years of issuance of this license and every 10 years thereafter, the licensee shall sample fish fillets for mercury. Fish fillets from the Big Quinnesec impoundment may be pooled with fish from the Twin Falls impoundment and the Kingsford impoundment. Fillets shall be from the species and be of the size described in Table A-1 of the plan. After each sampling year, the licensee shall prepare a report summarizing the results of its monitoring. By January 1 of the year following the sampling year, the licensee shall provide a copy of the report to the Commission, the Michigan DEQ Division Chief, or its successor, and the Wisconsin DNR.

Article 410. Within six months of license issuance, the licensee shall file for Commission approval a plan for the passage of large woody debris that collects near the project intake into the reach of river below the project dam to improve fish habitat downstream of the project dam, and a plan to address the placement of fish cribs in the project impoundment (see Wilderness Shores Settlement Agreement, section 4.5., filed May 15, 1997).

The licensee shall prepare the plan after consultation with the Michigan Department of Natural Resources, Michigan Department of Environmental Quality, the Wisconsin Department of Natural Resources, and the U.S. Fish and Wildlife Service. 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 site-specific information.

The Commission may require changes to the plan. Upon Commission approval, the licensee shall implement the plan.

Article 411. Within one year of the effective date of the license, the licensee shall submit for Commission approval a plan for installing and maintaining a downstream fish protection facility at the project. (see Wilderness Shores Settlement Agreement, section 4.3., filed May 15, 1997.) The plan shall be prepared in consultation with the Michigan Department of Natural Resources and the U.S. Fish and Wildlife Service and shall include, but not be limited to, a description of the facility to be installed and an installation and maintenance schedule, documentation of consultation with the agencies, 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 may require changes to the plan. Upon Commission approval, the licensee shall implement the schedule.

Article 412. Except as provided below, the licensee shall manage project lands (see Wilderness Shores Settlement Agreement, section 5.1.4., filed May 15, 1997) as specified in the portions of the terrestrial-based natural resources management plan approved in ordering paragraph (D): riparian buffer zones, wildlife management, and nuisance plant control.

As long as the bald eagle (*Haliaeetus leucocephalus*) is federally-listed as threatened or endangered reimburse the Michigan DNR up to \$1,000 per year (adjusting annually for changes in the Consumer Price Index) for flight time over the Big Quinnesec

Project to identify bald eagle nest locations and collect data (see Wilderness Shores Settlement Agreement, section 4.6.3., filed May 15, 1997).

Article 413. Within one year of the effective date of the license, the licensee shall file for Commission approval a comprehensive recreation plan for the Upper Menominee River Basin Projects. The plan shall include, but not be limited to, provisions for the Big Quinnesec Falls Project, as specified in Section 6.1 of the Wilderness Shores Settlement Agreement (filed May 15, 1997):

- (1) maintain accessible launch facilities with concrete ramps at Recreation Site 6;
- (2) develop the tailwater area for accessible fishing with trails, vault toilets, and parking; and
- (3) maintain a canoe portage route with put-in and take-out facilities.

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

The plan shall include, for the Big Quinnesec Falls Project, a construction schedule, costs for the construction and yearly maintenance of each facility, appropriate soil erosion and sediment control measures, provisions for revegetating disturbed areas, documentation of agency consultation, copies of comments and recommendations on the plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments and recommendations are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment 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.

Article 414. The licensee shall monitor recreation use of the project area to determine whether existing recreation facilities are meeting recreation needs. Concurrent with the filing of FERC Form 80, required by Section 8 of the Commission's Regulations (18 CFR 8.11), the licensee shall file a report with the Commission on the monitoring results. This report, which shall be prepared in consultation with the U.S. Fish and Wildlife Service, the Michigan Department of Natural Resources, the Wisconsin Department of Natural Resources, and the National Park Service, shall include:

- (1) annual recreation use figures;
- (2) a discussion of the adequacy of the licensee's recreation facilities at the project site to meet recreation demand;
- (3) a description of the methodology used to collect all study data;
- (4) if there is a need for additional facilities, a recreation plan proposed by the licensee to accommodate recreation needs in the project area;
- (5) documentation of agency consultation and agency comments on the report after it has been prepared and provided to the agencies; and
- (6) 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. The Commission reserves the right to require changes to the report.

Article 415. The Licensee shall implement the "Programmatic Agreement Among The Federal Energy Regulatory Commission, The Advisory Council On Historic Preservation, The State Of Wisconsin, State Historic Preservation Officer, And The State Of Michigan, State Historic Preservation Officer, For Managing Historic Properties That May Be Affected By New and Amended Licenses Issuing For The Continued Operation Of Existing Hydroelectric Projects In The State Of Wisconsin And Adjacent Portions Of The State Of Michigan," executed on December 30, 1993, including but not limited to the Historic Resources Management Plan (HRMP) for the Project. In the event that the Programmatic Agreement is terminated, the licensee shall implement the provisions of its approved HRMP. The Commission reserves the authority to require changes to the HRMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the HRMP, the licensee shall obtain Commission approval before engaging in any ground disturbing activities or taking any other action that may affect any historic properties within the Project's Area of Potential Effect.

Article 416. As described in section 4.4.1. of the Wilderness Shores Settlement Agreement (Agreement), filed May 15, 1997, the licensee shall establish a fund for the implementation of resource enhancement and adaptive management measures in the upper Menominee River Basin and its tributaries, upstream of river mile 81 on the Menominee



River. On January 1 of each year, the license shall contribute the amount specified in section 4.4.1. of the Agreement.

Within 120 days of the effective date of the license, the licensee shall file for Commission approval a plan, as described in sections 4.4.1. and 4.4.3., describing the investment, funding rollover, and accounting procedures for the fund.

The licensee shall develop and file for Commission approval annual resource enhancement plans and implementation schedules as described in section 4.4.2 of the Agreement. The plan shall detail the specific enhancement activities to be undertaken by the licensee to enhance the natural resources of the upper Menominee River. The plan shall be developed in coordination with similar plans required in the licenses for the Way Dam Project (FERC Project No. 1759), Lower Paint Project (FERC Project No. 2072), Hemlock Falls Project (FERC Project No. 2074), Peavy Falls Project (FERC Project No. 11830), Michigamme Falls Project (FERC Project No. 2073), Twin Falls Project (FERC Project No. 11831), and Kingsford Project (FERC Project No. 2131).

The licensee shall include in the plan documentation of its consultation on the plan, copies of comments and recommendations on the completed plan, and specific descriptions of how any comments and recommendations are accommodated by the plan. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission may require changes to the plan. Upon Commission approval, the licensee shall implement the plan.

Article 417. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those 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 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 type 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 10 water craft 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; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary Federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft 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 normal 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 Energy Projects, 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 map may be used), the nature of the proposed use, the identity of any Federal or state agency official consulted, and any Federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

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

(1) Before conveying the interest, the licensee shall consult with Federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the 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 ensure 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.

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

(G) 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.

(H) This order is final unless a request for rehearing is filed within 30 days of the date of its issuance, as provided in Section 313 of the FPA. The filing of a request for rehearing does not operate as a stay of the effective date of this license 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 order.

By the Commission.

( S E A L )

  
David P. Boergers,  
Secretary.

## Appendix A

### Michigan Department of Environmental Quality Certification Under Section 401 of the Federal Clean Water Act

In the matter of: Wisconsin Electric Power Company  
333 Everett Street  
Milwaukee, WI 53203

This Certification covers the following hydroelectric power projects located on the Menominee River and its tributaries in Michigan:

<b>Federal Energy Regulatory Commission (FERC) Project</b>	<b>FERC Number</b>
Way Dam and Michigamme Reservoir	1759
Hemlock Falls	2074
Lower Paint Plant, Dam and Diversion Canal	2072
Peavy Falls Plant and Peavy Pond	1759
Michigamme Falls	2073
Twin Falls	1759
Kingsford	2131
Big Quinnesec Falls	1980

The Michigan Department of Environmental Quality (MDEQ) certifies that Way Dam and Michigamme Reservoir, Hemlock Falls, Lower Paint Plant, Dam and Diversion Canal, Peavy Falls and Peavy Pond, Michigamme Falls, Twin Falls, Kingsford, and Big Quinnesec Falls will comply with Section 401(a) of the Federal Clean Water Act and the Michigan Water Quality Standards, provided the conditions set forth in this Certification are met.

This Certification is based on the Wilderness Shores Settlement Agreement (WSSA) dated February 10, 1997, Wisconsin Electric Company's (WE) 401 Certification request letters dated October 1, 1997 and August 20, 1997, and other information contained in the official files of the MDEQ Surface Water Quality Division (SWQD) and the Michigan Department of Natural Resources (MDNR).

#### Certification Conditions:

##### 1.0 Operation Requirements

1.1 WE shall maintain impoundment elevations in accordance with WSSA Paragraphs 3.1.1.4 and 3.1.1.5 (Michigamme Reservoir), 3.1.2.2 (Hemlock Falls Impoundment), 3.1.4.1 and 3.1.4.2 (Peavy Falls and Lower Paint Impoundments),

3.1.5.1 (Michigamme Falls Impoundment), 3.1.6.1 (Twin Falls Impoundment), 3.1.7.1 (Kingsford Impoundment), and 3.1.8.1 (Big Quinnesec Falls Impoundment).

1.2 WE shall operate the projects in accordance with WSSA Paragraphs 3.1.1.1 through 3.1.1.3, 3.1.1.6, and 3.1.1.8 (Way Dam), 3.1.2.1 (Hemlock Falls Dam), 3.1.3.1 and 3.1.3.2 (Lower Paint Dam), 3.1.4.3 (Peavy Falls Dam), 3.1.5.2 through 3.1.5.4 (Michigamme Falls Dam), 3.1.6.2 through 3.1.6.4 (Twin Falls Dam), 3.1.7.2 through 3.1.7.4 (Kingsford Dam), and 3.1.8.2 through 3.1.8.4 (Big Quinnesec Falls Dam). WE shall arrange for the re-regulation of the upstream peaking flows as stated in Paragraphs 3.1.9.1 through 3.1.9.4 and 3.1.9.6.

1.3 WE shall provide for compliance monitoring of the projects' operations including impoundment elevations and powerhouse discharges as stated in WSSA Paragraphs 3.1.1.7 (Way Dam and Michigamme Reservoir), 3.1.2.3 (Hemlock Falls Dam and Impoundment), 3.1.3.3 (Lower Paint Dam), 3.1.4.4 (Peavy Falls Dam and Impoundment), 3.1.5.5 and 3.1.5.6 (Michigamme Falls Dam and Impoundment), 3.1.6.5 and 3.1.6.6 (Twin Falls Dam and Impoundment), 3.1.7.5 and 3.1.7.6 (Kingsford Dam and Impoundment), and 3.1.8.5 and 3.1.8.6 (Big Quinnesec Falls Dam and Impoundment).

1.4 WE shall develop and implement an operations testing plan in accordance with WSSA Section 3.2.

1.5 WE shall develop and implement an impoundment drawdown plan which addresses all impoundment drawdown situations in accordance with WSSA Paragraphs 3.3.1 through 3.3.4.4.

## 2.0 Water Quality Limitations

2.1 WE shall not discharge water that exceeds the temperature and dissolved oxygen requirements specified in WSSA Paragraphs 4.1.2, 4.1.3, and 4.1.5.

2.2 In the event that any of the Water Quality Standards listed in WSSA Paragraphs 4.1.2, 4.1.3, and 4.1.5 are not met, WE shall follow the procedure listed in WSSA Paragraph 4.1.6.

## 3.0 Water Quality Monitoring and Reporting

3.1 WE shall monitor and report water quality in accordance with WSSA Paragraphs 4.1.4 and 4.1.7 through 4.1.14.

4.0 Woody Debris Transport and Management

4.1 WE shall provide for woody debris transport and management in accordance with WSSA Paragraph 4.5.1.

5.0 Erosion Control

5.1 WE shall develop and implement a plan to remediate stream and impoundment shoreline erosion sites caused by the operation of the projects in accordance with WSSA Paragraph 5.1.5.

6.0 Upstream Fish Passage

6.1 WE shall provide for upstream fish passage in accordance with WSSA Paragraphs 4.2.2 through 4.2.2.6.

7.0 Downstream Fish Protection and Passage

7.1 WE shall provide for downstream fish protection and passage in accordance with WSSA Paragraphs 4.3.1 through 4.3.5.

8.0 Natural Resources Damages and Penalties:

8.1 The state reserves the right to seek civil or criminal penalties and liabilities under applicable law.

9.0 Permits and Approvals:

9.1 Nothing herein shall relieve WE from the requirement to obtain any other necessary permits, licenses, or approvals from other federal or state departments or agencies.

10.0 The addresses or contact points for consultations, approvals, and submittals of plans and reports as referred to in this document are as follows:

MDEQ      Chief, Surface Water Quality Division  
              P.O. Box 30273  
              Lansing, Michigan 48909

MDNR      FERC Coordination Unit  
              Fisheries Division



Project No. 1980-009

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P.O. Box 30028  
Lansing, Michigan 48909

Issued this 14th day of May 1998, by the MDEQ SWQD and shall expire 40 years after date of the issuance of a FERC license.

James Grant, Chief  
Great Lakes and Environmental Assessment Section  
Surface Water Quality Division  
Michigan Department of Environmental Quality