

UNITED STATES OF AMERICA 110 FERC ¶ 62,215  
FEDERAL ENERGY REGULATORY COMMISSION

Wisconsin Public Service Corporation

Project No. 1979-012

ORDER ISSUING NEW LICENSE

(March 4, 2005)

INTRODUCTION

1. On June 21, 2002, Wisconsin Public Service Corporation (WPSC) filed an application for a new license pursuant to Sections 4(e) and 15 of the Federal Power Act (FPA)<sup>1</sup> to continue operation and maintenance of the 4.2-megawatt (MW) Alexander Hydroelectric Project No. 1979. The project is located on the Wisconsin River, a navigable waterway of the United States,<sup>2</sup> near the City of Merrill, Lincoln County, Wisconsin. The project occupies 3.59 acres of public land administered by the Bureau of Land Management. As discussed below, I am issuing a new license for the project. Issuing a new license is in the public interest because it would allow the project to continue generating electric energy to serve growing regional demand while protecting and enhancing environmental, recreational and cultural resources.

BACKGROUND

2. The current license for the project, issued on April 15, 1985,<sup>3</sup> expired on June 30, 2004. Project operation has continued pursuant to annual licenses, pending disposition of WPSC's application for a new license.

3. Public notice of the license application was issued on February 13, 2003. A motion to intervene was filed by the Wisconsin Department of Natural Resources (WDNR).<sup>4</sup>

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

<sup>2</sup> *See Wisconsin Public Service Corp. v. Federal Power Commission*, 147 F. 2d 743, cert. denied 325 U.S. 880.

<sup>3</sup> 31 FERC ¶ 62,050 (1985).

<sup>4</sup> The motion, which was timely and unopposed, was granted automatically pursuant to Rule 214(c)(1) of the Commission's Rules of Practice and Procedure.

4. On March 8, 2004, the Commission issued a notice indicating the project was ready for environmental analysis, soliciting comments, recommendations, and terms and conditions. Responding to this notice, by letters filed May 10, 2004, and April 30, 2004, the U.S. Department of the Interior (Interior) and the U.S. Environmental Protection Agency stated they had no comments.

5. On October 28, 2004, Commission staff issued for public comment an environmental assessment (EA). WPSC and WDNR filed comments on the EA, on November 19, and 29, 2004, respectively; noting minor corrections. Neither objected to the recommendations made in the EA. All motions to intervene and comments have been fully considered in determining whether, and under what conditions, to issue this license.

#### PROJECT DESCRIPTION

6. The Alexander Project includes an earthen embankment dam with a gated spillway section controlled by 11 Taintor gates, and a concrete walled section with earth backfill. The project's powerhouse is integral to the dam, and contains three generating units with a total installed capacity of 4,200-kilowatts. The reservoir has a surface area of 803 acres. A more detailed project description is contained in ordering paragraph (B)(2).

7. The Alexander Project is operated in a run-of-river (ROR) mode. WPSC does not propose any new construction or additional capacity at the project.

#### WATER QUALITY CERTIFICATION

8. Under Section 401(a)(1) of the Clean Water Act (CWA)<sup>5</sup> the Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency either has issued a water quality certification (WQC) for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed 1 year. Section 401(d) of the CWA provides that state certification shall become a condition on any federal license or permit that is issued.<sup>6</sup> Only a reviewing court can revise or delete these conditions.<sup>7</sup>

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<sup>5</sup> 33 U.S.C. § 1341(a)(1).

<sup>6</sup> 33 U.S.C. § 1341(d).

<sup>7</sup> See *American Rivers v. FERC*, 129 F.3d 99 (D.C. Cir. 1997).

9. WPSC requested a WQC for the Alexander Project from the WDNR on June 20, 2002, and WDNR issued a WQC for the Alexander Project on October 18, 2002.

10. The conditions of the WQC, set forth in Appendix A, are incorporated in the license by ordering paragraph E. The WQC includes requirements for water level management and monitoring, mode of operation, water quality monitoring, recreation facilities, and various administrative measures. The WQC requires the licensee to operate the project with specific requirements, develop plans without prior Commission approval, and implement programs and report the results of monitoring. Article 401 requires the licensee to submit these plans to the Commission for approval, and file monitoring results with the Commission.<sup>8</sup> Article 402 requires the licensee to notify the Commission when project operation is modified from that specified in the WQC if required by operating emergencies beyond the control of the licensee, and for short periods for project maintenance purposes, upon mutual agreement between the licensee and the Wisconsin Department of Natural Resources.

11. Condition F of the WQC requires the licensee to develop a fish protection and enhancement plan which establishes a fund and requires the licensee to contribute \$7,000 per year for the term of the license to enhance fisheries in the Wisconsin River. The fund is designed to mitigate fish losses due to entrainment mortality and/or lack of fish passage at the project. The EA (p. 96) did not recommend this measure, finding that there is nothing in the record to indicate how much or even if entrainment and mortality of fish is adversely affecting fishery resources in the project area, and that the aquatic community in the project area appears to be healthy, productive, and diverse. It is well-established that the Commission cannot require funding of compensatory mitigation, or any remedy for fish protection, where, as here, it has not been shown by substantial evidence that entrainment mortality has had a significant adverse effect on the fishery population.<sup>9</sup> However, as noted, under section 401(d) of the CWA, WQC conditions are mandatory license conditions and therefore Condition F must be included in the Alexander license.

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<sup>8</sup> I am including in numbered license articles certain provisions for certification conditions for the purpose of adding basic requirements to enable the Commission to enforce the conditions. However, these articles do not purport to, and indeed cannot alter or override the mandatory conditions, but are rather meant to be complementary to them. *See Avista Corporation*, 93 FERC ¶ 61,116 n. 13 (2000).

<sup>9</sup> *See City of New Martinsville, WV v. FERC*, 102 F.3d 567 (D.C. Cir. 1996), and *Allegheny Energy Supply Company, LLC.*, 109 ¶ 61,028 (2004).

## SECTION 18 FISHWAY PRESCRIPTIONS

12. Section 18 of the FPA<sup>10</sup> provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate. No fishway prescription for this project has been filed, nor has there been any reservation of authority requested.

## THREATENED AND ENDANGERED SPECIES

13. Section 7(a) of the Endangered Species Act of 1973 (ESA)<sup>11</sup> requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally-listed threatened and endangered species, or result in the destruction or adverse modification of their designated critical habitat.

14. There are two federally listed species with the potential to occur in the project area. Bald eagles have been observed in the project area, and gray wolves may use project lands. WPSC proposes a bald eagle management plan that contains provisions for annual consultation with the U. S. Fish and Wildlife Service (FWS) and the WDNR and measures to monitor and protect threatened and endangered species at the project. WPSC also proposes a land and wildlife management plan that specifies that WPSC will implement the wolf management measures in the Wisconsin Wolf Management Plan (WDNR, 1999). In the EA, staff determined that the project, if licensed with these WPSC-proposed measures, is not likely to adversely affect the bald eagle or gray wolf.

15. In a letter dated October 29, 2004, staff requested concurrence from the FWS on its effects determination. FWS concurred in a letter filed February 8, 2005. Articles 407 and 408 require the implementation of WPSC's Bald Eagle Management Plan, and Land and Wildlife Management Plan.

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<sup>10</sup> 16 U.S.C. § 811.

<sup>11</sup> 16 U.S.C. § 1536(a).

## RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

16. Section 10(j) of the FPA<sup>12</sup> requires the Commission, when issuing a license, to include conditions based on the recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,<sup>13</sup> for protection and enhancement of fish and wildlife and their habitat affected by the project. Neither Interior nor WDNR filed section 10(j) recommendations for the Alexander Project.

## OTHER ISSUES

### Compliance Monitoring Plan

17. WPSC proposes a compliance monitoring plan to monitor operations at the Alexander Project. The plan includes the continued use of a notched staff gauge in the impoundment (headwater) to allow visual inspection of the headwater level (target headwater elevation of 1,276.8 feet NGVD), automatic water level sensors to record headwater and tailwater elevations, a daily operation log, and the recalculation of turbine efficiency factors whenever major modifications to the project occur to ensure accurate downstream releases from the dam.

18. The WQC requires maintaining the existing headwater and tailwater level sensors, monitoring and recording them on an hourly basis, releasing a minimum flow of 193 cfs from the dam, and implementing the compliance monitoring plan proposed by WPSC.

19. WPSC's plan, however, does not include the location of the headwater and tailwater sensors, the frequency of required maintenance or calibration of these sensors, and the procedures for releasing flows during emergency shutdowns.

20. A revised compliance monitoring plan, that incorporates the above measures into the plan proposed by WPSC and required by the WQC, would improve the Commission and the agencies' ability to document compliance with the operation requirements of the license. Therefore, Article 403 requires a revised compliance monitoring plan.

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<sup>12</sup> 16 U.S.C. § 803(j)(1).

<sup>13</sup> 16 U.S.C. § 661 *et seq.*

### Reservoir Drawdown Plan

21. Drawdowns are a necessary component of project maintenance in many cases and can also be a means of dealing with certain emergencies beyond the control of the licensee. Although WQC condition G requires that a drawdown plan be developed prior to any maintenance activity, having a general reservoir drawdown plan in place can avoid potential adverse environmental effects related to emergency drawdowns.

22. The EA recommends a reservoir drawdown plan that would include procedures for emergency and planned drawdowns, including the timing, duration, and rate of drawdowns and measures to minimize effects on water quality, recreation, and fish and wildlife resources. Having such a plan in place should help ensure that environmental resources are protected during reservoir drawdowns. Accordingly, Article 404 requires a reservoir drawdown plan

### Woody Debris Management Plan

23. Numerous species of aquatic invertebrates and fish benefit from the food and habitat that vegetation, stumps, tree branches, etc. provide. Passing such woody debris downstream of a project can enhance aquatic habitat. Although WQC condition O requires that WPSC pass woody debris downstream of the project in a reasonably safe manner, it does not specify a method or frequency for this action.

24. The EA recommends a woody debris management plan that would include the frequency and methods used to pass woody debris downstream of the project, which would ensure that the debris is handled in a safe, effective manner. Accordingly, Article 405 requires a woody debris management plan.

### Invasive Plants

25. Purple loosestrife occurs within the project boundary and is an invasive species that displaces native wetland vegetation and degrades wildlife habitat. It occurs within wetlands that were formed or enhanced by the Alexander Dam.

26. WPSC proposes invasive species monitoring and control plans for: Purple Loosestrife, Eurasian Milfoil, and Zebra Mussels. These plans, which were recommended in the EA, include provisions for annual monitoring reports to be submitted to the WDNR and FWS; documentation of these submittals is to be filed annually with the Commission. The need for control measures would be determined in consultation with the agencies. Ordering paragraph D approves the plans, as filed by WPSC, with the

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following staff modification made to the Zebra Mussel Monitoring Plan: if the presence of zebra mussel colonies is confirmed at the project, the licensee shall meet with the WDNR and the FWS to determine appropriate control measures, if suitable. Article 406 requires implementation of the invasive species monitoring and control plan.

#### Land and Wildlife Management Plan

27. WPSC proposes a land and wildlife management plan for WPSC-owned land within the project boundary. Under the plan, WPSC would manage timber and wildlife habitat, provide recreation opportunities, protect cultural and historic sites, and protect endangered species habitat.

28. The EA recommends the WPSC-proposed comprehensive Land and Wildlife Management Plan and the WQC requires a land management plan. The Land and Wildlife Management Plan, as filed by WPSC, is approved in ordering paragraph D. Article 408 of this license requires implementation of the plan.

#### Recreation Plan

29. The Alexander Project provides for a variety of year-round recreational opportunities including trails, a campground, natural areas, and boater access to the impoundment at three recreational sites and one private lakeshore business. WPSC proposes a recreation plan that contains provisions for enhancing existing recreation facilities and provides for ongoing interagency consultation with the WDNR, Lincoln County, local townships, and other agencies that may have land management responsibilities in the project area.

30. The EA recommends the WPSC-proposed recreation plan and the WQC requires a recreation plan. The recreation plan, proposed by WPSC, is approved in ordering paragraph D. Article 409 requires implementation of the plan.

#### Cultural Resources

31. On December 30, 1993, the Wisconsin State Historic Preservation Officer, the Michigan State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the Commission, executed a Programmatic Agreement (PA) for managing historic properties that may be affected by relicensing projects in the state of Wisconsin and adjacent portions of Michigan. Article 410 requires the PA to be implemented. This satisfies the Commission's responsibilities under Section 106 of the

National Historic Preservation Act.<sup>14</sup>

## ADMINISTRATIVE CONDITIONS

### A. Annual Charges

32. The Commission collects annual charges from licensees for administration of the FPA. Article 201 provides for the collection of funds for administration of the FPA.

### B. Exhibit G Drawings

33. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. Article 202 requires the filing of these drawings.

### C. Amortization Reserve

34. The Commission requires that for new major licenses, licensees must set up and maintain an amortization reserve account upon license issuance. Article 203 requires the establishment of the account.

### D. Headwater Benefits

35. Some projects directly benefit from headwater improvements that were constructed by other licensees, the United States, or permittees. Article 204 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

### E. Use and Occupancy of Project Lands and Waters

36. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 411 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape planting. Such uses must be consistent with the purposes of protecting and enhancing the scenic, recreational, and environmental values of the project.

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<sup>14</sup> 16 U.S.C. § 470(f).

## COMPREHENSIVE PLANS

37. Section 10(a)(2)(A) of the FPA<sup>15</sup> requires the Commission to consider the extent to which a hydroelectric project is consistent with federal and state comprehensive plans for improving, developing, or conserving waterways affected by the project.<sup>16</sup> Under section 10(a)(2)(A), federal and state agencies filed a total of 66 qualifying comprehensive plans of which staff identified ten plans to be applicable.<sup>17</sup> No conflicts were found.

## APPLICANT'S PLANS AND CAPABILITIES

38. In accordance with Sections 10(a)(2)(C) and 15(a) of the FPA, Commission staff have evaluated WPSC'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

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<sup>15</sup> 16 U.S.C. § 803(a)(2)(A).

<sup>16</sup> Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2004).

<sup>17</sup> Wisconsin: (1) Wisconsin Department of Natural Resources. 1985. *Wisconsin statewide comprehensive outdoor recreation plan, 1986-1991*. Madison, Wisconsin. September 1985. Nine volumes; (2) Wisconsin Department of Natural Resources. 1991. *Wisconsin statewide comprehensive outdoor recreation plan for 1991-1996*. Madison, Wisconsin. October 1991. 312 pp. and survey form; (3) Wisconsin Department of Natural Resources. 1994. *Wisconsin Water Quality Assessment Report to Congress*. Madison, Wisconsin. August 1994; (4) Wisconsin Department of Natural Resources. 1995. *Wisconsin's biodiversity as a management issue*. Madison, Wisconsin. May 1995; (5) Wisconsin Department of Natural Resources. 1995. *Wisconsin's Forestry Best Management Practices for Water Quality*. Madison, Wisconsin. March 1995; (6) Wisconsin Department of Natural Resources. 1992. *Upper Wisconsin River Southern Sub-basin water quality management plan*. Madison, Wisconsin. June 1992. (7) Wisconsin Department of Natural Resources. 1991. *Upper Wisconsin River Northern Sub-basin water quality management plan*. Madison, Wisconsin. May 1991.

Federal: (1) FWS and Canadian Wildlife Service. 1986. *North American Waterfowl Management Plan*. May 1986; (2) FWS. Undated. *Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service*. Washington, D.C. 11 pp; (3) National Park Service. 1982. *The nationwide rivers inventory*. Department of the Interior, Washington, D.C. January 1982. 432. pp.

efficient and reliable electric service; (E) need for power; (F) transmission services; (G) cost effectiveness of plans; and (H) actions affecting the public. I accept the staff's findings in each of the following areas.

A. Conservation Efforts

39. Section 10(a)(2)(C) of the FPA requires the Commission to consider the electricity consumption efficiency improvement programs in the case of license applicants primarily engaged in the generation or sale of electric power. WPSC is a regulated utility that sells all the power generated by the project to its residential and commercial customers. Based on the information in the application, staff concludes that WPSC has made a good faith effort to reduce consumption and improve project performance to respond to consumer demand for electric energy. Staff conclude that WPSC complied with and is likely to continue to comply with Section 10(a)(2)(C) of the FPA.

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

40. Staff has reviewed WPSC's compliance with the terms and conditions of the existing license. Staff finds that WPSC's overall record of making timely filings and compliance with its license is satisfactory. The staff also reviewed WPSC's license application and other submissions in an effort to judge its ability to comply with the articles, terms, and conditions of any license issued, and with other applicable provisions of this part of the FPA. The staff concludes that WPSC has or can acquire the resources and expertise necessary to carry out its plans and comply with all articles and terms and conditions of a new license.

C. Safe Management, Operation, and Maintenance of the Project

41. WPSC owns and operates the Alexander Project. The project dam and appurtenant facilities are subject to Part 12 of the Commission's regulations concerning project safety. The staff reviewed WPSC's management, operation, and maintenance of the project pursuant to the requirements of Part 12 and the associated Engineering Guidelines, including all applicable safety requirements such as warning signs and boat barriers, the Emergency Action Plan, and the Independent Consultant's Safety Inspection Reports. The applicant's record of managing, operating, and maintaining the facilities present no reason not to issue a new license.

D. Ability to Provide Efficient and Reliable Electric Service

42. The staff reviewed WPSC's plans and its ability to operate and maintain the

project in a manner most likely to provide efficient and reliable electric service. Staff conclude that WPSC has been operating the project in an efficient manner within the constraints of the existing license and that it would be expected to continue to provide efficient and reliable electric service in the future.

E. Need for Power

43. The Alexander Project generates about 23,550 megawatt-hours (MWh) of electricity annually. Without the Alexander Project, WPSC would have to either: (1) purchase power; (2) install additional fossil-fueled generators; or (3) purchase other hydroelectric facilities. The present and future use of the projects' power, its displacement of nonrenewable fossil-fired generation, and contribution to a resource diversified generation mix, support a finding that the power from the project would help meet both the short- and long-term need for power.

F. Transmission Services

44. WPSC's transmission system is the most efficient means currently available to transmit the project's power because it is an existing system designed to accommodate the project's output into the regional grid. No changes are recommended or proposed that would affect the capability of the project to connect to the regional grid to continue to serve delivery to the region. The Alexander Project does not have a primary transmission line because WPSC has an interconnected substation adjacent to the Alexander Project's powerhouse. The project's power flows directly into WPSC's system through appurtenant facilities between the powerhouse and the substation.

G. Cost-Effectiveness of Plans

45. WPSC proposes no new construction or changes in project operation. The project, under a new license, would continue to operate in a ROR mode, and would continue to be a very valuable source of economical electric power. If licensed as proposed with staff's recommended measures, the project would produce about 23,550 MWh of power annually. Staff conclude that the plans of WPSC would be achieved, to the extent possible, in a cost effective manner.

#### H. Actions Affecting the Public

46. The Alexander Project generates electricity that is used by customers in the region. WPSC pays taxes annually to local and state governments, and the project provides employment opportunities and attracts those interested in various forms of available recreation. Staff concludes that the various environmental and recreational enhancement measures approved in this license would benefit the public.

#### PROJECT ECONOMICS

47. In determining whether a proposed project will be best adapted to a comprehensive plan for developing a waterway for beneficial public purposes, the Commission considers a number of public interest factors, including the economic benefit of the project power.

48. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*,<sup>18</sup> the Commission employs an analysis that uses current costs to compare the costs of the project and likely alternative power, with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license.

49. As proposed by WPSC, the annual cost of the project would be about \$426,000 (18.11 mills/kWh). The annual power value, for the estimated annual generation of 23,550 MWh, would be \$972,000 (41.30 mills/kWh).<sup>19</sup> To determine whether the proposed project is currently economically beneficial, staff subtracts the project's cost from the value of the power the project produces. The resulting annual net benefit would be \$546,000 (23.19 mills/kWh).

50. If licensed as proposed by WPSC, and with additional staff-recommended measures, including the mandatory water quality certification conditions, the Alexander

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<sup>18</sup> 72 FERC ¶ 61,027 (1995).

<sup>19</sup> Our estimate of the cost of alternative power is based on the Energy Information Administration's (EIA) reference case estimate of average real fossil fuel costs for electric utilities, as published by EIA in their Annual Energy Outlook for 2004 and its supplemental data on the EIA Internet Homepage.

Project would produce an average of 23,550 MWh of energy annually at a cost of about \$433,000 or 18.39 mills/kWh. The annual value of the project's power would be about \$972,000 or 41.30 mills/kWh.<sup>20</sup> Thus, the project's power would cost about \$539,000 or 22.91 mills/kWh less than currently available alternative power.

51. In analyzing public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary benefits). These benefits include their value as almost instantaneous load-following response to dampen voltage and frequency instability on the transmission system, system-power-factor-correction through condensing operations, and a source of power available to help in quickly putting fossil-fuel based generating stations back on line following a major utility system or regional blackout.

52. Ancillary services are now mostly priced at rates that recover only the cost of providing the electric service at issue, which do not resemble the prices that would occur in competitive markets. As competitive markets for ancillary services begin to develop, the ability of hydro projects to provide ancillary services to the system will increase the benefits of the project. The Alexander Project is located in the region served by Midwest Independent System Operator (Midwest ISO). Midwest ISO serves the electrical transmission needs of much of the Midwest, but does not yet operate centralized spot markets for energy or ancillary services ([www.midwestiso.org](http://www.midwestiso.org)).

## COMPREHENSIVE DEVELOPMENT

53. Sections 4(e) and 10(a) of the FPA<sup>21</sup> require the Commission to give equal consideration to 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 would 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.

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<sup>20</sup> The economics have been revised to include the additional cost of the WQC conditions.

<sup>21</sup> 16 U.S.C. §§ 797(e) and 803(a)(1).

54. Based on my independent review and evaluation of the Alexander Project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the EA, I have selected the Alexander Project, with the staff-recommended measures, as the preferred alternative.

55. I selected this alternative because: (1) issuance of a new license would serve to maintain a beneficial, dependable, and inexpensive source of electric energy; (2) the required environmental measures would protect and enhance fish and wildlife resources, water quality, recreational resources and historic properties; and (3) the 4.2 MW of electric energy generated from a renewable resource would continue to offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

#### LICENSE TERM

56. Section 15(e) of the FPA,<sup>22</sup> provides that any new license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years. The Commission's general policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures; 40-year terms for projects with a moderate amount of such activities; and 50-year terms for projects with extensive measures.<sup>23</sup>

57. This license will have a term of 30 years, because there is no new development and there are no extensive mitigation or enhancement measures.

#### SUMMARY OF FINDINGS

58. The EA for the Alexander Project contains background information, analysis of effects, support for related license articles, and the basis for a finding that the project will not result in any major, long-term adverse environmental effects. The project would be safe if operated and maintained in accordance with the requirements of this license.

59. Based on the review and evaluation of the project, as proposed by the applicant,

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<sup>22</sup> 16 U.S.C. § 808(e).

<sup>23</sup> *See* Consumers Power Company, 68 FERC ¶ 61,077 at 61,383-84 (1994).

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and including the staff-recommended environmental measures, I conclude that the continued operation and maintenance of the project in the manner required by the license would protect and enhance fish and wildlife resources, water quality, recreation, and historic resources. The electricity generated from this renewable water power resource would be beneficial because it would continue to offset the use of fossil-fueled generating stations, thereby conserving non-renewable resources and reducing atmospheric pollution. I conclude that the Alexander Project, with the conditions set forth below, will be best adapted to the comprehensive development of the Wisconsin River Basin for beneficial public uses.

The Director orders:

(A) This license is issued to Wisconsin Public Service Corporation (licensee), effective the first day of the month in which this order is issued, for a period of 30 years, to operate and maintain the Alexander 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, enclosed by the project boundary shown by Exhibit G filed on June 21, 2002:

<u>Exhibit G Drawings</u>	<u>FERC No. 1979-</u>	<u>Description</u>
Sheet 1	1001	Project Boundary Map

(2) Project works consisting of: (1) a dam, described from east to west side as comprised of a gated spillway controlled by 11 Taintor gates each measuring 26-feet-wide and 15-feet-high, the powerhouse, a 385-foot-long concrete wall with earth backfill, and a 515-foot-long, 20-foot-high earthen embankment dam; (2) a reservoir with a surface area of 803 acres and, a 7,000 acre-foot storage volume at normal pond elevation; (3) a powerhouse containing three generating units with an total installed capacity of 4,200 kilowatts; and (4) 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: Pages A-1 and A-5 filed on June 21, 2002.

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Exhibit F: The following Exhibit F filed June 21, 2002, and supplemented on March 31, 2003:

<u>Exhibit F Drawings</u>	<u>FERC No. 1979-</u>	<u>Description</u>
Sheet 1	1002	Plan of Dam and Elevations
Sheet 2	1003	Plan of Dam and Sections
Sheet 3	1004	Cross Section of Powerhouse
Sheet 4	1005	Alexander Substation

(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 all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

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

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

(1) Invasive Species Monitoring and Control Plans, Volume III, Appendix E.3b.3-2 of the license application;

(2) Bald Eagle Management Plan, Volume III, Appendix E.3b.4-1 of the license application;

(3) Recreation Plan, Volume IV, Appendix E.5.3.2 of the license application;

(4) Land and Wildlife Management Plan, Volume IV, Appendix E.6.5-1 of the license application;

(E) This license is subject to the conditions of the water quality certification issued by the Wisconsin Department of Natural Resources pursuant to Section 401(a) of the Clean Water Act, as those conditions are set forth in Appendix A to this order.

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(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", and the following additional articles:

Article 201. The licensee shall pay the United States the following annual charges, effective the issuance date of this license:

(a) For the purposes of reimbursing the United States for the Commission's administrative costs, pursuant to Part I of the Federal Power Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 4,200 kilowatts.

(b) Recompensing the United States for the use, occupancy and enjoyment of 3.59 acres of its lands, other than for transmission line right-of-way.

Article 202. Exhibit Drawings. Within 45 days of the date of issuance of the license, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats.

a) Four sets of the approved exhibit drawings shall 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. Prior to microfilming, the FERC Drawing Number (e.g., P-1234-1001 through P-1234-####) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall 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 of the sets of aperture cards along with form FERC-587 shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections Chicago Regional Office. The remaining set of aperture cards and a copy of Form FERC-587 shall be filed with the Bureau of Land Management office at the following address:

State Director  
Bureau of Land Management  
City, State Zip  
ATTN: FERC Withdrawal Recordation

b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections Chicago Regional Office. Exhibit F drawings must be identified as (CEII) material under 18 CFR §388.113(c). Exhibit G drawings must be identified as (NIP) material under 18 CFR §388.112. Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension in the following format [P-1234-####, G-1, Project Boundary, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file  
FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4  
RESOLUTION – 300 dpi desired, (200 dpi min)  
DRAWING SIZE FORMAT – 24” X 36” (min), 28” X 40” (max)  
FILE SIZE – less than 1 MB desired

Each Exhibit G drawing that includes the project boundary must contain a minimum of three known reference points, arranged in a triangular format for GIS georeferencing to vector data. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown and identified on the drawing. In addition, each project boundary drawing must be stamped by a registered land surveyor.

c) The licensee shall file three separate sets of the project boundary data in a georeferenced vector electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format) with the Secretary of the Commission, ATTN: OEP/DHAC. The file name shall include: FERC Project Number, data description, date of this license, and file extension in the following format [P-1234, boundary vector data, MM-DD-YYYY.SHP]. The georeferenced electronic boundary data file must be positionally accurate to  $\pm 40$  feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. A single electronic boundary data file is preferred and must contain all reference points shown on the individual project boundary drawings. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown. The data must be accompanied by a separate text file describing the map projection used (i.e., UTM, State Plane, Decimal Degrees, etc), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this license, and file extension in the following format [P-1234, project boundary

metadata, MM-DD-YYYY.TXT].

Article 203. Amortization Reserve. 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 204. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license.

Article 401. Commission Approval and Reporting.

## (a) Requirement to File Plans for Commission Approval

The Wisconsin Department of Natural Resources (WDNR) water quality certification (Appendix A to this order) requires the licensee to develop certain monitoring plans without reference to prior Commission approval. Each such plan shall also be submitted to the Commission for approval. These plans are listed below.

WQC Condition No. (Appendix A)	Plan Name	Due Date
F	Fish protection and enhancement plan	Within one year of license issuance
K	Recreational facilities plan	Within one year of license issuance
P	Land management plan	Within one year of license issuance

As to each plan, the licensee shall submit to the Commission documentation of its consultation with the WDNR, copies of comments and recommendations made in connection with the plan, and a description of how the plan accommodates the comments or recommendations. 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 make changes to the plan. Upon Commission approval, the plan becomes a requirement of the license, and the licensee shall implement the plan or changes in project operations or facilities, including any changes required by the Commission.

## (b) Requirement to File Reports

The licensee shall also file with the Commission reports of completion of the following water quality certification conditions.

WQC Condition No. (Appendix A)	Report Name	Due Date
E	Operation compliance report	Annually

WQC Condition No. (Appendix A)	Report Name	Due Date
G	Scheduled changes to normal operation report	30 days prior to changes

Article 402. Water Levels. The licensee shall maintain the water level in the project reservoir, and release a continuous flow as specified in conditions C and D of the water quality certification (Appendix A to this order), respectively. The reservoir level and continuous flow release may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods for project maintenance purposes, upon mutual agreement between the licensee and the Wisconsin Department of Natural Resources. If the reservoir level or continuous flow release is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. Compliance Monitoring Plan. Within six months of license issuance, the licensee shall file for Commission approval, a plan to monitor reservoir water surface elevations and the continuous flow release specified in water quality certification conditions C and D (Appendix A to this order), respectively. The plan shall be prepared after consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS).

The compliance monitoring plan shall include provisions to monitor: (1) reservoir water surface elevations; and (2) all continuous flows according to the water quality certification conditions C and D (Appendix A to this order). The plan shall detail the mechanisms and structures that would be used, including any periodic maintenance and calibration necessary for any installed devices or gages, to ensure that the devices work properly, and shall specify how often reservoir and continuous flow releases will be recorded and reported to the WDNR. The plan shall include: (1) the location of the headwater and tailwater sensors; (2) the frequency of required maintenance or calibration of these sensors; (3) the frequency of reporting of water levels to WDNR and FWS; (4) procedures for releasing flows during emergency shutdowns; (5) provisions to file annual reports of all summary data which shall also be provided to the WDNR and FWS, and a procedure to submit all data to the WDNR and FWS, upon request; (6) procedures for releasing flows during planned and emergency shut-downs including limits on planned outages in the spring; and (7) a schedule for implementing the monitoring plan after approval by the Commission.

The licensee shall include with the compliance monitoring plan documentation of agency consultations, including copies of agency comments and recommendations on the draft plan, 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. The final compliance monitoring plan shall not be implemented until the licensee is notified that the plan is approved. Upon approval, the licensee shall implement the plan according to the approved schedule, including any changes required by the Commission.

Article 404. Reservoir Drawdown Plan. Within six months of license issuance, the licensee shall file for Commission approval, a plan for emergency and planned drawdowns. The plan shall be prepared after consultation with the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife Service.

The reservoir drawdown plan shall include considerations to protect environmental resources during scheduled and emergency drawdowns of the project reservoir. The plan shall include, at a minimum, the timing, duration, and rate of drawdown and measures to minimize effects on water quality, recreation, and fish and wildlife resources.

The licensee shall include with the reservoir drawdown plan documentation of agency consultation, including copies of agency comments and recommendations on the draft plan, 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. The reservoir drawdown plan shall not be implemented until the licensee is notified that the plan is approved. Upon approval, the licensee shall implement the plan according to the approved schedule, including any changes required by the Commission.

Article 405. Woody Debris Management Plan. Within six months of license issuance, the licensee shall file for Commission approval, a plan to pass woody debris

according to water quality certification condition O (Appendix A to this order). The plan shall be prepared after consultation with the Wisconsin Department of Natural Resources and specify the frequency and methods for woody debris management.

The licensee shall include with the woody debris management plan documentation of agency consultation, including copies of agency comments and recommendations on the draft plan, 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. The woody debris management plan shall not be implemented until the licensee is notified that the plan is approved. Upon approval, the licensee shall implement the plan according to the approved schedule, including any changes required by the Commission.

Article 406. Invasive Species Monitoring Plans. Within three months of license issuance, the licensee shall implement its invasive species monitoring and control plans (Final Application, E.3b.3-2). The above plans include the: Purple Loosestrife Monitoring Plan; Eurasian Milfoil Monitoring Plan; and Zebra Mussel Monitoring Plan. The Zebra Mussel Monitoring Plan shall be implemented with the following addition:

If the presence of zebra mussel colonies is confirmed at the project, the licensee shall meet with the Wisconsin Department of Natural Resources (WDNR) and the US Fish and Wildlife Service (FWS) to determine appropriate control measures, if suitable.

As stated in each plan, documentation of the submittal of monitoring reports to FWS and WDNR shall be filed with the Commission no later than December 31<sup>st</sup> of each year.

Article 407. Bald Eagle Management Plan. Within three months of license issuance, the licensee shall implement its bald eagle management plan and file documentation with the Commission that the plan has been implemented (Final Application, Appendix E.3b.4-1).

Article 408. Land and Wildlife Management Plan. Within three months of license issuance, the licensee shall implement its Land and Wildlife Management Plan and file

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documentation with the Commission that the plan has been implemented (Final Application, Appendix E.6.5-1).

Article 409. Recreation Plan. Within three months of license issuance, the licensee shall implement its Recreation Plan and file documentation with the Commission that the plan has been implemented (Final Application, Appendix E.5.3.2).

Article 410. Programmatic Agreement. Upon the issuance date of this license, the licensee shall implement the "*Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and 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 filing, for Commission approval, within one year of the issuance date of this license, a Historic Resources Management Plan (HRMP). In the event that the Programmatic Agreement (PA) is terminated, the licensee shall continue to 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 PA is terminated, the licensee shall obtain approvals from or make notifications of the Commission or State Historic Preservation Officer where the Historic Resources Management Plan calls upon the licensee to do so.

Article 411. Use and Occupancy. (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 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 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 5 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 file a letter with 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 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 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 or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance; flowage; recreation; public access; protection of environmental resources; and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised exhibit G or K drawings would be filed for approval for other purposes.

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

(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 the filing. Proof of service on these entities must accompany the filing with the Commission.

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(H) This order is issued under authority delegated to the Director and is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in Section 313(a) 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 of this order shall constitute acceptance of this license.

J. Mark Robinson  
Director  
Office of Energy Projects

## APPENDIX A

WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
CERTIFICATION UNDER SECTION 401 OF THE  
FEDERAL CLEAN WATER ACT

- A. The applicant shall comply with all federal, state, and local permit requirements.
- B. The applicant must meet the most current State Water Quality Standards that apply to this project. As with all other affected operation, the applicant would be required to meet any revised state water quality standards.
- C. The applicant must operate the Alexander Project in a run-of-river mode designed to dampen peaking flows from Grandfather Falls Dam upstream. The target reservoir elevation shall be 1276.8 feet  $\pm$ 0.3 feet National Geodetic Vertical Datum (NGVD). The minimum flow release from the dam shall be 193 cfs at all times. Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the applicant. The applicant must make all reasonable attempts to return to run-of-river operation as soon as possible. If an emergency occurs that affects water levels and flow releases, the applicant shall notify the Department's office in Rhinelander, Wisconsin, so they can be prepared to respond to public inquiries.
- D. The applicant in operating the project in a run-of-river mode, shall at all times act to minimize the fluctuations of the reservoir surface elevations and tailwater reaches for the protection of water quality, fish and wildlife resources in the Wisconsin River.
- E. The applicant must continue to maintain the headwater and tailwater automatic water level sensors that continuously monitor and record the headwater and tailwater levels on an hourly basis, and, in order to demonstrate compliance with run-of-river mode, the applicant must report the headwater levels to the Department upon request. The applicant must continue to maintain a daily record (log) of operations and provide any pertinent information to the Department upon request, including turbine

operation, headwater and tailwater elevations, and flow releases through the powerhouse and spillway updated on an hourly basis.

- F. The Department has evaluated the need for fish passage at the Alexander Project and has determined that fish passage will not be recommended at this time. We reserve the right to revisit this decision if in the future a NR 331 analysis process determines that fish passage may be necessary at this project. The applicant will develop a fish protection and enhancement plan which establishes a fund to be used for habitat improvement, fish protection, or other measures designed to mitigate fish losses due to entrainment mortality and /or, lack of fish passage. The applicant shall contribute up to \$7,000 per year for the term of this license to a collective fund which will be used to enhance fisheries in the Wisconsin River.
- G. Any proposals for project maintenance or repair work involving the river, including reservoir drawdowns to facilitate repair/maintenance work, shall be filed with the Department for prior review.
- H. The applicant shall allow the Department to inspect the project area at any time to monitor compliance with certification conditions.
- I. Any change to the project that would have a significant or material effect on the findings, conclusions, or conditions of this certification, including project operation, must be submitted to the Department for prior review.
- J. The Department may request, at any time, that FERC reopen the license to consider modifications to the license necessary to assure compliance with Wisconsin Water Quality standards.
- K. The applicant shall prepare a recreational facilities plan within one year of license issuance.
- L. The applicant shall insure compliance by implementing the operational compliance plan in Section E.2 of the application for subsequent license.
- M. The applicant shall continue to implement the current system of flow continuation during power outages as described in the application for subsequent license.

- O. The applicant shall pass all large woody debris downstream that may be done so in a reasonably safe manner.
  
- P. The applicant will retain ownership of all lands currently owned within the project boundary. The applicant will prepare a land management plan (LMP) within one year of water quality certification issuance, which will include the following five principles:
  - A. Lands will not be sold, transferred, or otherwise conveyed without written concurrence of the Department.
  - B. Said lands must remain open to the public.
  - C. Said lands may be managed according to normal silvacultural practices as specified in the LMP.
  - D. Endangered, threatened, and sensitive species (such as northern white cedar and orchids) will be protected in the LMP.
  - E. Annual adaptive management meetings will be held with the DNR to work out details of practices for each parcel within the LMP.