

UNITED STATES OF AMERICA 110 FERC ¶ 62,010
FEDERAL ENERGY REGULATORY COMMISSION

PCA Hydro Inc.

Project No. 2180-007

ORDER ISSUING NEW LICENSE

(January 6, 2005)

INTRODUCTION

1. On June 26, 2001, PCA Hydro Inc. (PCA) filed an application for a new license pursuant to Sections 4(e) and 15 of the Federal Power Act (FPA)¹ to continue operation and maintenance of the 3.0-megawatt (MW) Grandmother Falls Hydroelectric Project No. 2180. The project is located on the Wisconsin River, a navigable waterway of the United States,² near the town of Bradley, in Lincoln County, Wisconsin. The project does not occupy any federal lands. 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 energy to serve growing regional demand while protecting and enhancing environmental, recreational and cultural resources.

BACKGROUND

2. A new license for the project was issued on September 16, 1977,³ and expired on June 30, 2003. Project operation has continued pursuant to annual licenses, pending disposition of PCA's application for a new license.

3. Public notice of the license application was issued on June 20, 2002. Motions to intervene were filed by the Wisconsin Department of Natural Resources (WDNR) and the U.S. Department of the Interior (Interior).⁴

4. On March 8, 2004, the Commission issued a notice indicating the project was

¹ 16 U.S.C. §§ 797(e) and 808.

² See *Wisconsin Public service Corp. V. Federal Power Commission*, 147 F. 2d 743(CCA 7), certiorari denied 325 U.S. 880.

³ 14 FPC 924 (1955).

⁴ The motions, which were timely and unopposed, were granted automatically pursuant to Rule 214(c)(1) of the Commission's Rules of Practice and Procedure.

ready for environmental analysis and soliciting comments, recommendations, and terms and conditions. Responding to this notice, by letters filed May 10, 2004, and April 30, 2004, Interior and the U.S. Environmental Protection Agency stated they had no comments.

5. On October 28, 2004, the Commission staff issued for public comment an environmental assessment (EA). PCA and WDNR filed comments on the EA, on November 22, and 29, 2004, respectively. All motions to intervene, protests, and comments have been fully considered in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION

6. The Grandmother Falls Project consists of: a concrete gravity dam with integral powerhouse and a gated section; a rock-filled dike; a 758-acre reservoir, at a normal pool elevation of 1,419.3 feet National Geodetic Vertical Datum (NGVD); a powerhouse with an installed capacity of 3,000 kilowatts (kW); a 2,900-foot-long, 44-kilovolt transmission line extending from the powerhouse to a Wisconsin Public Service transmission line; and appurtenant facilities. A more detailed project description is contained in ordering paragraph (B)(2).

7. The Grandmother Falls Project is operated in a run-of-river (ROR) mode. PCA 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)⁵ 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.⁶ Only a reviewing court can revise or delete these conditions.⁷

⁵33 U.S.C. § 1341(a)(1).

⁶33 U.S.C. § 1341(d).

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

9. PCA requested a WQC for the Grandmother Falls Project from the WDNR on June 25, 2001. On October 24, 2001, WDNR issued a WQC for the project. PCA objected to the conditions of the WQC and on September 27, 2002, WDNR issued a revised WQC.

10. The conditions of the WQC, set forth in Appendix A, are incorporated in the license by ordering paragraph D. The WQC includes requirements for water level management and monitoring, operating mode, water quality monitoring, a fish barrier net, recreation facilities, and various administrative responsibilities. The WQC requires the licensee to operate the project with specific requirements, develop plans, and implement programs and report the results of monitoring studies without prior Commission approval. Article 401 requires the licensee to submit these plans to the Commission for approval.⁸

11. Condition F of the WQC requires the licensee to design, construct, operate, and maintain a fish barrier net to prevent fish from entering the project's turbines. However, in lieu of these requirements, Condition F permits the licensee to instead contribute \$4,333 per year for the term of the license to a fund for designing, constructing, and operating fish passage and /or protection devices somewhere else in Wisconsin.

12. The EA (p. 96) did not recommend the barrier net or fund contribution measures, finding that there is nothing in the record to indicate how much or even if entrainment and mortality of fish are 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.⁹ 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 Grandmother Falls license.

⁸ This license includes, 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).

⁹ 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

13. Section 18 of the FPA¹⁰ 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

14. Section 7(a) of the Endangered Species Act of 1973 (ESA)¹¹ 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.

15. 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. In the EA, staff determined that the project as proposed by PCA with staff's recommended wildlife management plan is not likely to adversely affect these federally listed species. Staff recommends the wildlife management plan contain provisions for annual consultation with the U. S. Fish and Wildlife Service (FWS) and WDNR, measures to monitor and protect threatened and endangered species at the project, and measures to protect other wildlife of concern.

16. In a letter dated October 29, 2004, staff requested concurrence from the FWS on its effects determination. FWS concurred in a letter filed December 3, 2004. Article 406 requires the wildlife management plan.

¹⁰16 U.S.C. § 811.

¹¹16 U.S.C. § 1536(a).

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

17. Section 10(j) of the FPA¹² 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,¹³ 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 Grandmother Falls Project.

COMMENTS ON THE EA

18. PCA and WDNR filed comments on the EA; noting certain minor corrections. PCA stated their objections to certain recommendations. The objections are discussed below.

Compliance Monitoring Plan

19. PCA questions the need to prepare a compliance monitoring plan to document a system that is already operational and specified in the WQC (WQC condition E). They object on the grounds that: (1) a monitoring plan, which PCA is obligated to implement, is already specified in the WQC; and (2) preparation of a new plan is unnecessary and overly cumbersome.

20. Although the WQC requires the maintenance of existing headwater and tailwater level sensors, monitoring and recording them on an hourly basis, it does not include a comprehensive plan on how PCA will comply with the operational requirements of this license.

21. The EA recommendation that PCA develop a compliance monitoring plan includes: (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; and (4) procedures for releasing flows during emergency shutdowns.

¹²16 U.S.C. § 803(j)(1).

¹³ 16 U.S.C. § 661 et seq.

22. A compliance monitoring plan would enable the Commission and the agencies to verify that the project is operating in compliance with its license; accordingly, Article 403 requires the plan.

Reservoir Drawdown Plan

23. PCA states that, rather than requiring a “generic drawdown plan”, a more realistic requirement would be to implement WQC condition G that requires a specific drawdown plan be developed prior to any maintenance activity.

24. 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. Having a reservoir drawdown in place can avoid potential adverse environmental effects related to emergency drawdowns. The EA’s recommended drawdown plan includes planning considerations to protect environmental quality, natural resources, and the public interest in drawdowns of the project reservoir; accordingly, Article 404 requires the reservoir drawdown plan.

Woody Debris Management Plan

25. WQC condition L specifies that PCA pass woody debris downstream of the project in a reasonably safe manner.

26. PCA agrees to pass woody debris downstream as required in WQC condition L; however, they do not believe that a specific plan needs to be developed to implement this provision. The EA’s recommended woody debris management plan would include the frequency and methods used to pass the woody debris downstream of the project, which would ensure that the debris is handled in a safe, effective manner; accordingly, Article 405 requires the woody debris management plan.

Invasive Plants

27. PCA objects to the recommendation in the EA for an invasive species monitoring and control plan. They object on the grounds that: (1) project operation does not affect the presence of noxious weeds; and (2) it is overly burdensome on them to be solely responsible for the eradication of these invasive species.

28. The EA recommendation that PCA develop and implement an invasive species monitoring and control plan, includes consultation with Interior and WDNR in the preparation of the plan, and does not specify eradication as a requisite measure. The need

for control measures would be determined in consultation with the agencies and subject to Commission approval.

29. An invasive species monitoring and control plan would help prevent these and other invasive species from colonizing and disrupting the environment within the project area throughout the license term; accordingly, Article 407 of this license requires an invasive plant monitoring plan including species control when deemed appropriate.

Project Boundary

30. PCA reiterates its request to change the project boundary to exclude lands (422.5 acres) it claims are unnecessary for project operation. They point out that WQC article M indicates that the WDNR supports their request. PCA's proposal for changing the project boundary also includes a provision for adding 115 acres that were previously outside the project boundary. These proposed additional lands contain an environmental interpretive area and waterfowl habitat developed by PCA as a cooperative effort with the local community.

31. The EA recommends that the proposed change in the project boundary not be approved as a part of the license at this time because the information in the record does not provide any indication of how the removed land would be used nor does it provide any site-specific environmental resource information. It also does not address existing uses of the land nor does it address whether or not the land removal or addition would be consistent with any presently approved plan. This information is needed to determine the effect of removing the land from the project boundary and would be necessary in any future application to amend the license.

32. Although this issue was specifically noted in the EA, PCA did not, in their EA comments, provide any new information to address these concerns. I agree that the record in this proceeding does not contain sufficient information on which to make an informed decision with respect to PCA's request to change the amount of land within the project boundary. Consequently I must deny the request as currently proposed. PCA may file an application to amend the license to modify the project boundary, accompanied by information adequate to address the issues identified above.

OTHER ISSUES

Cultural Resources

33. 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 408 requires the PA to be implemented. This satisfies the Commission's responsibilities under Section 106 of the National Historic Preservation Act.¹⁴

34. The Wisconsin statewide programmatic agreement assigns licensees' responsibilities to "ensure that historic properties are considered in the continued operation and maintenance of hydroelectric facilities during the term of their licenses." To further this purpose, licensees are required to develop Historic Resource Management Plans (HRMP). Article 409 of this license requires the development and implementation of the HRMP and also provides protection for archeological or historic resources that could be discovered during: (1) upgrading recreation facilities; and (2) future operation and maintenance of the project.

ADMINISTRATIVE CONDITIONS

A. Annual Charges

35. 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

36. 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

37. 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

38. Some projects directly benefit from headwater improvements that were constructed

¹⁴ 16 U.S.C. § 470(f).

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

39. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 410 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.

COMPREHENSIVE PLANS

40. Section 10(a)(2)(A) of the FPA¹⁵ 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.¹⁶ Under section 10(a)(2)(A), federal and state agencies filed a total of 66 qualifying comprehensive plans of which staff identified 12 plans to be applicable.¹⁷ No conflicts were found.

¹⁵16 U.S.C. § 803(a)(2)(A).

¹⁶Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2003).

¹⁷Wisconsin: (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; (8) Wisconsin Department of Natural Resources. 1986. *Wisconsin Osprey Recovery Plan*,

APPLICANT'S PLANS AND CAPABILITIES

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

42. Section 10(a)(2)(C) of the FPA requires the Commission to consider the extent of electricity consumption efficiency improvement programs in the case of license applicants primarily engaged in the generation or sale of electric power. PCA supplies its parent company, Packaging Corp. of America, all of its energy generated for use at their mill facilities.

43. Staff concludes that PCA 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

44. Staff has reviewed PCA's compliance with the terms and conditions of the existing license. Staff finds that PCA's overall record of making timely filings and compliance with its license is satisfactory. The staff also reviewed PCA'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 PCA has or can acquire the resources and expertise

Report 23. C.M. Gieck; (9) Wisconsin Department of Natural Resources. 1999. Wisconsin Statewide Karner Blue Butterfly Habitat Conservation Plan. Volume 1: Statewide Habitat Conservation Plan. March 1999; (10) FWS and Canadian Wildlife Service. 1986. North American Waterfowl Management Plan. May 1986; (11) FWS. Undated. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C. 11 pp; and (12) National Park Service. 1982. The nationwide rivers inventory. Department of the Interior, Washington, D.C. January 1982. 432. pp.

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

45. PCA owns and operates the Grandmother Falls Project. The project dam and appurtenant facilities are subject to Part 12 of the Commission's regulations concerning project safety. The staff reviewed PCA'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

46. The staff reviewed PCA's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Staff concludes that PCA has been operating the project in an efficient manner within the constraints of the existing license and that it would continue to provide efficient and reliable electric service in the future.

E. Need for Power

47. The Grandmother Falls Project generates about 17,897 megawatt-hours (MWh) of electricity annually. Without the Grandmother Falls Project, PCA would have to purchase power from the Wisconsin Public Service Corporation. If PCA does not receive a new license for the project, replacement energy would have to be purchased from Wisconsin Public Service Corporation. The project is located in the Mid-Continent Area Power Pool (MAPP) region of the North American Electric Reliability Council (NERC). According to the NERC, demand for electric energy in the region is expected to increase at an average rate of 1.98 percent per year through 2012 (NERC, 2003). By producing hydroelectricity, this project displaces the need for other power plants, primarily fossil-fuel facilities, to operate, thereby avoiding some power plant emissions and creating an environmental benefit. 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 in the MAPP region. Therefore, I conclude that there is a need for the power generated by the project.

F. Transmission Services

48. PCA does not have a transmission system. PCA supplies its parent company, Packaging Corp. of America, all of its energy generated for use at their mill facilities.

G. Cost-Effectiveness of Plans

49. PCA 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 17,897 MWh of power annually. Staff concludes that the plans of PCA would be achieved, to the extent possible, in a cost effective manner.

H. Actions Affecting the Public

50. The Grandmother Falls Project generates electricity that is used by Packaging Corp. of America. PCA 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

51. 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.

52. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*,¹⁸ 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.

¹⁸72 FERC ¶ 61,027 (1995).

53. As proposed by PCA, the annual cost of the project would be about \$402,000 (22.48 mills/kWh). The annual power value, for the estimated annual generation of 17,897 MWh, would be \$739,000 (41.30 mills/kWh). 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 \$337,000 (18.81 mills/kWh).

54. The proposed action with additional staff-recommended measures would increase the annual cost about \$7,000, to \$409,000 (22.86 mills/kWh) for the same generation, resulting in a net annual benefit of \$330,000 (18.44 mills/kWh).

55. 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.

56. 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. Grandmother falls Project is located in the region served by the 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).

COMPREHENSIVE DEVELOPMENT

57. Sections 4(e) and 10(a) of the FPA,¹⁹ respectively, 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.

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

59. 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 3.0 MW of electric energy generated from renewable resources would continue to offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

LICENSE TERM

60. Section 15(e) of the FPA,²⁰ 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.²¹

¹⁹16 U.S.C. §§ 797(e) and 803(a)(1).

²⁰16 U.S.C. § 808(e).

²¹ See Consumers Power Company, 68 FERC ¶ 61,077 at 61,383-84 (1994).

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61. 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

62. The EA for the Grandmother Falls 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.

63. Based on the review and evaluation of the project, as proposed by the applicant, 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 Grandmother Falls 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 PCA Hydro, Inc. (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 Grandmother Falls 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 revised Exhibit G filed on April 25, 2002 and those lands specified in the project boundary discussion of this order:

Exhibit G Drawings

FERC No. 2180-

Description
Project Boundary Map

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<u>Exhibit G Drawings</u>	<u>FERC No. 2180-</u>	<u>Description</u>
Sheet 1	1001	

(2) Project works consisting of: (1) a 39-foot-high, 450-foot-long concrete gravity dam with integral powerhouse and a gated section containing eight Taintor gates; (2) a 370-foot-long, rock-filled dike with clay core; (3) a 758-acre reservoir with a normal storage capacity of 1,940 acre-feet, at a normal pool elevation of 1,419.3 feet NVGD; (4) a powerhouse containing three Francis turbines connected to generators with a combined capacity of 3,000 kW; (5) a 2,900-foot-long, 44 kilovolt transmission line extending from the powerhouse to the Wisconsin Public Service line; and (5) appurtenant facilities.

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

Exhibit A: Pages A-1 and A-2 filed on June 26, 2001.

Exhibit F: The following revised Exhibit F filed December 18, 2001:

<u>Exhibit F Drawings</u>	<u>FERC No. 2180-</u>	<u>Description</u>
Sheet 1	1002	Powerhouse Plan & Elevation
Sheet 2	1003	Powerhouse Plan & Elevation
Sheet 2	1004	Powerhouse Plan & Elevation

(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) 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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(E) 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. *Administrative Annual Charges.* The licensee shall pay the United States annual charges, effective the first day of the month in which the license is issued, for the purposes of reimbursing the United States for the cost of administration of Part I of the Federal Power Act, as determined in accordance with provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 3,000 kilowatts.

Article 202. *Exhibit Drawings.* Within 45 days of the date of issuance of this license, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats. The filing shall include Exhibit G maps, showing the project boundary as specified in this order, for Commission approval.

a) Three 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-2180-1001 through P-2180-1004) 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 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.

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. The drawings must be identified as (CEII) material under 18 CFR § 388.113(c). 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 [e.g., P-2180-1001, 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

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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. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown and identified on the drawing.

c) The licensee shall file three separate sets of the project boundary data in a geo-referenced 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 [e.g., P-2180, boundary vector data, MM-DD-YYYY.SHP]. The geo-referenced electronic boundary data file must be positionally accurate to ± 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 include 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 [e.g., P-2180, 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
J	Recreational facilities plan	Within one year of license issuance
M	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
C	Emergency changes to normal operations report	10 days after emergency
E	Operations compliance report	Annually
F	Barrier net design report/Fish fund	Within one year of license issuance
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. If the reservoir levels or continuous flow release are modified from the water quality certification conditions C and D, the licensee shall notify the Commission as soon as possible, but no later than 10 days after 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 U.S. Fish and Wildlife Service (FWS).

The compliance monitoring plan shall include, at a minimum:

- (1) provisions for monitoring reservoir water surface elevations, and continuous flows according to water quality certification conditions C and D (Appendix A to this order);
- (2) a description of 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 how often reservoir and continuous flow releases will be recorded and reported to the WDNR;
- (3) the location of the headwater and tailwater sensors;
- (4) the frequency of required maintenance and/or calibration of sensors;
- (5) the frequency of reporting water levels to the WDNR and FWS;
- (6) procedures for releasing flows during planned and emergency shut-downs including limits on planned outages in the spring;
- (7) provisions for filing 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; and
- (8) 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 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 U.S. Fish and Wildlife Service.

The reservoir drawdown plan shall detail all of the planning considerations to protect environmental quality, natural resources, and the public interest in scheduled and emergency drawdowns of the project reservoir. The plan shall include, at a minimum, procedures for emergency and planned drawdowns, including the timing, duration, and rate of drawdown and measures to minimize the 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 L (Appendix A to this order). The plan shall include the frequency and methods to be used to pass woody debris. 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. *Wildlife Management Plan.* Within 6 months of license issuance, the licensee shall file for Commission approval a plan to manage and protect wildlife at the project. The plan shall be prepared after consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS). Measures to protect threatened and endangered species (i.e., bald eagle, gray wolf) at the project, as well as other wildlife of concern (i.e., osprey, wood turtle), shall be included in this single wildlife management plan.

The plan shall include, at a minimum, the measures included in the licensee-proposed bald eagle management plan (E.11.5 of the Final Application), as well as a provision for annual consultation with the resource agencies to allow for periodic management plan updates and to obtain agency input regarding proposed management decisions.

The plan shall also include, at a minimum, the following:

1. agency-recommended measures to protect threatened and endangered species and their habitat at the project;
2. procedures for obtaining and documenting up-to-date bald eagle nesting activity and the presence of gray wolves on an annual basis, and for maintaining the information on project maps for use when planning land-disturbing activities such as vegetation control or recreation facility development; and
3. licensee consultation with WDNR and FWS prior to conducting land-disturbing activities that could affect any of the threatened and endangered species using project land.

The licensee shall include with the wildlife 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 wildlife 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 407. *Invasive Plants.* Within six months of license issuance, the licensee shall file for Commission approval a plan to monitor and control invasive plant species in project waters. 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 plan shall include, at a minimum:

1. the criteria used to determine and list which invasive plant species are at the project;
2. the results of baseline field surveys (data should be logged, mapped, and photographed) to determine the presence/absence of invasive species;
3. follow-up methods of monitoring (e.g., field survey, aerial photographs) and the frequency (e.g., annually) and schedule (e.g. July 1-30) for monitoring invasive species;
4. a description of the specific measures the licensee will implement (e.g., informational signs posted along property or brochures issued) to increase public awareness of invasive species;
5. a description of management practices the licensee will implement (i.e., rinsing trucks, and mowing equipment before and after use) to help prevent the spread of nuisance species;
6. a description of the criteria that will be used to determine when control measures are needed and a description of the specific control measures that the licensee will implement to control/eliminate each nuisance species found at the site (i.e., manual pulling, chemical application, biological controls);
7. recommended procedures for obtaining technical assistance from the WDNR, FWS and others; and
8. a schedule for filing monitoring reports with the WDNR, FWS, and the

Commission for review.

If at any time during the term of license, the agencies and the Commission deem it necessary to control/eliminate nuisance species, the licensee shall work with the resource agencies to successfully control the nuisance species. The licensee shall include with the plan documentation of agency consultation on the draft plan, copies of all agency comments and verification on how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and make recommendations before filing the plan and all subsequent monitoring reports 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 invasive plant 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 408. 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 effective date of this license 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.

In the event that the Programmatic Agreement is terminated, the licensee shall continue to implement the provisions of its approved Historic Properties Management Plan. The Commission reserves the authority to require changes to the Historic Properties Management Plan at any time during the term of the license. If the Programmatic Agreement is terminated, the licensee shall obtain approvals from or make notifications of the Commission or State Historic Preservation Officer where the Historic Properties Management Plan calls upon the licensee to do so.

Article 409. Historic Resource Management Plan. The Wisconsin statewide Programmatic Agreement requires the preparation of a Historic Resources Management Plan (HRMP). The HRMP will contain further measures aimed at the protection of cultural resources at the project, and focus on protection measures at the sites already identified as being affected or potentially affected by project operation.

If archeological or historic sites are discovered during any future project modifications or construction that require land-disturbing activities, or during project operation or maintenance, or if the licensee plans any future modifications, other than routine maintenance, the licensee shall: (1) consult with the Wisconsin State Historic Preservation Officer (SHPO) about the discovered sites; (2) prepare a site-specific plan, including a schedule, to evaluate the significance of the sites and to avoid or mitigate any impacts to sites found eligible for inclusion in the National Register of Historic Places; (3) base the site-specific plan on recommendations of the SHPO and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; (4) file the site-specific plan for Commission approval, together with the written comments of the SHPO; and (5) take the necessary steps to protect the discovered archeological or historic sites from further impact until notified by the Commission that all of these requirements have been satisfied.

The Commission may require cultural resources surveys and changes to the site-specific plans based on the filings. The licensee shall not implement a cultural resources management plan, begin any land-clearing or land-disturbing activities in the vicinity of any discovered sites, or modify previously discovered sites until informed by the Commission that the requirements of this article have been fulfilled.

Article 410. 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.

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

(G) 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 Grandmother Falls Project in a run-of-river mode. The target reservoir elevation shall be 1419.0 feet \pm 0.3 feet National Geodetic Vertical Datum (NGVD). Instantaneous 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 Grandmother Falls 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 design, construct, operate and maintain a fish barrier net to prevent fish from entering the turbines where they might be injured or killed. Within one year of license issuance a barrier net design, prepared in consultation with the Department and the USFWS, shall be submitted to the Department for review and comment. In lieu of the forgoing provisions of this condition G, the applicant shall contribute the sum of \$4333 per year for the term of this license (i.e., \$130,000) to a collective fund which will be used to design, construct and operate fish passage and /or protection devices somewhere else in Wisconsin.
- G. To ensure that environmental impacts are minimized, 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 and proposal.
- H. The applicant agrees to allow, upon reasonable notice under the then-existing circumstances, inspection of the project area to monitor compliance with the conditions set forth in this water quality certification.
- 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 applicant shall prepare a recreational facilities plan within one year of license issuance. This plan should provide for (but not be limited to) the following: (1) enlarge the present parking area on the east bank from the present two spaces to approximately five to seven spaces; (2) place appropriate signage in the east bank parking area to inform the public that fishing is a welcome activity; (3) maintain the path on the east bank below the dam for access for fishing from the shore; (4) subject to approval of the FERC, PCA is willing to construct and maintain a fishing pier on the east dam embankment; (5) take appropriate measures against erosion on the narrow, steep path on the west bank immediately downstream of the powerhouse; and (6) reroute the canoe portage on the west bank so as to

conform to PCA's shoreland ownership. Ownership and maintenance of the existing boat landing constructed by Taylor Investment Corp. on the west side of the river below the canoe portage shall fall within the responsibility of the DNR or its assigns and shall not be the responsibility of PCA.

- K. The applicant agrees to continue to participate in the Wisconsin River Segment A Total Maximum Daily Loads process to insure water quality standards will be met in the Grandmother Dam area.
- L. The applicant shall pass all large woody debris downstream that may be done so in a reasonably safe manner.
- M. In regard to the lands shown within the project boundary for the current license:
 - 1. The WDNR agrees to support the applicant's request to the FERC to modify the project boundary as shown in the license application for the FERC Project 2180 dated June 2001.
 - 2. The applicant owns several parcels of land in fee that lie within the project boundary for the current license but outside the proposed project boundary for the new license. In regard to these parcels 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 silvicultural practices as specified in the LMP.
 - D. Sensitive species (such as northern white cedar and orchids) will be protected in the LMP.

- E. Annual or semi-annual adaptive management meetings will be held with the DNR to work out details of practices for each parcel within the LMP.
- 3. The LMP will be implemented over the life of the license.