

UNITED STATES OF AMERICA 110 FERC ¶62,239  
FEDERAL ENERGY REGULATORY COMMISSION

International Paper Company

Project No. 4914-010

ORDER ISSUING SUBSEQUENT LICENSE  
Minor Project

(March 10, 2005)

INTRODUCTION

1. On November 20, 2002, International Paper Company (International) filed an application for a subsequent license pursuant to Part 1 of the Federal Power Act (FPA)<sup>1</sup> for the continued operation and maintenance of the 1.08-megawatt (MW) De Pere Hydroelectric Project No. 4914. The project is located at the U.S. Army Corps of Engineers' (Corps) De Pere Dam on the Fox River<sup>2</sup> in the City of De Pere in Brown County, Wisconsin. The project does not occupy any United States land. As discussed below, I am issuing a subsequent license for the project. Issuing a subsequent 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 existing license for the project was issued on December 31, 1984, with an effective date of January 1, 1955.<sup>3</sup> The license expired on November 30, 2004, and, since then, International has operated the project under the terms and conditions of the existing license pending the disposition of the application for a subsequent license.<sup>4</sup>

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<sup>1</sup> 16 U.S.C. § 791a-825c.

<sup>2</sup> The Fox River is a navigable waterway of the United States. *See* 29 FERC ¶ 62,438 (1984).

<sup>3</sup> 29 FERC ¶ 62,438.

<sup>4</sup> *See* Section 9 of the Administrative Procedure Act, 5 U.S.C. §558(c). *See also* 18 C.F.R. § 16.21(a) (2004).

3. Public notice of the application was issued on November 27, 2002. A timely motion to intervene was filed by the Wisconsin Department of Natural Resources (WDNR). The intervention is not in opposition to relicensing the project.

4. The Commission issued a public notice on September 17, 2003, that the application was ready for environmental analysis and soliciting comments, recommendations, terms and conditions and prescriptions. The only comments in response were filed by the U.S. Department of the Interior (Interior). International filed reply comments on December 30, 2003.

5. On July 8, 2004, the Commission staff issued for public comment an environmental assessment (EA). The EA contains background information, an analysis of effects, support for related license articles, and the basis for a finding that licensing the project would not constitute a major federal action significantly affecting the quality of the human environment.

6. The Commission received comments on the EA from the U.S. Fish and Wildlife Service (FWS) and International. All motions to intervene and comments have been fully considered in determining whether, and under what conditions, to issue this license.

#### PROJECT DESCRIPTION

7. The project is located at the Corps' De Pere Lock and Dam. The navigation lock is on the east side of the Fox River. The Corps' 986-foot-long De Pere Dam extends from the east side of the river. The 400-foot-long project dam is attached to the west end of the Corps' dam and continues to the project powerhouse which is located in the lower level of International's Nicolet paper mill. The entire impoundment formed by these structures is owned and operated by the Corps for navigation purposes.

8. The existing project, which operates in a run-of-river mode, includes: (1) a 13.6-foot-high, 400-foot-long overflow spillway with a crest elevation of 586.66 feet International Great Lakes Datum (IGLD) attached to the westerly end of the Corps' De Pere Dam; (2) intake works consisting of 28 exterior gates screened by steel racks, and 28 interior gates; and (3) a powerhouse containing eight 135-kilowatt (kW) generating units with a total installed capacity of 1,080 kW. International is also authorized by the existing license, but not required, to install 12-inch flashboards on its section of the De Pere Dam, but only to the extent that the water does not rise above an 18-inch limit above the crest of the dam. International maintains 12-inch flashboards on the 400-foot-long project section of the dam in order to help maintain water levels and head levels in the reservoir needed to operate the turbines.

9. The Corps' De Pere Dam includes a 334.5-foot-long western overflow spillway, a central 355-foot-long sluiceway with Taintor gates (or Taintor gate spillway), and a

296.5-foot-long eastern overflow spillway. The De Pere Dam and the associated lock are part of the Fox River Navigational System. The Corps regulates the reservoir to maintain a constant upstream pool elevation between 586.66 feet IGLD and 588.16 feet IGLD for navigation; the normal pool elevation is 587.1 feet IGLD.

10. International currently operates the project in a run-of-river mode between the reservoir elevations set by the Corps for commercial and recreational navigation on the Fox River. International proposes to continue to operate the project in a run-of-river mode between the reservoir elevations set by the Corps for commercial and recreational navigation on the Fox River. International proposes no new construction or capacity at the project.

#### WATER QUALITY CERTIFICATION

11. Under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1), the Commission may not issue a license for a hydroelectric project unless the state certifying agency has either issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable time, not to exceed one year.<sup>5</sup>

12. On November 6, 2002, International applied to the WDNR for water quality certification for the De Pere Hydroelectric Project. The WDNR received the request on November 18, 2002, and issued a WQC for the project on April 18, 2003, containing the following 7 conditions requiring International to: (1) comply with all federal, state and local permit requirements; (2) meet state water quality standards applying to the project, and meet any revised state water quality standards; (3) operate the project in a run-of-river mode; (4) file with the Commission, after consultation with the WDNR, any proposals for project maintenance or repair work involving the river, including reservoir drawdowns; (5) allow the WDNR to inspect the project area at any time upon reasonable notification to monitor compliance with WQC conditions; (6) submit to the WDNR any change to the project, including project operation, that would have a significant or material effect on the WQC; and (7) allow the WDNR to request from the Commission, as necessary, that the license be reopened as to consider modifications to the license necessary to assure compliance with state water quality standards.

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<sup>5</sup> Section 401(a) requires an applicant for a federal license or permit to conduct any activity which may result in any discharge into navigable waters to obtain from the state in which the discharge originates certification that any such discharge will comply with applicable state water quality standards.

13. The WQC conditions are incorporated in the license by ordering paragraph E of this order. The entire text of the conditions is contained in Appendix A.<sup>6</sup>

#### COASTAL ZONE MANAGEMENT ACT

14. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA), 16 U.S.C. § 1456(c)(3)(A), the Commission cannot issue a license for a hydropower project within or affecting a state's coastal zone, unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's Coastal Zone Management Program, or the agency's concurrence is conclusively presumed by its failure to act within 6 months of its receipt of the applicant's certification.

15. On June 26, 2003, International certified to, and requested concurrence to the certification from, the Wisconsin Coastal Management Program (WCMP) of the Wisconsin Department of Administration that the project complies with the policies of Wisconsin's approved coastal management program and would be conducted in a manner consistent with such policies. The request for concurrence was received by the WCMP on July 11, 2003. The WCMP did not reply to International within 6 months of receiving International's request for concurrence, so the WCMP is presumed to be in concurrence with the certification.

#### SECTION 18 FISHWAY PRESCRIPTIONS

16. Section 18 of the FPA, 16 U.S.C. § 811, provides that the Commission shall require a licensee, at its own expense, to construct, operate, and maintain such fishways as prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate.

17. Interior, by letter dated November 13, 2003, filed a request to reserve its authority to prescribe fishways under section 18 be included in any license issued for the project. The Commission recognizes that future fish passage needs cannot always be determined at the time of project licensing. The Commission's practice has been to include a license article that reserves the Secretary of the Interior's authority to prescribe fishways when so requested. Therefore, consistent with Commission practice, Article 401 of this license reserves the Commission's authority to require fishways that may be prescribed by the Secretary of the Interior for the De Pere Hydroelectric Project under section 18 of the FPA.

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<sup>6</sup> Section 401(d) of the CWA provides that the state certification shall become a condition on any Federal license or permit that is issued. Only a reviewing court can revise or delete these conditions. *See American Rivers v. FERC*, 129 F.3d 99 (D.C. Cir. 1997).

## RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

### A. Recommendations Pursuant to Section 10(j) of the FPA

18. Under the provisions of section 10(j)(1) of the FPA, 16 U.S.C. § 803(j)(1), each hydroelectric license issued by the Commission should include conditions based on recommendations provided by federal and state fish and wildlife agencies for the protection of, mitigation of adverse impacts to, and enhancement of fish and wildlife resources affected by the project. Section 10(j)(2) of the FPA states that whenever the Commission believes that any fish and wildlife agency recommendation is inconsistent with the purposes and the requirements of the FPA or other applicable law, the Commission and the agency shall attempt to resolve any such inconsistency, giving due weight to the recommendations, expertise, and statutory responsibilities of each agency. If the Commission still does not adopt a recommendation, it must explain how the recommendation is inconsistent with Part I of the FPA or other applicable law and how the conditions imposed by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife affected by the project.

19. In response to the Notice of Application Ready for Environmental Analysis, Interior submitted a November 13, 2003 letter with comments, recommendations, terms, and conditions. This license includes conditions consistent with most of Interior's recommendations including: (1) coordinating with the Corps in taking reasonable actions to maintain flows in tailwater spawning substrate areas when they are occupied by spawning lake sturgeon (article 404); (2) operating the project in a run-of-river mode (article 402); (3) operating the project to meet state water quality standards (appendix A); (4) following recommended measures to protect the bald eagle and its habitat within the project area (article 405); (5) cooperating with the resource agencies in developing measures that would discourage bald eagles from using the open-water project tailwaters during the winter if a contaminant problem develops (article 405); and (6) implementing measures to identify and control the spread of purple loosestrife and Eurasian milfoil at the project when notified by resource agencies (article 406).<sup>7</sup>

20. Four 10(j) recommendations made by Interior were not adopted by Commission staff in the EA because the staff found the recommendations to be inconsistent with the

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<sup>7</sup> Recommendations (1), (5), and (6) are not specific measures to protect, mitigate damages to, or enhance fish and wildlife. Consequently, Commission staff did not consider them under section 10(j). Rather, staff adopted them after considering them under the broad public interest standard of FPA § 10(a)(1), 16 U.S.C. § 803(a)(1).

provisions of the FPA. A 10(j) meeting was held with Interior on September 14, 2004, to resolve the remaining unadopted recommendations.

21. One unadopted 10(j) recommendation was resolved before the 10(j) meeting. Interior recommended that International should maintain minimum and maximum water level elevations in the reservoir permitted by the Corps and minimize fluctuations within these boundaries set by the Corps. In an August 9, 2004 letter, Interior concurred with the Commission staff's EA recommendation that instead, International should continue to operate the project in a manner that meets the Corps' guidelines for the reservoir.

22. Two of the remaining 10(j) recommendations were resolved in the 10(j) meeting. Because International currently does not have the capability of releasing emergency flows from the powerhouse and to construct facilities to do so would be costly and would not provide any substantial benefits to aquatic resources below the project, Interior withdrew its 10(j) recommendation to provide a constant discharge of water through the project in the event of a power outage with the caveat that the issue may be revisited if the need arises. Because International does not control the water levels in the reservoir, the Taintor gates, or other features of the Corps' dam, because tailwater elevations are controlled by water levels in Lake Michigan, Interior also concurred with Commission staff that there is no need at this time at the De Pere Project for its 10(j) recommendation to develop a plan to monitor compliance with project operations.

23. Interior's remaining 10(j) recommendation was not resolved and is not included in this license. Interior recommends that the licensee be required to conduct periodic water quality monitoring over the term of the license in accordance with a schedule approved by the WDNR. Commission staff's analysis in the EA found that operation of the project has little to no effect on water quality in the reservoir and the water quality in the reservoir has in the past, and would continue in the future, to meet the state water quality standards required in this license and by the WQC. The cost of the recommended water quality monitoring would outweigh the benefit. In addition, after the EA was issued, Commission staff learned that the WDNR conducts monthly water quality sampling in the De Pere Reservoir one-quarter mile upstream of the dam using the same long-term monitoring protocol it formerly used at the De Pere Project. The Commission staff concludes that the current WDNR water quality monitoring in the reservoir is sufficient. However, Interior still recommends that the licensee be required to conduct water quality monitoring at the project over the term of the license to offer protection to fishery resources.

B. Recommendations Pursuant to Section 10(a)(1) of the FPA

24. In a recommendation that staff determined is outside the scope of section 10(j)<sup>8</sup> and did not recommend adopting, Interior recommends that the licensee be required to establish a fish protection and enhancement fund (FPF) to provide annual monetary contributions to compensate for fish losses caused by entrainment and mortality at the project. Commission staff determined in the EA that, while some fish are killed at the project by project operations, entrainment of fish by the project does not adversely affect resident fish populations of the Fox River. Staff based their determination on the robust sport fishery occurring below the De Pere Dam and the presence of a diverse warm- and coolwater fish population above the dam. Therefore, staff determined that establishing an FPF for fish that are lost by the project is not supportable.

25. At the September 14, 2004 meeting, Interior expanded on its original November 13, 2003 recommendation that International coordinate with the Corps in taking reasonable actions to maintain flows in tailwater spawning substrate areas when they are occupied by spawning lake sturgeon. Even though the EA recommended adopting this measure, Interior said it was still concerned about natural low river flows that have occurred during the lake sturgeon spawning period over the past several years, and how project operation could affect the flows that need to be passed over the crest of the east spillway of the Corps' De Pere Dam in order to protect lake sturgeon spawning and hatching activities below the east spillway.

26. A meeting to clarify and discuss these concerns was held on December 6, 2004. The meeting discussion also incorporated information Interior provided in a letter dated October 18, 2004, that in 5 of the last 8 years (1997 through 2004), flows in the river, below the east spillway of the Corps dam, had dropped off significantly after sturgeon spawning had occurred and subjected larval sturgeon to reduced flows needed for outmigration from the site. Interior said that during natural low flows in the river, water going through the project turbines could reduce the flows over the east spillway that are needed for sturgeon larval outmigration. Interior indicated that a spill of around 1,000 cfs is needed over the east spillway from around April 15 to June 15 to prevent adverse conditions for sturgeon outmigrations.

27. At the December 6, 2004 meeting, the Corps reported that in addition to navigation, flows released by the Corps from Lake Winnebago into the Fox River have in the past been for flood control and water supply purposes in the Fox River between Lake Winnebago and Green Bay. Because of issues related to lake sturgeon, including those at the De Pere Dam and the De Pere Project, the Corps reported that in the future it would

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<sup>8</sup> Commission staff did not consider this under section 10(j) because it is not a specific measure to protect, mitigate damages to, or enhance fish and wildlife.

also be concerned with providing timely flows for sturgeon spawning below the De Pere Dam.

28. Interior recommended that there be yearly consultation regarding Fox River flows in advance of the lake sturgeon spawning season. The Corps reported that by late February and early March the Corps usually has an idea of the snow pack situation and what an upcoming season's water supply for the Fox River would be. The Corps offered that, as part of its normal conference on river issues, the Corps could also hold a conference call with the WDNR, FWS, and the licensee to plan the availability of spill flows over the east spillway of the De Pere dam to protect sturgeon spawning activities.

29. Interior concurred with the Commission staff's conclusion that the license should include an article requiring the licensee to consult annually with the Corps, FWS, and the WDNR in early March of each year to determine how adequate spills could be provided over the east spillway of the De Pere Dam to protect sturgeon spawning, egg incubation, and larval outmigration below the De Pere Dam.

30. Based upon staff's review of Interior's October 18, 2004 letter, the information presented at the December 6, 2004 meeting, and staff's independent analysis of flow data for the Fox River, this license requires the International to prepare a plan for lake sturgeon protection which would include meeting annually with the Corps and the resource agencies to determine how adequate flows could be provided below the east spillway of the De Pere Dam during the lake sturgeon spawning and outmigration period (Article 404).

#### THREATENED AND ENDANGERED SPECIES

31. Section 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. § 1536(a), requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally-listed endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of such species. That section further requires that formal consultation with the FWS be initiated if the proposed agency action is likely to affect the listed species, unless through informal consultation the action agency and the FWS determine that there will not likely be an adverse effect.

32. In a letter dated December 7, 2004, the FWS noted that the federally-listed bald eagle is potentially affected by the project because eagles can be expected to forage in the tail waters of hydroelectric projects along the Fox River, and may attempt to nest in the project vicinity sometime in the long term. The Commission's July 8, 2004 EA recommends that the license require the licensee to develop a Bald Eagle Management and Protection Plan that would address future habitat changes that could allow nesting, and would also anticipate a possible bald eagle winter contaminant problem along the Fox River. In its December 7, 2004 letter, the FWS concurs with the staff's EA

conclusion that, with staff's recommended bald eagle protection measure, relicensing the project is "not likely to adversely affect" the species at the project.

33. As stated above in the discussion of the 10(j) process, and consistent with Interior's 10(j) November 13, 2003 recommendations regarding the bald eagle, article 405 requires that International Paper Company develop a project-specific Bald Eagle Management and Protection Plan for land within the project boundary that considers future bald eagle use and foraging along the Fox River.

#### HISTORIC PROPERTIES UNDER THE NATIONAL HISTORIC PRESERVATION ACT

34. Relicensing is considered an undertaking within section 106 of the National Historic Preservation Act (NHPA), as amended, 16 U.S.C. § 470. Section 106 requires that federal agencies take into account how each of their undertakings could affect historic properties.

35. The Corps' De Pere dam is an historic property. The Corps' De Pere Lock and Dam is part of the Fox River Navigational System which dates back to the 1850s, and was listed in the National Register of Historic Places as part of the De Pere Lock and Dam Historic District on December 7, 1993.

36. The De Pere Hydroelectric Project and the associated paper mill are also historic properties. The Wisconsin Historical Society (WHS), by letters dated April 22, and August 15, 2002, states that International's De Pere paper mill facility is eligible for inclusion in the National Register of Historic Places. As an integral part of the paper mill complex, the De Pere Hydroelectric Project is also eligible.

37. 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. The EA recommends that any license contain a provision requiring implementation of the Wisconsin State Programmatic Agreement, including filing within one year of license issuance an Historic Resources Management Plan (HRMP) as stipulated in the PA.

38. In an August 5, 2004 letter commenting on the EA, International says it believes that requirements related to the implementation of the PA should be directed only towards the portions of the mill structures and the attached dam segment that are required for hydroelectric production. Therefore, International requests that the license article requiring implementation of the PA be worded to specify that development of the HRMP would include only the historic components related to the hydroelectric facility.

39. This is not necessary. The PA already contains requirements as to how International must operate and maintain the historic licensed project facilities. The impoundment is not owned or operated by International, so the PA's shoreline monitoring stipulations would not pertain to the project HRMP. Article 202 of this license requires International to file for Commission approval an exhibit G drawing that consists of a map showing the project boundary. That project boundary would define the geographical limits of archeological resources that would be addressed in the HRMP.

40. Article 407 requires the PA to be implemented, and requires, within one year of license issuance, that International develop and file with the Commission an HRMP in accordance with the PA. This satisfies the Commission's responsibilities under section 106 of the National Historic Preservation Act.

#### APPLICANT'S PLANS AND CAPABILITIES

41. In accordance with sections 10 and 15 of the FPA<sup>9</sup> and the Commission's regulations, we have evaluated International's record as a licensee with respect to the following: (A) compliance history and ability to comply with the subsequent license; and (B) safe management, operation, and maintenance of the project.<sup>10</sup> I accept the staff's finding in each of the following areas.

##### A. Compliance History and Ability to comply with the Subsequent license

42. The staff reviewed the application and other submissions in an effort to judge International's ability to comply with the articles, terms, and conditions of any license issued, and with other applicable provisions of this part of the FPA. International's overall record of making timely filings and compliance with its license is satisfactory. No incidents of noncompliance occurred during the existing license period. The staff concludes that International Paper can comply with the conditions of a subsequent license.

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<sup>9</sup> 16 U.S.C. §§ 803(a)(2)(c) and 808(a).

<sup>10</sup> In order No. 513, we exempted licenses of minor projects, such as the De Pere Project, whose licenses waive portions of sections 14 and 15 of the FPA, from the information requirements of 18 C.F.R. § 16.10. See 54 *Fed. Reg.* 23756 (June 2, 1989) and 55 *Fed. Reg.* 10768 (March 23, 1990), FERC Statutes and Regulations, Regs. Preambles 1986 1990 ¶ 30,854 at p. 31,445 (May 17, 1989).

### B. Safe Management, Operation and Maintenance of the Project

43. International owns and operates the De Pere Hydroelectric Project. The project is classified as having a low hazard potential. The project is subject to Part 12 of the Commissions regulations entitled, "Safety of Water Power Projects and Project Works." The project is exempt from the requirements of Part 12C, Emergency Action Plan. There are no outstanding dam safety issues.

44. Based on the above, I conclude that there are no reasons to deny issuance of a subsequent license when considering the licensee's record of managing, operating, and maintaining the project.

### C. Need for Power (Section 15(a)(2)(D))

45. The De Pere Hydroelectric Project is located within the Mid-America Interconnected Network, Inc. (MAIN) region of the North American Electric Reliability Council (NERC). NERC annually publishes public information relative to projected increases in capacity and energy demand. NERC's most recent information indicates that the summer demand for electric capacity (MW) in the MAIN region will increase at an average annual rate of 1.7-percent between 2003 and 2012. During the summer, which is the most critical electric generating season for MAIN, the projected annual growth rate for electrical energy (megawatthours) is 1.5-percent for the same period.

46. All power from the De Pere Hydroelectric Project is used by International's Nicolet mill facility. The project's 1,080-kW capacity represents about 9 percent of the paper mill's demand. International currently purchases power from the local electric utility, Wisconsin Public Service Corporation (WPSC), to meet the remainder of its energy requirements. If the project is not granted a new license, the project's average annual generation of 4,717 megawatthours would have to be replaced with purchased power from WPSC, one of MAIN's members. WPSC projects that there is minimal potential for expansion of renewable energy (hydro, geothermal, biomass, or solar) or non-combustible (nuclear) in the near term. Therefore, the loss of the De Pere Hydroelectric Project would increase WPSC's need for building new generating stations while the emissions of oxides of nitrogen and sulfur and carbon monoxide and dioxide would also increase.

47. I conclude that present and future use of the project's power, its low cost, its displacement of nonrenewable fossil-fueled generation, and its contribution to a diversified generation mix support a finding that the power from the De Pere Project will help meet a need for power in the MAIN region and the WPSC's service territory during the short and long term.

## OTHER ISSUES

### A. Administrative Conditions

48. The Commission collects annual charges from licensees for, among other things, the administration of the FPA, and the use of government dams or other structures owned by the United States. Article 201 provides for such annual charges.

49. 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.

50. Subsequent to the filing of the application, the Commission's regulations have been modified to require Exhibit G for all projects under 18 C.F.R. § 4.61 to conform to the requirements of 18 C.F.R. § 4.41(h). Because the exhibit G information filed with the application and on April 14, 2003, does not conform to the new requirements, Article 202 requires the filing for Commission approval an exhibit G that conforms to the requirements of 18 C.F.R. § 4.41(h).

### B. Memorandum of Understanding

51. Pursuant to a Memorandum of Understanding (MOU) between the Federal Energy Regulatory Commission (Commission) and the Department of the Army, signed by parties on November 2, 1981, for hydropower projects developed on Corps facilities, the Commission routinely includes special license articles which do the following:

(1) require the licensee to submit final plans and specifications for cofferdams and deep excavations to the Corps of Engineers and Commission for review and approval; (Articles 301 and 302);

(2) require the licensee to enter into a comprehensive agreement with the Corps of Engineers within 90 days after a license is issued. The agreement must assure that: (a) studies and construction activities for the licensed project do not interfere with Corps of Engineers operations or damage Corps of Engineers facilities, and (b) the licensee compensates the Corps of Engineers for its project-related personnel and construction costs (Article 303);

(3) authorize the Corps of Engineers to (a) inspect the construction, operation, and maintenance of any licensed facilities that may affect the structural integrity or operation of the Corps of Engineers project; and (b) order the licensee to stop any activity that may endanger the structural integrity or safety of the Corps of Engineers project (Article 304);

(4) require the licensee to submit a regulating plan to the Corps of Engineers for approval at least 60 days prior to the start of construction, and to enter into an operating Memorandum of Agreement (MOA) with the Corps of Engineers describing the detailed operation of the power facilities acceptable to the Corps of Engineers (Article 305);

(5) provide that the licensee shall have no claim under the license against the United States arising from any changes made in the structure, operation, or reservoir levels of the Corps of Engineers project (Article 306); and

(6) require the licensee to provide the Commission's Regional Engineer two copies of all correspondence between the licensee and the Corps of Engineers and provides that the Commission's Regional Engineer shall not authorize construction until the Corps of Engineers provides final written approval of the project (Article 307).

### C. Flashboards

52. International maintains 12-inch flashboards on the 400-foot-long project section of the dam in order to help maintain water levels and head levels in the reservoir needed to operate the turbines. Article 403 authorizes continued use of 12-inch flashboards on the project dam.

### STATE AND FEDERAL COMPREHENSIVE PLANS

53. Section 10(a)(2)(A) of the FPA<sup>11</sup> requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project.<sup>12</sup> Under section 10(a)(2)(A), federal and state agencies filed a total of 69 qualifying comprehensive plans addressing various resources in Wisconsin. Of these, the staff identified and reviewed ten plans that are relevant to this project.<sup>13</sup> No inconsistencies were found.

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<sup>11</sup> 16 U.S.C. § 803(a)(2)(A).

<sup>12</sup> Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2003).

<sup>13</sup> These plans are: (1) "Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service," Undated, Fish and Wildlife Service; (2) "North American waterfowl management plan," 1986, Fish and Wildlife Service and Canadian Wildlife Service; (3) "The nationwide rivers inventory," 1982, National Park Service; (4) "Upper Fox River Basin area wide water quality management plan," 1979, Wisconsin Department of Natural Resources; (5) "Lower Green Bay remedial action plan for Lower Fox River and Lower Green Bay area of concern," 1988, Wisconsin Department of

## COMPREHENSIVE DEVELOPMENT

54. Sections 4(e) and 10(a)(1) of the FPA, 16 U.S.C. §§ 797(e) and 803(a)(1), require the Commission, in acting on applications for license, to give equal consideration to the power and 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 in the Commission's judgment 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.

55. 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 benefits of project power.

56. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*,<sup>14</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 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. In making its decision, the Commission considers the project power benefits both with the applicant's proposed mitigation and enhancement measures and with the Commission's modifications and additions to the applicant's proposal.

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Natural Resources; (6) "Wisconsin water quality management program: Upper Fox River water quality management plan," 1990, Wisconsin Department of Natural Resources; (7) "Wisconsin water quality management program: Lower Fox River Basin water quality management plan," 1991, Wisconsin Department of Natural Resources; (8) "Statewide comprehensive outdoor recreation plan, 1991-1996," 1991, Wisconsin Department of Natural Resources; (9) "Wisconsin water quality assessment report to Congress," 1992, Wisconsin Department of Natural Resources; and (10) "Wisconsin biodiversity as a management issue," 1995, Wisconsin Department of Natural Resources.

<sup>14</sup> 72 FERC ¶ 61,207 (1995).

57. As proposed by International, the annual cost of the project would be about \$53,381 (11.32 mills/kilowatt-hour (kWh)). The annual power value, for the estimated annual generation of 4,717 megawatt-hours (MWh), would be \$151,887 (32.20 mills/kWh).<sup>15</sup> The resulting annual net benefit would be \$98,506 (20.88 mills/kWh).

58. The proposed action with additional staff-recommended measures would increase the annual cost about \$770 to \$54,151 (11.54 mills/kWh) and result in a loss of 18 MWh for a total annual generation of 4,691 MWh resulting in a net annual benefit of \$97,736 (20.83 mills/kWh).

59. My evaluation of the economics of the proposed action with additional staff-recommended measures shows that project energy would cost less than alternative energy.

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

61. The preferred alternative includes the following measures:

(1) reserving Commission authority to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of such fishways as may be prescribed by the Secretary of the Interior under section 18 of the Federal Power Act (Article 401);

(2) operating the project in a run-of-river mode for the protection of water quality and fishery resources of the Fox River (Article 402);

(3) authorization of use of flashboards on the crest of the 400-foot-long project portion of the De Pere Dam (Article 403);

(4) providing a project operational plan for the protection of lake sturgeon (Article 404);

(5) providing a bald eagle management and protection plan (Article 405);

(6) providing a nuisance plant control plan (Article 406); and

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<sup>15</sup> The annual power value was estimated using the cost of power value (32.20 mills/kWh) provided by International in exhibit H of the license application.

(7) implementing the Wisconsin Statewide Programmatic Agreement (Article 407).

#### LICENSE TERM

62. The Commission's general policy is to establish 30-year terms for projects with little or no proposed redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures; 40-year terms for projects with a moderate amount thereof; and 50-year terms for projects with an extensive amount thereof.

63. The subsequent license for the De Pere Hydroelectric Project requires no new development, and a minimal amount of new enhancement measures. I am therefore issuing the subsequent license for a 30-year term.

#### SUMMARY OF FINDINGS

64. The EA contains background information, analysis of effects, support for related license articles, and the basis for a finding of no significant impact on the environment. The design of this project is consistent with the engineering standards governing dam safety. The project would be safe if operated and maintained in accordance with the requirements of this license.

65. Based upon a review of the agency and public comments filed on the project, and the staff's independent analysis pursuant to sections 4(e), 10(a)(1), and 10(a)(2) of the FPA, I conclude that issuing a license for the project, with the required environmental measures and other special license conditions, would be best adapted to the comprehensive development of the Lower Fox River for beneficial public uses.

#### The Director orders:

(A) This license is issued to International Paper Company (licensee), for a period of 30 years, effective the first day of the month in which this order is issued, to construct, operate and maintain the De Pere Hydroelectric Project. This license is subject to the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, described in Exhibits A and G, filed on November 20, 2002, and April 14, 2003, respectively.

(2) The project works consisting of: (1) a 13.6-foot-high, about 400-foot-long

uncontrolled spillway that abuts the westerly end of the U.S. Corps of Engineers' De Pere Dam and is topped by 12-inch timber flashboards; (2) intake works consisting of 28 exterior gates screened by steel racks, and 28 interior gates; (3) a powerhouse located in the lower level of the licensee's papermill building containing eight identical vertical turbines each connected to a generator with a rated capacity of 135-kilowatts (kW) for a total installed capacity of 1,080 kW; and (4) other appurtenances.

The project works generally described above are more specifically described in Exhibit A of the application and shown by Exhibit F drawings described below, filed on April 14, 2003.

<u>Exhibit F Drawing</u>	<u>FERC No. 4914-</u>	<u>Description</u>
Sheet F-1	1001	General Plan View
Sheet F-2	1002	Powerhouse Plan and Section

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

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

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

4(b), except the second sentence; 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the FPA that are waived here; 10(c), insofar as it relates to depreciation reserves; 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 19; 20; and 22.

(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.

(F) This license is subject to the articles set forth in Form L-9 (October 1975), entitled "Terms and Conditions of License for Constructed Minor Project Affecting Navigable Waters of the United States", and the following additional articles:

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

- (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 1,080 kilowatts (kW). Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kW will not be assessed an annual charge.
- (B) Recompensing the United States for the utilization of surplus water or water power from a government dam, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time.

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 licensee shall at the same time file for Commission approval an exhibit G drawing that consists of a map showing the project boundary and other features necessary to conform to the requirements of 18 C.F.R. § 4.41(h).

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-4914-### through P-4914-###) 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 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-4914-####, 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. 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 vector data in a geo-referenced 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-4914, boundary vector data, MM-DD-YYYY.SHP]. The geo-referenced 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 [e.g., P-4914, project boundary metadata, MM-DD-YYYY.TXT].

Article 301. *U.S. Army Corps of Engineers Review and Approval of Facility Design and Construction.* The design and construction of those permanent and temporary facilities, including reservoir impounding cofferdams and deep excavations, that would be an integral part of, or that could affect the structural integrity or operation of the Government project shall be done in consultation with and subject to the review and approval of the U.S. Army Corps of Engineers' (Corps') District Engineer. The Corps' review of the cofferdams will be in addition to the licensee's review and approval of the final plans, and shall in no way relieve the licensee of responsibility and liability regarding satisfactory performance of the cofferdams. Within 90 days from the issuance date of the license, the licensee shall furnish the Corps and the Commission's Regional Engineer, a schedule for submission of design documents and the plans and specifications for the project. If the schedule does not afford sufficient review and approval time, the licensee, upon request of the Corps, shall meet with the Corps and FERC staffs to revise

the schedule accordingly.

Article 302. *Licensee Review and Approve of Contractor-Designed Cofferdams and Deep Excavations.* The licensee shall review and approve the design of contractor-designed cofferdams and deep excavations, other than those approved according to Article 301, prior to the start of construction and shall ensure that construction of cofferdams and deep excavations are consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the licensee shall file with the Director, Division of Dam Safety and Inspections, with a copy to the Commission's Regional Engineer and the U.S. Army Corps of Engineers, one copy of the approved cofferdam construction drawings and specifications and a copy of the letter(s) of approval.

Article 303. *Licensee Access to U.S. Army Corps of Engineers Lands and Property.* The licensee shall within 90 days from the issuance date of the license, enter into an agreement with the U.S. Army Corps of Engineers (Corps) to coordinate its plans for access to and site activities on lands and property administered by the Corps so that the authorized purposes, including operation of the Federal facilities, are protected. In general, the agreement shall not be redundant with the Commission's requirements contained in this license, shall identify the facility, and the study and construction activities, as applicable, and terms and conditions under which studies and construction will be conducted. The agreement shall be mainly composed of reasonable arrangements for access to the Corps site to conduct studies and construction activities, such access rights to be conditioned by the Corps as may be necessary to protect the federally authorized project purposes and operations. Should the licensee and the Corps fail to reach an access agreement, the licensee shall refer the matter to the Commission for resolution.

Article 304. *U.S. Army Corps of Engineers Inspection of Construction, Operation and Maintenance of Project Works.* The construction, operation and maintenance of the project works that, in the judgment of the U.S. Army Corps of Engineers (Corps) may affect the structural integrity or operation of the Corps project shall be subject to periodic or continuous inspections by the Corps. Any construction, operation and maintenance deficiencies or difficulties detected by the Corps inspection shall be immediately reported to the Regional Engineer. Upon review, the Regional Engineer shall refer the matter to the licensee for appropriate action. In cases when construction, operation or maintenance practices or deficiencies may create a situation posing imminent danger to the structural integrity and safety of the Corps project, the Corps inspector has the authority to stop construction or maintenance while awaiting the resolution of the problem.

Article 305. *U.S. Army Corps of Engineers Pre-construction Approval of a Regulating Plan and Operating Memorandum of Agreement.* The licensee shall at least 60 days prior to start of construction, submit for approval a regulating plan to the U.S.

Army Corps of Engineers (Corps), describing (a) the designed mode of hydropower operation, and (b) reservoir flow diversion and regulation requirements for operation of the Corps project during construction as established by the Corps. In addition, the licensee, prior to start of power plant operation, shall enter into an operating Memorandum of Agreement (MOA) with the Corps describing the detailed operation of the powerhouse acceptable to the Corps. The MOA shall specify any restrictions needed to protect the primary purposes of the Corps project for navigation, recreation, water quality, and flood control. The Regional Engineer shall be invited to attend meetings regarding the agreement. The MOA shall be subject to revision by mutual consent of the Corps and licensee as experience is gained by actual project operation. Should the licensee and the Corps fail to reach an agreement, the matter will be referred to the Director, Office of Energy Projects for resolution. Copies of the regulating plan and signed MOA between the Corps and the licensee and any revision thereof shall be furnished to the Director, Office of Energy Projects and the Regional Engineer.

Article 306. *Licensee Claims Against the United States.* The licensee shall have no claim under this license against the United States arising from the effect of any changes made in the operation or reservoir levels of the U.S. Army Corps of Engineers (Corps) project.

Article 307. *U.S. Army Corps of Engineers Plans and Specifications Approval Prior to Regional Engineer Authorization of Project Work Construction.* The licensee shall provide the Regional Engineer two copies of all correspondence between the licensee and the U.S. Army Corps of Engineers (Corps). The Regional Engineer shall not authorize construction of any project work until the Corps' written approval of construction plans and specifications has been received by the Regional Engineer.

Article 401. *Fishways.* Authority is reserved by the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior under section 18 of the Federal Power Act.

Article 402. *Run-of-River Operation and Reservoir Levels.* The licensee shall operate the De Pere Project in a run-of-river mode at all times for the protection of water quality and fishery resources in the Fox River below the De Pere Dam.

The licensee shall at all times act to minimize the fluctuation of the impoundment surface elevation by maintaining a discharge from the project so that, at any point in time, flows, as measured immediately downstream of the project, approximate the sum of inflows to the project impoundment.

Run-of-river operation and reservoir surface elevations may be temporarily modified, if required by operating emergencies beyond the control of the licensee or for

short periods, upon mutual agreement among the licensee, Wisconsin Department of Natural Resources (WDNR), U.S. Army Corps of Engineers (Corps), and the U.S. Fish and Wildlife Service (FWS), or as directed by the Corps to accommodate the authorized purpose of the Corps' facilities. If the flow or reservoir elevation is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

The licensee shall notify the FWS Lower Fox River Basin Leader, Green Bay Regional Office within 12 hours of any project emergency that affects flow releases or reservoir water levels. The licensee shall also consult with the WDNR, Corps, and FWS Green Bay Ecological Services Field Office prior to any reservoir drawdowns that are needed for project maintenance activities.

Article 403. Flashboards. The licensee is authorized to use 12-inch tall flashboards on the crest of the 400-foot-long portion of the De Pere Dam (that is the licensee-owned diversion structure for the project) to facilitate maintenance of reservoir pool levels for project operation. Flashboard installation and removal by the licensee shall not interfere with the U.S. Army Corps of Engineers' (Corps') navigational responsibilities for the Fox River. For navigational purposes, the Corps manages water levels in the reservoir so that water levels do not exceed 18 inches over the crest (at 586.66 feet International Great Lakes Datum) of the dam. The licensee shall sluice water through the project and or remove flashboards in concert with other Corps actions to reduce water levels in the reservoir when river levels are in excess of 18 inches above the crest of the dam. The licensee is responsible for installing, removing, and maintaining the flashboards on the licensee-owned section of the De Pere Dam

Article 404. Operational Plan for Lake Sturgeon Protection. Within 12 months of the date of issuance of the license, the licensee shall file for Commission approval an operational plan for the De Pere Project to help protect lake sturgeon spawning, egg incubation, and larval hatching activities that occur in the Fox River below the east spillway of the De Pere Dam during the period April 15 to June 15. The operational plan shall be prepared in consultation with the U.S. Corps of Engineers, Detroit District, (Corps), the U.S. Fish and Wildlife Service (FWS), and the Wisconsin Department of Natural Resources (WDNR).

The operational plan shall include, but not be limited to:

(a) a component of the plan that requires the licensee to meet with the Corps, FWS, and WDNR between the last week in February and the second week in March each year to determine how adequate spills could be provided over the east spillway of the Corps' De Pere Dam that would help protect lake sturgeon spawning, egg incubation, and larval hatching and outmigration in the Fox River below the De Pere Dam during the period April 15 to June 15; and

(b) and a schedule for implementing the plan.

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

Article 405. Bald Eagle Management and Protection Plan. Within 12 months of the issuance date of the license, the licensee shall file for Commission approval a project-specific Bald Eagle Management and Protection Plan for the De Pere Project. The plan shall be developed using state and federal bald eagle management guidelines (Management Guidelines): Bald Eagles in Wisconsin (Eckstein, 1990), Management Guidelines for Breeding Areas of the Northern States Bald Eagle Recovery Plan (Grier, 1983) and Bald Eagle Winter Management Guidelines (Martell, 1992). The plan shall be prepared in consultation with the U.S. Fish and Wildlife Service (FWS) and the Wisconsin Department of Natural Resources (WDNR). The plan shall be updated and re-filed with the Commission every 5 years.

The plan shall include, but not be limited to the following:

(a) a description of how the Management Guidelines were used in preparation of the plan;

(b) a description of the management objectives and actions that would be implemented to protect bald eagles and their nesting trees on project lands, including a description of how habitat changes that could allow bald eagle nesting within the project boundary would be identified;

(c) a description of the management objectives and actions that would be used to determine if the project tailwaters are contaminated and for limiting bald eagles feeding in the project tailrace;

(d) a description of the specific methodology that would be used to implement the necessary measures identified in (b) and (c) above;

(e) a description of the cost of implementation and maintenance of the protection measures; and

(f) a schedule for implementing the necessary measures .

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the FWS and the WDNR, and specific descriptions of how the agencies' comments and recommendations are accommodated by the plan. The licensee shall allow 30 days for the agencies to comment and 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. No land-disturbing activities affecting endangered species shall begin at the project until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 406. Nuisance Plant Control Plan. Within 12 months of the issuance date of the license, the licensee shall file for Commission approval a final Nuisance Plant Control Plan (NPCP) for the De Pere Project to monitor purple loosestrife (*Lythrum salicaria*) and Eurasian water milfoil (*Myriophyllum spicatum*) in project waters. The nuisance plant control plan shall be prepared in consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS).

The Nuisance Plant Control Plan Shall include, but not be limited to:

- (a) a description of the method of monitoring;
- (b) a description of the frequency of monitoring;
- (c) a description of the specific measures that the licensee will take (e.g., informational signage) to increase public awareness of how Eurasian water milfoil is spread and measures the public can take to prevent the spread of this species;
- (d) a description of procedures that would be used for obtaining technical assistance and input from the WDNR and FWS; and
- (e) a schedule for providing the monitoring results to the WDNR and FWS.

If at any time during the term of license, the WDNR and the FWS deem it necessary to control or eliminate purple loosestrife or Eurasian water milfoil, and the Commission agrees with that determination, the Commission may require the licensee to control/eliminate purple loosestrife or Eurasian water milfoil if there is a biologically safe method of control available.

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

Article 407. Historic Properties. The licensee shall implement the "Programmatic Agreement Among The Federal Energy Regulatory Commission, The Advisory Council On Historic Preservation, The State Of Wisconsin, State Historic Preservation Officer, And The State Of Michigan, State Historic Preservation Officer, For Managing Historic Properties That May Be Affected By New and Amended Licenses Issuing For The Continued Operation Of Existing Hydroelectric Projects In The State Of Wisconsin And Adjacent Portions Of The State Of Michigan," executed on December 30, 1993, including but not limited to the Historic Resources Management Plan (HRMP) for the project. In the event that the Programmatic Agreement is terminated, the licensee shall implement the provisions of any approved HRMP. The HRMP shall be filed within one year of the issuance of this license. The Commission reserves the authority to require changes to the HRMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the HRMP, the licensee shall obtain Commission approval before engaging in any ground disturbing activities or taking any other action that may affect any historic properties within the project's Area of Potential Effect.

Article 408. 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 type of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement.

To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the impoundment 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 impoundment. 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. If no conveyance was made during the prior calendar year, the licensee shall so inform the Commission and the Regional Director in writing no later than January 31 of each year.

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

At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

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

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

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

(3) The instrument of conveyance must include 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.

(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 of the FPA. The filing of a request for rehearing does not operate

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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

Water Quality Certificate Conditions for the De Pere Hydroelectric Project No. 4914 Issued April 18, 2003, Under Section 401 of the Federal Clean Water Act by the Wisconsin Department of Natural Resources.

### Water Quality Certification (P.L. 92-500, Section 401)

In the matter of:      International Paper  
                                 200 Main Avenue  
                                 De Pere, WI 54115-2299

#### APPLICATION FOR A SUBSEQUENT LICENSE FOR THE DE PERE HYDROELECTRIC PROJECT (FERC No. 4914)

The Wisconsin Department of Natural Resources (the Department) has reviewed a request for Subsequent License dated November 18, 2002 by the International Paper (the applicant). This request has been supplemented by a copy of the Federal Energy Regulatory Commission (FERC) license application filed with FERC on November 18, 2002. The Department has made the following findings:

#### **I. Background/General Setting**

1.      On November 18, 2002 the applicant applied to FERC for re-licensing of the De Pere Hydroelectric Project located on the Fox River in the City of De Pere, Brown County.
2.      The De Pere Hydroelectric Project is one of 13 dams on the lower Fox River. The project is located 7 miles upstream from the mouth of the Fox River. Twelve dams are located upstream from this project. The De Pere Hydroelectric Project is the lowermost dam on the Fox River.
- 4.[sic] The project facilities were originally built at the De Pere site in 1891 and rebuilt in 1927.

#### **II. Project Civil Works**

5.      The De Pere Dam consists of a powerhouse on the West side of the Fox River which houses eight vertical turbines. The structure includes a 400

foot-long concrete spillway that is adjacent to the U.S. Army Corps of Engineers spillway and lock system.

6. The total generating capacity of the eight generating units is 1,078 kW.
7. The upstream reservoir has a surface area of 900 acres at normal pool elevation maintained between 586.66 and 588.16 feet.

### **III. Flow Regime and Reservoir Management**

8. The estimated average annual discharge for the project is 4,320 cfs. The project will continue to operate in a run-of-river mode as the reservoir has always done.

### **IV. Standards Designation**

9. Wisconsin state water quality standards protect the public interest, which includes the protection of public health and welfare and the present and prospective uses of all waters of the state for public and private water supplies, propagation of fish and other aquatic life and wild and domestic animals, domestic and recreational purposes, and agricultural, commercial, industrial, and other legitimate uses. In all cases where the potential uses are in conflict, water quality standards shall protect the general public interest. These water quality standards serve as a basis for developing and implementing control strategies to achieve legislative policies and goals. Water quality standards serve as a basis for decisions in other regulatory, permitting or funding activities that impact water quality.
10. To preserve and enhance the quality of waters, standards are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all waters including the mixing zone and the effluent channel meet the following conditions at all times and under all flow conditions:
  - (a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
  - (b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in the waters of the state.

(c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in the waters of the state.

(d) Substances in concentrations or combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

11. It should be recognized that these standards will be revised as new information or advancing technology indicate that revisions are in the public interest. Water used for hydropower and commercial shipping depends mainly on quantity, depth, and elevation; consequently, no specific quality standards for these uses have been prepared.
12. The Department classifies all surface waters into one of five fish and aquatic life subcategories. The Fox River is classified as a *Warm water sport fish community - Fish and Aquatic Life*. This subcategory includes surface waters capable of supporting a community of warm water sport fish or serving as a spawning area for warm water sport fish.
13. Except for natural conditions, all waters classified for fish and aquatic life, subcategory *Warm water sport fish community* shall meet the following criteria or any variance granted them (NR 102.04 Wisconsin Administrative Code):

*Dissolved oxygen* - The dissolved oxygen content in surface waters may not be lowered to less than 5 mg/L at any time.

*Temperature* -

1. There shall be no temperature changes that adversely affect aquatic life.
2. Natural daily and seasonal temperature fluctuations shall be maintained.
3. The temperature shall not exceed 89° F for warm water fish.

*pH* - The pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum.

## V. State Comprehensive Plans

### *The Lower Fox River Basin Water Quality Management Plan*

The goal of this plan is to identify areas of water quality concerns and identify management objectives for the water resources of the Lower Fox River Basin. The plan focuses on issues that require a comprehensive approach both within the Department and with other agencies and public and private groups.

### *Wisconsin's Biodiversity as a Management Issue*

This report presents the Department's strategy for the conservation of biological diversity. In the aquatic community section of this report, past and present dam construction is considered the number one impact on our states large rivers. Impacts on rivers caused by dams include fragmentation of river habitats, elimination of higher gradient riffle and rapids habitat, increased temperatures and reduced dissolved oxygen levels in waters discharged below dams, interference with natural flooding and sedimentation, interference with the natural downstream transport of woody debris. Hydroelectric dams also pose mortality threats to downstream migrating fish species, block natural upstream movements of fish, and may interfere with the colonization of macroinvertebrates and mussel species. Hydroelectric facilities, which conduct peaking operations, have a negative effect on habitat for fish and other aquatic species. Changes in discharge due to peaking cause changes in substrate, velocity and depth conditions. This translates into changing habitat conditions for aquatic species.

The report lists possible actions that would be consistent with ecosystem management and would correct some of the negative impacts that dams have on rivers. These include providing both up and downstream fish passage at dams when and where it is appropriate and providing adequate minimum flows to protect recreation, water quality and fish and aquatic life.

### *Lower Green Bay and Fox River Remedial Action Plan*

This plan was developed to guide restoration efforts of the lower Fox River and Lower Green Bay. The plan uses a broad ecosystem management approach to review pollution sources and develop methods and solutions to restore and maintain these systems.

### *Wisconsin Lake Sturgeon Management Plan*

This plan identified issues related to lake sturgeon management and conservation. Issues identified included declines in abundance, an absence of

comprehensive biological and harvest information with which to manage populations, the negative impacts of habitat loss, maintenance of genetic diversity, and the importance of protection from illegal harvest. The plan outlines objectives to accomplish these and other needs. A list of priority waters for rehabilitation was identified in the plan and includes the waters of Green Bay and tributaries.

#### ACTION OF THE DEPARTMENT

The Department has the authority to issue water quality certification under Chapter NR 299 of the Wisconsin Administrative Code. Water quality certification procedures have been adopted pursuant to Section 401 of the Clean Water Act (33 USC 1341) and Sections 144.025 and 147.0, Wis. Stats. It is the policy of the Department to review, all activities which require a federal license or permit which may result in any discharge to waters of the state and to:

1. Deny certification for any activity where the Department does not have reasonable assurance that any discharge will comply with effluent limitations, water quality related concerns or any other appropriate requirements of state law as outlined in NR 299.04; or
2. Grant or grant conditionally certification for any activity where the Department has reasonable assurance that any discharge will comply with effluent limitations, water quality related concerns or any other appropriate requirements of state law as outlined in NR 299.04; or
3. Waive certification for any activity which the Department finds will result in no discharge, any wastewater discharge associated with an activity which will be regulated by the permit authority under ch. 283, Wis. Stats., or any activity that does not fall within the purview of the Department's authority.

The Department shall determine whether it has reasonable assurance that the proposed activity complies with the following water quality standards;

1. Effluent limitations adopted under s. 283.13, Wis. Stats., and 33 USC 1311, for categories of discharges;
2. Water based related effluent limitations adopted under s. 283.13(5), Wis. Stats., and 33 USC 1312;
3. Water quality standards adopted under s. 281.15, Wis. Stats., and 33 USC 1313;
4. Standards of performance adopted under s. 283.19, Wis. Stats., and 33 USC

1316;

5. Toxic and pretreatment effluent standards adopted under s. 283.21, Wis. Stats., and 33 USC 1317;
6. Public interest and public rights standards, related to water quality, set forth in ss. 30.03, 30.10, 30.11, 30.12, 30.123, 30.13, 30.15, 30.18, 30.19, 30.195, 30.196, 30.20, 30.202, 30.206, 30.21, 31.02, 31.05, 31.06, 31.07, 31.08, 31.12, 31.13, 31.18, 31.23, 88.31 and 281.15, Wis. Stats., and made applicable by 33 USC 1341(d);
7. Any other appropriate requirements of state law as provided in 33 USC 1341(d).

Based on its review of the applicant's proposal and the above findings, the Department concludes that there is a discharge from this project. There is reasonable assurance that operation and maintenance of the De Pere Hydroelectric Project as proposed by the applicant in the February 2003 license application and modified by the following conditions will not cause a violation of Wisconsin Water Quality Standards. And, the De Pere Hydroelectric Project will be in compliance with sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act, P.L. 92-500, as amended, and other appropriate requirements of state law:

- A. The applicant shall comply with all federal, state and local permit requirements.
- B. The applicant shall meet State of Wisconsin water quality standards applying to this project. As with all other affected operations, the applicant is required to meet any revised state water quality standards.
- C. The applicant must operate the De Pere Hydroelectric Project in a run-of-river mode.
- D. Any proposals for project maintenance or repair work involving the river, including reservoir drawdowns to facilitate repair/maintenance work shall be filed with FERC after consultation with the Department.
- E. The applicant shall allow the Department to inspect the project area at any time upon reasonable notification to monitor compliance with certification conditions.
- F. 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 and written approval.

- G. 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.

Dated at Peshtigo, WI: April 9, 2003

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By           [signed]          

George Boronow

Lower Fox River Basin - Water Team Supervisor

NOTICE OF APPEAL RIGHTS

If you believe you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition shall name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30 day period for filing a petition for judicial review. Unless a written request for a hearing is filed with the Department within 30 days after mailing of the notice, the Department's decision will become final without public hearing at the end of the 30-day period.