UNITED STATES OF AMERICA 78 FERC ¶ 62,084 FEDERAL ENERGY REGULATORY COMMISSION

Fraser Papers, Inc.

Project No. 2473-002

ORDER ISSUING SUBSEQUENT LICENSE (Minor Project) (Issued February 5, 1997)

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I NTRODUCTI ON

Fraser Papers, Inc. (Fraser)1/ filed an application for subsequent license under Part I of the Federal Power Act (FPA)2/ to continue to operate and maintain the 1,500-kilowatt (kW) Crowley Project (FERC No. 2473), located on the Flambeau River, in Price County, Wisconsin. The Flambeau River is a navigable waterway of the United States. The Commission issued the original license for the project on September 30, 1969. The original license expired on December 31, 1993. Since then, Fraser, along with Flambeau Paper, has operated the project under annual license. 3/

BACKGROUND

Notice of the application has been published. No protests were filed in this proceeding and no agency objected to issuance of this license. Comments received from interested agencies and individuals have been fully considered in determining whether to issue this license.

Motions to intervene were filed on July 15, 1992, by the Wisconsin Department of Natural Resources (Wisconsin DNR), on October 11, 1994, by the Dairyland Power Cooperative (Dairyland Power), on August 7, 1992, by the U.S. Department of the Interior (Interior), and by the Izaak Walton League on August 11, 1992.

- / Fraser was formally known as Flambeau Paper Corp. (Flambeau Paper). By order issued January 23, 1994 (78 FERC ¶ 62, 044), the Fraser's request to transfer the license for the Crowley Project from Flambeau Paper to Fraser Paper was approved. Accordingly, we refer to the licensee, herein as Fraser, except in those cases where Flambeau Paper was clearly the party of record during the licensing process (e.g., Compliance History, Section 10(j) consultation process).
- / 16 U.S.C. ^{⊥⊥}791(a)-823(b).
- / See 33 FPC 1067 (1965). Section 23(b) of the FPA, 16 U.S.C. \pm 81791) requires the project to be licensed.

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None of the intervenors object to issuance of a subsequent license.

The Commission's staff issued the Flambeau River Final Environmental Impact Statement (FEIS) for this project and five other projects seeking relicensing 4/. The staff also prepared a Safety and Design Assessment (S&DA). The FEIS and S&DA are available in the Commission's public file for this project.

PROJECT DESCRIPTION

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The existing project consists of a 513-foot-long dam, a reservoir with a surface area of 422 acres, a powerhouse containing two generating units with a total installed capacity of 1,500 kW, and appurtenant facilities. A more detailed project description can be found in ordering paragraph B(2) and in the FEIS.

WATER QUALITY CERTIFICATION

Under Section 401(a)(1) of the Clean Water Act, 33 U.S.C. \pm 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 (WQC) 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. 5/ Flambeau Paper applied for a WQC for the Crowley Project by letter dated May 31, 1990. Although the Wisconsin DNR waived certification by failing to act on Flambeau Paper's request for a WQC within one year, the Wisconsin DNR affirmatively waived the requirement for a WQC for the Crowley Project in a letter dated July 9, 1991, from William H. Clark, Wisconsin DNR to Ed Kreul, Flambeau Paper Corporation.

- / I am today issuing new or subsequent licenses for the following projects on the Flambeau River: P-2640, P-2421, P-2395, P-2390, and P-2475. The cumulative environmental effects of these projects have been evaluated in the FEIS (September 1996).
- / Section 401(a)(1) 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.

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SECTION 18 - AUTHORITY TO PRESCRIBE FISHWAYS

Section 18 of the FPA 6/ states that the Commission shall require construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of Commerce or Interior. Interior, by letter dated June 24, 1993, requests that its authority to prescribe the construction, operation, and maintenance of fishways pursuant to Section 18 of the FPA be reserved for any project licensed.

Consistent with Commission practice, Article 408 of this License reserves authority to the Commission to require the Licensee to construct, operate, and maintain such fishways as may be prescribed by Interior pursuant to Section 18 of the FPA. 7/ APPLICANT'S PLANS AND CAPABILITIES

Staff evaluated Flambeau Paper's record as a licensee in the areas of conservation efforts and compliance history. I accept the staff's findings as discussed below.

Here are the findings:

A. Conservation Efforts (Section 10(a)(2)(C))

The Public Service Commission of Wisconsin (PSCW) has statutory and regulatory authority regarding least cost planning and energy conservation in the state of Wisconsin. Fraser promotes electric conservation in compliance with the requirements and policies of the PSCW.

B. Compliance History Pursuant to Section 15(a)(3)(A) of the Federal Power Act

We have reviewed Flambeau Paper's compliance with the terms and conditions of the existing license. We find that the compliance record of Flambeau Paper is less than satisfactory. The licensee failed to timely file the Emergency Action Plans or updates (7 times), Spillway Operation Certification (2 times), Operation Inspection Follow-up Reports (2 times), and a Form 80 Recreation Report. In addition, the licensee did not timely comply with a dam repair requirement, and a Part 12 Remedial Action.

/ 16 U.S.C. ⊥811.

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/ The Commission has specifically sanctioned the reservation of fishway prescription authority at relicensing. See Wisconsin Public Service Corporation, 62 FERC ¶ 61,095 (1993); aff'd, Wisconsin Public Service Corporation v. FERC, 32 F. 3d 1165 (1994). Project No. 2473-002 -4-

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The compliance record described above does not warrant the denial of Fraser's application for a new license. However, because of the licensee's compliance history, special consideration must be given to ensure that the licensee complies with the terms and conditions of this new license. Therefore, Article 501 has been added to the license requiring the licensee to develop, and file for Commission approval, a Hydropower Compliance Management Program that will ensure compliance with the terms and conditions of the new license and allow the Commission to monitor progress toward compliance.

RECOMMENDATIONS OF FISH AND WILDLIFE AGENCIES

Section 10(j)(1) of the FPA requires the Commission, when issuing a license, to include license conditions, based on recommendations of Federal and state fish and wildlife agencies. The recommendations are submitted pursuant to the Fish and Wildlife Coordination Act, are intended to "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat)"

A. Final Determinations Under FPA Section 10(j)(2)(A) and (B)

In determining whether to accept or reject recommendations of fish and wildlife agencies under Section 10(j), the Commission first determines whether each recommendation is supported by substantial evidence in the record; if not, the recommendation is inconsistent with the requirement of Section 313(b) of the FPA that Commission orders be supported by substantial evidence. 8/

Second, the Commission determines whether a substantiated recommendation is inconsistent with the FPA or other applicable law. Any such inconsistency is usually with the Commission's determinations under the equal consideration/comprehensive development standards of FPA sections 4(e) and 10(a)(1), in that the recommendation conflicts unduly with another project purpose or value.

Third, the Commission must show how the fish and wildlife conditions that are adopted will "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat)" affected by the project.

Because implementing all of the agencies' recommendations taken together would have substantial adverse effects on project purposes, as discussed in Section 6 of the FELS, staff looked at

[/] See IV FERC Statutes and Regulations, supra ¶ 30,921 at p. 30,157.

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each individual recommendation made by the resource agencies and other entities to determine whether the benefits to the environment would justify the cost of implementing the measure. For reasons discussed in the following subsections, staff determined the following recommendations to be inconsistent with Sections 4(e) and 10(a) of the FPA and either partially adopted or did not adopt them.

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

The staff recommended adoption of, and this license contains, conditions consistent with Interior's and Wisconsin DNR's recommendations that Fraser:

1) operate in a run-of-river mode while maintaining the impoundment within ñ0.25 ft. of the normal impoundment elevation of 1,428.0 ft. National Geodetic Vertical Datum (NGVD) (Article 401 and 402);

2) develop a plan for maintaining run-of-river discharges in the event of power outages (Article 403);

3) develop and implement a water quality monitoring plan in the Crowley Project impoundment (Article 406);

4) develop a spill containment plan (Article 419);

5) evaluate the feasibility of implementing fish protection measures to minimize entrainment or develop a fisheries resource enhancement plan (Article 409);

6) follow Federal and state bald eagle (Haliaeetus leucocephalus) management guidelines (Article 412);

7) develop an erosion control plan (Article 413).

For those fish and wildlife recommendations that the staff found in the draft environmental impact statement (DELS) to be inconsistent with the FPA or other applicable law, staff and the resource agencies held a meeting on March 12 and 13, 1996, in Park Falls, Wisconsin to attempt to resolve those

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inconsistencies. Inconsistencies on the following measures were Page 5

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resol ved.

1) develop and implement a reservoir drawdown management plan with specified parameters; and

2) use stream flow gages to determine operational compliance.

Here's how these inconsistencies were resolved:

1) Reservoir drawdown management plan

Staff explained in the DELS that it agreed with the resource agencies on the elements necessary for a reservoir drawdown management plan (Section 5). However, staff concluded that determining the specifics of each element at this time would provide less flexibility and result in unnecessary adverse impacts, such as unnecessarily prolonging the duration of a As an alternative, staff recommended requiring drawdown. consultation with the agencies prior to initiating any reservoir Staff's alternative would address the agencies drawdown. concerns regarding resource impacts and public notification, while addressing concerns regarding flexibility and the potential for unnecessary adverse impacts. The Wisconsin DNR agreed with staff's alternative. Article 405, requires Fraser to develop, prior to any reservoir drawdown for maintenance purposes a reservoir drawdown plan to determine: drawdown objectives, drawdown timing, rate of drawdown and refill, impoundment elevations, duration of drawdown, and minimum flows to be maintained during the drawdown and refill period.

2) Stream flow gages to determine operational compliance

Staff concluded that stream flow gages would not effectively document project compliance with the recommended operating mode because no area upstream of the powerhouse provides a suitable location for the installation of stream flow gages. Staff offered, as an alternative, to recommend that the licensee be required to test for a three-year period their ability to operate each project in the mode required by each license. Following the test period, the licensee would submit the results of the test period to the agencies for comment and recommendations. The comments and recommendations along with the test results would be filed with the Commission. If necessary based on the results of the test, an alternative method to head pond control and project generation records, as required in Article 403, would be developed and filed for Commission approval to document project compliance with the required mode of operation. Article 404 requires this evaluation.

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At the 10(j) meeting, staff and the resource agencies failed to resolve inconsistencies regarding the following recommendations.

The licensee should:

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1) cooperate with the U.S. Fish and Wildlife Service (FWS) and Wisconsin DNR in implementing a plan to control the spread of purple loosestrife; and

2) develop a wildlife management plan for lands that may be incorporated into the project boundary in the future and that might have potential wildlife management benefits.

Here are my conclusions:

1) Purple loosestrife

Staff did not adopt Interior's recommendation for the Licensee to cooperate with the FWS and Wisconsin DNR in implementing a plan to control the spread of purple loosestrife. As discussed in the FELS, purple loosestrife is not found in the Crowley Project impoundment or vicinity (Section 4). Therefore, staff concluded that it is premature to develop a plan to eliminate or control purple loosestrife.

I conclude, based on staff's analysis, that there is not substantial evidence that such a plan is needed. As an alternative, staff recommends that the licensee monitor the project impoundment for the presence of purple loosestrife. In addition, if purple loosestrife is detected in the project impoundment or vicinity, the licensee should cooperate with the resource agencies when an effective and biologically safe method of control or eradication is developed by the resource agencies and the agencies deem elimination or control necessary. I have included staff's recommendation as Article 410 of the license.

2) Wildlife management on lands acquired in the future

Staff did not adopt the resource agencies' recommendation to develop a wildlife management plan for lands having wildlife management potential which may be incorporated into the project boundary in the future. The record provides no indication that additional lands will be incorporated within the project boundary within the foreseeable future. Development of a wildlife management plan requires identification of the types of lands incorporated and species for which those lands would be managed. In addition, lands acquired for project purposes post-licensing would require Commission approval and would permit resource agency consultation. Therefore, staff determined that a license article requiring the licensee to develop a management plan for lands which may be acquired in the future is not necessary,

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because the cost of developing such plans, which may or may not ever be implemented, outweigh the potential benefit to wildlife. However, if such lands were acquired in the future the licensee would be required to amend the project license. At such time the resource agencies would have the opportunity to provide comments and recommendations regarding a wildlife management plan for those lands. Therefore, adequate procedural safeguards exist Crowley Rapids - License 02-05-1997 should lands be included in the project boundary in the future. I concur with staff and, therefore, have not included a license article requiring the development of a wildlife management plan on lands acquired in the future.

Pursuant to Section 10(j)(2)(B), I conclude that developing a plan to monitor the impoundment for purple loosestrife and the procedural safeguards inherent in the license regarding the development of wildlife management plans, in addition to the other fish and wildlife conditions required in this license, adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources affect by the Crowley Project.

The following recommendations made by the resource agencies (and not adopted in the FELS) are outside the scope of section 10(j) in that they do not provide specific measures for the protection, mitigation of damages to, and enhancement of fish and wildlife resources affected by the Crowley Project.

1) establish a trust fund to cover the cost of retiring any of the projects;

2) evaluate the feasibility of upstream fish passage (Outside of 10(j) because this is a study and not a specific measure or facility);

3) conduct contaminated sediment studies;

4) cooperate, through the provision of funds, manpower, and equipment, with the Wisconsin DNR on all fishery management practices within the vicinity of the Crowley Project (Outside of 10(j) because no specific management practices or facilities are identified);

5) design and conduct studies to determine the status of state and Federal threatened, endangered, watch, and special concern species associated with the Crowley Project (Outside of 10(j) because this is a study and not a specific measure or facility); and

6) investigate and report on the feasibility of incorporating foam control devices.

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Staff considered these recommendations in the attached FEIS for the Flambeau River Projects under Section 10(a)(1) of the FPA and their disposition follows.

1) Decommissioning trust fund

Staff did not adopt Interior's and Wisconsin DNR's recommendation to establish a trust fund to cover the cost of retiring the Flambeau River Projects. In its policy statement on project decommissioning (RM93-23-000), FERC Statutes and Regulations, Regulations Preambles, \P 31,011 at pp. 31,233-34

Crowley Rapids - License 02-05-1997 (1994), the Commission found that the licensee is responsible for project decommissioning, but declined to impose a generic decommissioning requirement. Instead, the Commission decided to address the issue on a case-by-case basis and found that there may be particular facts on the record in individual cases that would justify license conditions requiring the establishment of decommissioning cost trust funds in order to ensure the availability of funding when decommissioning occurs.

The Commission stated that it would consider, for example, whether there are factors suggesting that the life of the project may end within the license term, and whether the financial viability of the licensee indicates that the licensee would be unable to meet likely levels of expenditures without some form of advanced planning. I find no indication that would suggest that the Crowley Project would near the end of its usefulness during the license term. In addition, the licensee is a public corporation that appears to be financially stable and capable of meeting decommissioning expenses when and if they arise in the license term.

As part of the Wisconsin DNR's justification for a decommissioning fund, it cited the possibility of a license being transferred to an entity that may be unable to meet decommissioning obligations. In regards to licensees transferring marginal projects to entities which may be unable to meet a decommissioning obligation should it become an issue, the Commission's Policy Statement on Project Decommissioning at Relicensing states: "While the Commission is aware of no widespread problems on this score, it agrees the transfer applications should be scrutinized to foreclose this sort of situation..." The Commission has, also stated that it will scrutinize license transfers to ensure that transferees have the financial capacity to carry out the requirements of the license or, if foreseeable, decommission the project in an appropriate manner.

I conclude that implementation of a decommissioning fund is not necessary because the licensee has the financial resources to decommission the project, if that ever becomes an necessary, and the Commission will scrutinize transferees to preclude the

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transfer to entities lacking the resources to carry out the terms and responsibilities of the license. However, in order to address the resource agencies concerns in this regard, I will include Article 418, requiring the Fraser to give notice to the agencies of any proposed license transfers. 9/

2) Upstream fish passage feasibility study

Staff did not adopt the Wisconsin DNR's recommendation that Fraser prepare an upstream fish passage evaluation plan. In the FELS, staff concluded that the record contained insufficient information with which to recommend an evaluation of fish passage facilities (Section 5). I concur with staff's determination. I Crowley Rapids - License 02-05-1997 find no indication that the benefit of evaluating the feasibility of upstream fish passage at the Crowley Project is justified given the cost of such a feasibility study. The resource agencies can, however, recommend or require that fish passage facilities be installed in the future either through the standard reopener clause included in a license or through Interior's Section 18 authority.

3) Study of Contaminated Sediments

Wisconsin DNR recommended that the licensee cooperate with other hydropower operators in conducting an ecological assessment of contaminated sediments in the Flambeau River system, then prepare a sediment management plan for the approval of Wisconsin DNR, and implement the measures specified in the approved plan.

Staff noted that the applicant had completed studies of the sediments at the project impoundments, and identified the presence of contaminants, including mercury. However, since industrial releases have been cleaned up in recent years, the contamination problem is associated with the older, deeper sediments. The staff suggested that the potential disturbance of impoundment sediments should be the focus of concern. Therefore, the issue might best be considered in conjunction with the drawdown management plans for the projects. The focus of this approach for contaminated sediments would be on defining preventative measures to avoid disturbance of the sediments rather than conducting additional sediment studies at this time.

Wisconsin DNR did not object to the staff's suggested approach to the issue.

See Wisconsin Electric Power Co., 73 FERC \P 61,346 at p. 62,007 (1995).

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4) Cooperate with the Wisconsin DNR on implementing all fishery management practices

Staff did not adopt the Wisconsin DNR's recommendation because the Wisconsin DNR did not identify specific management practices, and therefore the recommendation was considered too open-ended to include in a license. However, during the Section 10(j) meeting, Commission staff, Wisconsin DNR staff, and representatives of Flambeau Paper agreed to specific language being placed in the license to meet Wisconsin DNR's concerns. Article 407 reflects this agreement.

5) Conduct threatened and endangered species studies

Staff did not adopt the Wisconsin DNR's recommendation Page 10 Crowley Rapids - License 02-05-1997 because Flambeau Paper had already completed extensive studies for threatened and endangered species. During the Section 10(j)meeting, Commission staff, Wisconsin DNR staff, and representatives of Flambeau Paper agreed to specific language being placed in the license to meet Wisconsin DNR's concerns. Article 411 reflects this agreement.

6) Feasibility of foam control devices

Staff did not adopt the Wisconsin DNR's recommendation because possible sources of the organics which cause the problem are undefined and it is unlikely that the hydropower project, alone, causes the foaming problem. During the Section 10(j) meeting, Commission staff, Wisconsin DNR staff, and representatives of Flambeau Paper agreed to specific language being placed in the license to meet Wisconsin DNR's concerns. Article 416 reflects this agreement.

COMPREHENSIVE PLANS

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Section 10(a)(2) of the FPA 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. 10/ Under Section 10(a)(2) of the FPA, Federal and state agencies filed 68 comprehensive plans that address various resources in Wisconsin. Of these, staff identified and reviewed ten plans relevant to this project. 11/ No conflicts were found.

- / Comprehensive plans for this purpose are defined at 18 C.F.R. $^{\perp}2.$ 19 (1996).
- / Upper Chippewa River Basin area wide water quality management plan, Wisconsin Department of Natural Resources, 1980; Wisconsin water quality assessment report to Congress, Wisconsin Department of Natural Resources, April 1992;

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COMPREHENSIVE DEVELOPMENT AND RECOMMENDED ALTERNATIVE

Sections 4(e) and 10(a)(1) of the FPA require the Commission to consider all uses of the waterway on which a project is located. When the Commission reviews a project, the environment, recreation, fish and wildlife, and other nondevelopmental values of the involved waterway are considered equally with power and other developmental values. In determining whether, and under what conditions, a hydropower license should be issued, the Commission must weigh the various economic and environmental values involved in the decision.

In the FEIS, staff independently analyzed the following alternatives for the Crowley Project: (1) Fraser's project proposal; (2) the proposed project with staff's supplemental environmental recommendations; and (3) the no-action alternative. I have selected the proposed project with staff's recommended Crowley Rapids - License 02-05-1997 environmental measures as the preferred alternative because: (1) the required measures would protect and enhance water quality, the resident fishery, terrestrial resources and the threatened bald eagle, recreational boating and other recreational activities, cultural resources, and aesthetics; (2) the electricity generated from a renewable resource would be beneficial because it would continue to replace the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable energy resources and reducing atmospheric pollution; and (3) the preferred alternative would be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses.

The environmental conditions that are being recommended as part of the preferred alternative require the licensee to: (1) file a detailed plan for any specific future scheduled maintenance drawdown (Article 405); (2) implement shoreline control measures downstream of Crowley Dam; (3) formulate a water

Wisconsin statewide comprehensive outdoor recreation plan for 1991-1996, Wisconsin Department of Natural Resources, October 1991; Wisconsin peregrine falcon recovery plan, Wisconsin Department of Natural Resources, January 1987; Wisconsin's forestry best management practices for water quality, Wisconsin Department of Natural Resources, March 1995; Wisconsin's biodiversity as a management issue, Wisconsin Department of Natural Resources, May 1995; Upper Chippewa River basin water quality management plan, Wisconsin Department of Natural Resources, February 1996; Fisheries USA; the recreational fisheries policy of the U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service, undated; The nationwide rivers inventory, National Park Service, January 1982; and The North American waterfowl management plan, U.S. Fish and Wildlife Service, May 1986.

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quality monitoring plan (Article 406); (4) operate the project in a run-of-river mode (Article 401 and 402); (5) prepare plans to ensure continued project operation in case of power outage and to document operational compliance (Article 403 and 404); (6) evaluate the feasibility of implementing downstream fish protection measures (Article 409); (7) cooperate with the Wisconsin DNR on reasonable fishery management practices (Article 407); (8) prepare a monitoring plan for purple loosestrife (Article 410); (9) follow Federal and state bald eagle management guidelines (Article 412); (10) cooperate with the Wisconsin DNR during agency-sponsored threatened and endangered species studies (Article 411); (11) provide improved canoe portage and related facilities and develop and improve recreation access facilities (Article 415); (12) establish a shoreline protection zone on applicant-owned shore lands (Article 414); (13) remove tree stumps and debris in high use areas to improve boater safety (Article 415); (14) cooperate in the planning, design and construction of a Riverside Trail (Article 416); (15) implement provisions of the state-wide programmatic agreement (Article Page 12

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Crowley Rapids - License 02-05-1997 417); (16) cooperate with Wisconsin DNR in developing foam abatement procedures (Article 416); (17) provide vegetative screening to improve the viewshed and scenic character in the vicinity of recreational developments and implement bank cleanup at all public access sites (Article 415); (18) prepare an erosion control plan (Article 413); and (19) development of a spill containment plan (Article 419). In addition, this license reserves Interior's authority to prescribe future fish passage facilities (Article 408).

I find that the costs associated with these environmental measures would be worth the nondevelopmental benefits provided. I also find that the measures are commensurate with the project's developmental objectives, based on the relative importance of all competing resource interests and concerns.

In determining whether a proposed project will be best adapted to a comprehensive plan for developing a waterway for beneficial public purposes pursuant to Section 10(a)(1) of the FPA, the Commission considers a number of public interest factors, including the economic benefits of project power.

Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in Mead Corporation, Publishing Paper Division, 12/ 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

/ 72 FERC ¶ 61,027 (1995).

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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 addition, certain economic factors related to project decommissioning impinge on the decision to issue a new license that are not present in the licensing of original projects. If an existing project is not issued a new license, or if the licensee declines to accept the new license, the project probably will have to be retired in one form or another. This could range from simple measures, such as removing the generator at the project, to major environmental restoration measures which could include dam removal.

Based on current economic conditions, without future escalation or inflation, the Crowley Project as the applicant proposes and with additional environmental measures, would produce about 7,420 megawatthours (MWh) of energy at an annual cost of about \$258,200 (or 34.8 mills/kWh). This is about \$58,000 (or 7.8 mills/kWh)less than currently available Crowley Rapids - License 02-05-1997 equivalent alternative power.

CUMULATIVE EFFECTS OF TURTLE-FLAMBEAU AND REST LAKE RESERVOIRS

By separate order issued today, the Turtle-Flambeau and Rest Lake Reservoirs, two unlicensed storage reservoirs upstream of this project, are found to be subject to the Commission's jurisdiction and are, therefore, required to be licensed (FERC Docket No. UL96-17-001 and UL96-16-002). Within the next few years, the cumulative impacts of the operation of these reservoirs will be the subject of analysis in a Commission licensing proceeding. It is appropriate to include a special article (Article 202) in the Crowley Project license with respect to the upstream storage reservoirs. The Turtle-Flambeau and Rest Lake Reservoirs play a cumulative role in the Flambeau River basin. Rather than wait to relicense the Crowley Project until after an in-depth study of cumulative impacts, the specific reopener article we are including in this license reserves our authority to require the licensee to take such measures as are determined necessary and appropriate, after notice and opportunity for comment, to mitigate for cumulative impacts as may be identified in any proceeding involving the licensing of the Turtle-Flambeau and Rest Lake Reservoirs. In this manner, the Commission can meet its obligations to examine and address cumulative impacts, and also move forward with issuing a subsequent license for the Crowley Project with terms and conditions significantly more beneficial to environmental values than those currently in effect.

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TERM OF LICENSE

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Any license issued shall be for a term which the Commission determines to be in the public interest, but not less than 30 years, nor more than 50 years from the date on which the license is issued. The Commission's policy is to relate the term of the license to the amount of redevelopment, new construction, new capacity, or environmental mitigative and enhancement measures that are authorized or required. The Commission issues a 30-year license for projects with little or no such activities, a 40-year license for projects with a moderate amount of such activities, and a 50-year license for projects with extensive activities of this kind. 13/

In the Commission's policy statement on Use of Reserved Authority in Hydropower Licenses to Ameliorate Cumulative Impacts, 14/ the Commission stated that, "[i]n issuing new and original licenses, the Commission will coordinate the expiration dates of licenses to the maximum extent possible, to maximize future considerations of cumulative impacts at the same time in contemporaneous proceedings at relicensing". There is one licensed project, the Dairyland Project (FERC No. 1961), on the Flambeau River whose license expires in 2001. In addition, the two unlicensed Turtle-Flambeau and Rest Lake headwater storage reservoirs, discussed above, will be required to file an application with the Commission. Crowley Rapids - License 02-05-1997

In order to facilitate the Commission's future coordinated treatment of the Crowley Project and other projects on the Flambeau River, I will grant the Crowley Project a 40-year license term. Thus, if the Dairyland Project and the Turtle-Flambeau and Rest Lake Reservoirs were to receive new or original licenses, their license terms could be adjusted in order that all eight project licenses on the Flambeau River would expire at about the same time. 15/ If, however, the Dairyland Project or the Turtle-Flambeau and Rest Lake Reservoirs receive license terms shorter than 40 years, then the standard articles and Article 202 in the Project No. 2473 license will allow the Commission to address any significant cumulative impact issues that may arise during the years between any subsequent relicensing of the Dairyland Project or licensing of the Turtle-Flambeau and Rest Lake Reservoirs and any subsequent relicensing of Project No. 2473.

- / See, e.g., Consumers Powers Company, 68 FERC ¶ 61,077 at pp. 61,383-84 (1984).
- / 69 FERC ¶ 61, 337 (1994).
- / See, e.g., Northern States Power Company, 75 FERC \P 61,136 (1996).

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SUMMARY OF FINDINGS

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Background information, analysis of impacts and support for related license articles are contained in the FEIS.

The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if operated and maintained in accordance with the requirements of this license. Analysis of related issues is provided in the Safety and Dam Design Assessment. 16/

I conclude that the project would not conflict with any planned or authorized development, and would be best adapted to comprehensive development of the waterway for beneficial public uses.

The Director orders:

(A) This license is issued to Fraser Papers, Inc. (the licensee), for a period of 40 years, effective the first day of the month in which this order is issued, to operate and maintain the Crowley Project (FERC No. 2473). 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:

Crowley Rapids - License 02-05-1997 (1) All lands, to the extent of the licensee's interests in those lands shown by exhibit G:

Exhibit G- FERC No. 2473-002 Showing

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Project Boundary

(2) Project works consisting of: (1) an existing reservoir with a surface area of 422 acres and a gross storage capacity of 3,539 acre-feet at the normal maximum surface elevation of 1,428 feet (NGVD); (2) an existing 513-foot-long dam consisting of (a) a 133-foot-long, 28-foot-high left earthen dike, (b) a powerhouse of which 54 feet is a water retaining structure, (c) a 71-footlong concrete spillway section containing two Taintor gates, and (d) a right earthen dike with a length of 255 feet; (3) a concrete and brick powerhouse containing two generating units with a combined nameplate rating of 1,500 kW; (4) a tailrace training wall extending about 150 feet downstream of the

/ A Safety and Design Assessment was prepared for the Crowley Project (FERC No. 2473) and is available in the Commission's public file for this project.

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powerhouse; (5) a substation at the east end of the powerhouse; and (6) appurtenant facilities.

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

Exhibit A - The following sections of Exhibit A filed December 31, 1991:

The generators as described in Section 1(i), page A-1; the turbines as described in Section 1(ii), pages A-1 and A-2; the transmission facilities as described in Section 1 (viii)(d), page A-7; and the additional mechanical and electrical equipment described elsewhere on pages A-1 through A-8 of the exhibit A.

Exhibit F - The following Exhibit F drawings, filed on December 31, 1991:

Exhi bi t	FERC No. 2473-002	Showi ng
F-1	1001	Plan and Elevation of Powerhouse
F-2	1002	Sections of Dam & Powerhouse

(3) All of the structures, fixtures, equipment or Page 16 Crowley Rapids - License 02-05-1997 facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project and located within or outside the project boundary, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

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

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

4(b), except for 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.

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(E) This license is subject to the articles set forth in Form L-9, 54 FPC 1817 (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. The licensee shall pay the United States an annual charge, effective as of the first day of the month in which this license is issued, for the purpose of reimbursing the United States for the cost of administration of Part I of the FPA, 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 1,500 kilowatts (kW). Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kW are not assessed an annual charge.

Article 202. The Commission reserves authority, in the context of any licensing, relicensing, or license or exemption amendment proceeding involving the unlicensed Turtle-Flambeau and Rest Lake Reservoirs (FERC Docket No. UL96-17-001 and UL96-16-002) to require the licensee, in a proceeding specific to this license, to conduct studies, modify minimum flow releases, or otherwise make reasonable provisions for modifying project facilities or operation as necessary to mitigate or avoid adverse cumulative effects identified in environmental analyses of these upstream reservoirs.

Article 301. Within 45 days from the date of issuance of this license, the licensee shall file an original set and two duplicate sets of aperture cards of the approved drawings. The set of originals must be reproduced on silver or gelatin 35 mm

Crowley Rapids - License 02-05-1997 The duplicate sets are copies of the originals made microfilm. on diazo-type microfilm. All microfilm must be mounted on type D (3-14" x 7-3/8") aperture cards.

Prior to microfilming, the FERC Drawing Number (2473-1001, 1002, etc.) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number must be typed on the upper right corner of each aperture Additionally, the Project Number, FERC Exhibit (e.g., Fcard. 1, G-1, etc.), Drawing Title, and date of this license must be typed on the upper left corner of each aperture card.

The original and one duplicate set of aperture cards must be filed with the Secretary of the Commission. The remaining duplicate set of aperture cards shall be filed with the Commission's Chicago Regional Office.

Article 401. Upon approval of the plan required in Article 403, the licensee shall operate the project in a run-

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of-river mode for the protection of aquatic resources in the Flambeau River. The licensee shall at all times act to minimize the fluctuation of the reservoir surface elevation by maintaining a discharge from the project so that, at any point in time, flows, as measured immediately downstream of the project tailrace, approximate the sum of inflows to the project reservoir.

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, or for short periods of time upon mutual agreement between the licensee, Wisconsin Department of Natural Resources (Wisconsin DNR), and the U.S. Fish and Wildlife Service (FWS). If the flow is so modified, the licensee shall notify the Commission, the Wisconsin DNR, and the FWS as soon as possible, but no later than 10 days after each such incident.

Article 402. Upon approval of the plan required in Article 403, the licensee shall maintain a target reservoir surface elevation of 1,428.0 ñ 0.25 ft. National Geodetic Vertical Datum (NGVD).

This reservoir surface elevation may be temporarily modified if required by operating emergencies beyond the control of the licensee or for short periods upon mutual agreement between the licensee, the U.S. Fish and Wildlife Service (FWS), and the Wisconsin Department of Natural Resources (Wisconsin DNR). If the reservoir water surface elevation is so modified, the licensee shall notify the Commission, the FWS, and the Wisconsin DNR as soon as possible, but no later than 10 days after each such incident.

Article 403. Within 180 days from the date of issuance of this license, in order to monitor the run-of-river operating mode required by Article 401 and the impoundment elevations in Crowley Rapids - License 02-05-1997 Article 402, the licensee shall develop, after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR) and the U.S. Fish and Wildlife Service (FWS), a plan, for Commission approval, to: (1) install, calibrate, and maintain staff gages in the project impoundment; (2) maintain automatic water level sensors to continuously record the elevation of the Crowley Project's impoundment; (3) maintain a log of the elevations of the Crowley Project's impoundment and turbine operation; (4) develop a generating capacity rating curve that relates generation in kilowatts to generation flow in cubic feet per second (cfs) for each turbine; (5) and ensure run-ofriver flows in the event of a black plant outage. The licensee shall provide impoundment elevation and turbine operation data to the FWS and the Wisconsin DNR upon receiving a written request for such information.

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

Article 404. Within 180 days from the date of issuance of this license, the licensee shall, after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR) and the U.S. Fish and Wildlife Service (FWS), develop and implement an operation testing plan to evaluate whether operation of the project in a run-of-river mode by the licensee is achieved through headpond control and turbine operation.

The licensee shall develop and implement the operation testing plan as follows. For the first three years upon approval by the Commission of the operation and testing plan required under this article, the licensee shall evaluate how closely the Crowley Project can operate in a run-of-river operating mode as required by Article 401 and to the impoundment elevations required by Article 402.

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

Crowley Rapids - License 02-05-1997 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.

Within six months after the end of the three-year test period, the licensee shall submit a report for evaluation and comment to the FWS and the Wisconsin DNR on the operational testing program. The report shall assess how closely the Crowley Project operates in a run-of-river mode using impoundment elevation and turbine generation and its effect on reservoir surface water level fluctuations. Within six months of receiving comments on the draft report from these agencies,

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the licensee shall file a final report with the Commission, including the agencies' comments.

If the above-named agencies comment that operation of the project cannot adequately meet the operations standards required by Articles 401 and 402 using impoundment elevation and turbine generation, the licensee shall provide, in the final report filed with the Commission for approval, its plan, specifications, and schedules for installing and operating an alternative method of operation controls to meet the operation requirements of Articles 401 and 402. The Commission reserves the right to require changes to the plan, specifications, and Upon Commission approval, the licensee shall schedul es. implement the plan, including any changes required by the Commission and according to the approved schedule.

Article 405. At least 60 days prior to any scheduled reservoir drawdown, the licensee shall, after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR) and the U.S. Fish and Wildlife Service (FWS), file with the Commission, for approval, a reservoir drawdown plan. The purpose of the drawdown plan is to minimize the impact of any project maintenance, requiring a reservoir drawdown which would result in an impoundment elevation below 1,427.0 ft. National Geodetic Vertical Datum (NGVD), on aquatic resources in the project impoundment and downstream of the project.

The plan shall provide for consultation with the FWS and the Wisconsin DNR concerning: (1) the objectives of the drawdown; (2) initiation and completion dates of the drawdown; (3) rates of drawdown and refill; (4) minimum reservoir èlévation to be maintained; (5) minimum flows to be maintained during drawdown and refill; (6) public notification; and (7) procedures for minimizing the suspension or mobilization of contaminated sediments in the Crowley Project impoundment.

The licensee shall include with the plan, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by The licensee shall allow a minimum of 30 days for the plan. Page 20

Crowley Rapids - License 02-05-1997 the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan,

including any changes required by the Commission.

Article 406. Within 180 days from the date of issuance of this license, the licensee shall, after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR), file

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with the Commission, for approval, a plan to monitor: (1) water clarity; (2) phosphorus; (3) chlorophyll a; (4) water temperature; and (5) dissolved oxygen in the Crowley Project impoundment monthly from June 1 through August 31.

The monitoring plan shall include a schedule for: (1) implementation of the program; (2) consultation with the Wisconsin DNR concerning the results of the monitoring; and (3) filing the results, agency comments, and licensee's response to agency comments with the Commission.

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

Article 407. The licensee shall, in consultation and cooperation with the U.S. Fish and Wildlife Service (FWS) and the Wisconsin Department of Natural Resources (Wisconsin DNR) implement those reasonable fishery management practices mutually agreed upon by the licensee, the FWS, and the Wisconsin DNR. Nothing in the article, however, shall be construed to relieve the licensee of any Commission requirement.

Article 408. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior pursuant to Section 18 of the Federal Power Act.

Article 409. Within one year from the date of issuance of this license, the licensee shall, after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR) and

Crowley Rapids - License 02-05-1997 the U.S. Fish and Wildlife Service (FWS), file with the Commission for approval, an evaluation of entrainment protective devices. The purpose of this evaluation is to determine the applicability of cost effective devices to minimize the entrainment of fish at the Crowley Project.

The licensee shall include with the evaluation documentation of consultation, copies of comments and recommendations on the completed evaluation after it has been

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prepared and provided to the agencies, and specific descriptions of how the agencies' comments are addressed by the evaluation. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the evaluation with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

If the evaluation of entrainment protective devices indicates that cost-effective devices to minimize the entrainment of fish do not exist, the licensee, after consultation with the Wisconsin DNR and the FWS, shall file for Commission approval a fisheries resource enhancement plan and implementation schedule. The purpose of this plan is to address turbine-induced impacts on fish at the Crowley Project. The plan shall describe specific activities to be undertaken and contain provisions to monitor the success of these measures. The licensee shall allow at least 30 days for the agencies to comment and make recommendations prior to filing the plan with the Commission. The plan shall include any comments received from the consulted agencies on the proposed plan, and a description of how the agency comments are accommodated by the developed plan. The Commission reserves the right to modify the proposed plan and schedule. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

The Commission reserves the right to: (1) require the licensee to assess the applicability of new technology regarding cost-effective measures for reducing turbine-induced mortality or injury at the Crowley Project; (2) require the installation of fish protection measures at the Crowley Project in lieu of other proposed measures, should fish protection measures be feasible; and (3) after notice and opportunity for comment, modify or eliminate the compensatory fishery resource plans should it be necessary or appropriate.

Article 410. Within 180 days from the date of issuance of this license, the licensee shall, in consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR) and the U.S. Fish and Wildlife Service (FWS), develop a plan to monitor purple loosestrife (Lythrum salicaria) in project waters. The plan shall include, but is not limited to: (1) the method of monitoring, (2) the frequency of monitoring, (3) documentation of transmission of monitoring data to the

Crowley Rapids - License 02-05-1997 Wisconsin DNR and FWS, (4) procedures for obtaining technical assistance and input from the Wisconsin DNR, and (5) specific information on how the licensee would cooperate with the agencies to control/eliminate purple loosestrife.

If at any time during the term of the license, the Wisconsin DNR or FWS deem it necessary to control/eliminate

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purple loosestrife, the licensee shall cooperate in this measure.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and 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 411. The licensee shall, when requested by the Wisconsin Department of Natural Resources (Wisconsin DNR), cooperate, in a mutually agreeable manner, with the Wisconsin DNR in conducting agency-sponsored threatened and endangered species surveys for species that: (1) have a high likelihood of occurring on project lands, (2) are likely to be impacted by project operations, and (3) have management potential. Nothing in this article, however, shall be construed to relieve the licensee of any Commission requirement.

Article 412. The licensee shall in operation and maintenance activities associated with the Crowley Project follow Federal and state guidelines, such as the U.S. Fish and Wildlife Service's "Northern States Bald Eagle Recovery Plan", and the Wisconsin Department of Natural Resources' "Bald Eagles in Wisconsin: A Management Guideline for Landowners" in order to protect and enhance bald eagles (Haliaeetus leucocephalus) and their associated habitat in the project vicinity.

Article 413. Within one year from the date of issuance of this license, the licensee shall, in cooperation with the Wisconsin Department of Natural Resources (Wisconsin DNR), the U.S. Fish and Wildlife Service (FWS), and the Natural Resources Conservation Service (NRCS), prepare and file for Commission approval, and upon approval implement, an erosion control plan for the east bank of the project tailrace, including: (1) a detailed description of proposed erosion control measures, (2) functional design drawings, (3) specific topographic locations Page 23 Crowley Rapids - License 02-05-1997 of all control measures, (4) a specific implementation schedule, and (5) details for monitoring and maintenance programs to control erosion problems. The erosion control plan shall also include a detailed plan for accommodating limited angler access in the tailrace area in order to avoid further

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erosion problems and to augment the recreation facilities requirements under Article 415 herein.

The licensee shall include evidence of consultation with the Wisconsin DNR, the FWS, and the NRCS, including copies of the agencies' comments and recommendations on the plan, and specific descriptions of how the agencies' comments are accommodated in the plan. The licensee shall allow a minimum of 30 days for the agencies to comment before filing the plan with the Commission. If the licensee does not adopt an agency recommendation, the plan 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 414. Within one year from the date of issuance of this license, the licensee shall, in consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR), the U.S. Fish and Wildlife Service (FWS), and Price County, prepare and file for Commission approval a plan to establish and maintain a shoreline buffer zone at its landholdings adjacent to the Crowley Project impoundment and along the Flambeau River in the project tailrace area. The plan shall include the following components: (1) a description of the location of all shoreland areas that the licensee owns in fee, including drawings, where a buffer zone would be established; (2) an explanation of the proposed width of the shoreline buffer zone in each area, based on resource-specific criteria (using 200 feet as a rule of thumb); and (3) an outline of the land management practices that would be implemented in these areas, including the land uses that would be allowed and prohibited.

The licensee shall include evidence of consultation with the Wisconsin DNR, the FWS, and Price County, including copies of the agencies' comments and recommendations on the plan, and specific descriptions of how the agencies' comments are accommodated in the plan. The licensee shall allow a minimum of 30 days for the agencies to comment before filing the plan with the Commission. If the licensee does not adopt an agency recommendation, the plan 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 415. Within one year from the date of issuance of this license, the licensee shall file as-built drawings showing

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the recreation facilities at the Crowley Project as described in the additional information filed on December 5, 1994, including developments at: (1) the Six Mile Landing boat access, in cooperation with the Wisconsin Department of Natural Resources (Wisconsin DNR), and (2) the improved portage trail, with new timber put-in and take-out Landings.

The licensee shall file a report with the as-built drawings, which shall describe: (1) how the design of the recreation facilities accommodates use by the disabled, (2) plans for operation and maintenance of the recreation facilities, (3) specific measures completed to clean-up accumulated debris and remove navigation hazards from areas of high boat traffic on the project impoundment, (4) provisions for trash removal at the public use areas at the project administered by the licensee, (5) vegetative screening established in the public use areas, (6) how it would make a project information brochure available to the public, and (7) a general plan and schedule for the future development of camping facilities and fishing access in the put-in area.

The licensee shall include evidence of consultation with the Wisconsin DNR, the NRCS, and the FWS on the recreation measures, including copies of comments and recommendations on the report after it has been provided to the agencies, and specific descriptions of how the agencies' comments are accommodated in the report. The licensee shall allow a minimum of 30 days for the agencies to comment before filing the report with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

Article 416. The licensee shall cooperate with the Wisconsin Department of Natural Resources in any future planning directed at: (1) identifying reasonable foam abatement procedures to reduce the occasional adverse visual effects of accumulated floating foam in the project tailrace, and (2) establishing segments of the Riverside Trail in the vicinity of the project, including cooperation in the design and construction of the trail when a final plan is formulated.

Article 417. 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, for Managing Historic Properties Affected By New and Amended Licenses Issuing For the Continued Operation of Existing Hydroelectric Projects in the State of Wisconsin" executed on December 30, 1993, including but not limited to, the Historic Resources Management Plan for the project. If the Programmatic Agreement is terminated, the licensee shall implement the Page 25 Project No. 2473-002 -27-

The Commission reserves the authority to require changes to the Historic Resources Management Plan at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the Historic Resources Management Plan, 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 418. Any application to transfer this license shall include proof of service of a copy of that application on the Wisconsin Department of Natural Resources and the U.S. Department of the Interior.

Article 419. Within 180 days from the date of issuance of this license, the licensee shall file with the Commission, for approval, a spill containment plan. The purpose of the plan is to prevent any substances, injurious to aquatic life or human health, spilled, as a result of project operation or maintenance, at the Crowley Project from entering the waters of the Flambeau River. The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service and the Wisconsin Department of Natural Resources.

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

Article 420. (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 Project No. 2473-002 -28-

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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) noncommercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time and where said facility is intended to serve single-family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. 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 th 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, The Commission reserves the gui del i nes, 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 and roads for which 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) Project No. 2473-002 -29-

telephone, gas, and electric utility distribution lines; (6) nonproject overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69 kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

The licensee may convey fee title to, easements or (d) rights-of-way across, or leases of 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 watercraft at a time and are located at least one-half mile 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 the edge of the project reservoir at normal maximum 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 45 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Hydropower Licensing, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

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(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 covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to insure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(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.

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Crowley Rapids - License 02-05-1997 Article 501. The licensee, within four months of the date of issuance of this license, shall file a Hydropower Compliance Management Program (HCMP) for Commission approval. The HCMP shall include the following elements for each license requirement:

1. The identification of, and schedule for, each action necessary to complete the license requirement;

2. A schedule for the start and completion of the consultation process with each resource agency required to be consulted for each action necessary to complete the license requirement; and

3. The identification of specific individuals in each agency that need to be consulted on each action necessary to complete the license requirement.

Seven copies of all submissions under this article must be filed with the Secretary of the Commission. One copy of each submission must also be filed with any agency consulted under element (2) above.

The Commission reserves the right to require the licensee to make modifications to the HCMP and to take other measures necessary to ensure compliance by the licensee with the terms and conditions of the license.

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

(G) This order is issued under authority delegated to the Director and constitutes final agency action. Requests for rehearing may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. \pm 385.813 (1996). The filing of a request for rehearing does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing shall constitute acceptance of this license.

John H. Clements Director, Office of

Hydropower Licensing

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