## UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Northern States Power Company and the City of Eau Claire, Wisconsin 101 FERC ¶ 62,212 Project No. 2670-014 Wisconsin

# ORDER ISSUING NEW LICENSE (MAJOR PROJECT) (Issued December 31, 2002)

#### **INTRODUCTION**

- 1. On August 21, 1998, Northern States Power Company and the City of Eau Claire, Wisconsin (NSP and the City) filed a license application, under Sections 15 and 4(e) of the Federal Power Act (FPA),¹ to continue to operate and maintain the existing 9.5 megawatt (MW) Dells Hydroelectric Project No. 2670. The Dells Project is located on the Chippewa River,² near the towns of Hallie, and Wheaton, in Chippewa County, Wisconsin. NSP and the City propose to increase the capacity by 2.1 MW due to rehabilitation of the electrical components at the project, without major modifications or additions to the existing structures. The project occupies 6.6 acres of land under the administration of the United States Bureau of Land Management.³
- 2. Based on my review of the agency and public comments, and evaluation of the developmental and environmental effects of the proposed project and its alternatives, I conclude that relicensing the project would be in the public interest. Therefore, this order issues a new license for the Dells Project.

#### **BACKGROUND**

<sup>&</sup>lt;sup>1</sup>16 U.S.C. §§ 797(e) - 808.

<sup>&</sup>lt;sup>2</sup>The Chippewa River is a navigable waterway of the United States. See Dairyland Power Cooperative, 8 FPC 1276 (1949).

<sup>&</sup>lt;sup>3</sup>The project occupies four separate islands consisting of federal lands managed by the U.S. Bureau of Land Management. The islands total 6.6 acres and are located in Dells Pond. The licensee pays annual land use charges therefor pursuant to Section 10(e) of the FPA, 16 U.S.C. § 803(e). Nothing in the record of this proceeding suggests that these federal lands are "reservations", as defined in FPA Section 3(2), 16 U.S.C. § 794(2).

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- 3. The original license for the project was issued on September 30, 1980, for a 20 year term. The license expired on August 31, 2000, and since then, NSP and the City have operated the project under an annual license pending the disposition of the application for a new license.
- 4. On February 1, 2001, NSP filed the Lower Chippewa River Settlement Agreement. Notice of the Settlement Agreement was issued on February 14, 2001. Notice of the application, which indicated that the project was ready for environmental analysis and soliciting comments, recommendations, and terms and conditions, was issued on December 7, 2001. The U.S. Department of the Interior (Interior), Wisconsin Department of Natural Resources (WDNR) filed timely motions to intervene, none in opposition.
- 5. On July 24, 2002, the Commission staff issued, for public comment, an environmental assessment (EA). The EA recommended that the project be licensed with certain environmental measures, and found that licensing the project would not constitute a major federal action significantly affecting the quality of the human environment. In response to the EA, the National Park Service, WDNR, NSP filed comments (Discussed in paragraph 28).
- 6. The motions to intervene and comments received from interested agencies and individuals throughout the proceeding (including the comments filed on the EA) have been fully considered and addressed in this order in determining whether, and under what conditions, to issue this license.

#### PROJECT DESCRIPTION

7. The Dells Project is located at river mile (RM) 61.0 on the Chippewa River. The project's principal features consist of: (1) a 396-foot-long, 40-foot-high dam with spillway section and adjoining powerhouses; (2) a 1,183 acre reservoir with a total storage volume of 11,158 acre-feet; (3) a spillway with 13 Taintor gates measuring 26.0 feet by 15.0 feet; (4) two adjacent powerhouses containing a total of seven turbine/generator units with a capacity of 9.5 MW, proposed to be increased to 11.6 MW following equipment rehabilitation; and (5) appurtenant facilities. A more detailed project description is contained in ordering paragraph (B)(2).

#### APPLICANT'S PLANS AND CAPABILITIES

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8. In accordance with Sections 10(a)(2)(C) and 15(a) of the FPA,<sup>4</sup> staff has evaluated NSP's record as a licensee with respect to the following: (1) conservation efforts; (2) compliance history and ability to comply with the new license; (3) safe management, operation, and maintenance of the project; (4) ability to provide efficient and reliable electric service; (5) need for power; (6) transmission services; (7) cost effectiveness of plans; and (8) actions affecting the public. I accept staff's finding in each of the following areas.

## Conservation Efforts (Section 10(a)(2)(C))

- 9. Section 10(a)(2)(C) of the FPA requires the Commission to consider the electricity consumption improvement program of the applicant, including its plans, performance, and capabilities for encouraging or assisting its customers to conserve electricity cost-effectively, taking into account the published policies, restrictions, and requirements of state regulatory authorities. NSP is a business corporation that sells all the power generated by the project to its customers. NSP offers programs for its residential customers such as rebates, assistance for low-income customers, and an in-house financing program as well as a variety of business programs for the commercial/industrial/agricultural sector customers.
- 10. Staff concludes that the applicant has and will continue to comply with section 10(a)(2)(C) of the FPA.

Compliance History and Ability to Comply with the New License (Sections 15(a)(2)(A) and 15(a)(3)(A))

- 11. Staff reviewed the relicense application and NSP's compliance with the terms and conditions of the existing license. Staff finds that NSP's overall record of making timely filings and compliance with its license is satisfactory.
- 12. Review of our records shows that NSP has generally complied with the terms and conditions of its license. Staff concludes that NSP can comply with the conditions of a new license.

Plans and Abilities of the Applicant to Manage, Operate, and Maintain the Project Safely (Section 15(a)(2)(B))

 $<sup>^416~</sup>U.S.C.~\S~803(a)(2)(C)$  and  $\S~808(a).$ 

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- 13. Staff reviewed NSP's safety record for the Dells Project. The project operates, and would continue to operate, in a peaking mode, with limited seasonal impoundment water level fluctuations.
- 14. The City of Eau Claire and NSP own and operate the Dells Project. The project dam and appurtenant facilities are subject to Part 12 of the Commission's regulations concerning project safety. Staff reviewed NSP's management, operation, and maintenance of the project pursuant to the requirements of Part 12 and the associated Engineering Guidelines, including all applicable safety requirements such as warning signs and boat barriers, Emergency Action Plan, and Independent Consultant's Safety Inspection Reports. The applicant's record of managing, operating, and maintaining these facilities presents no reason not to issue a new license.
- 15. Staff concludes that the dam and other project works are safe, and that the applicant's record of managing, operating, and maintaining these facilities is adequate.

Plans and Abilities of the Applicant to Operate and Maintain the Project in a Manner Most Likely to Provide Efficient and Reliable Electric Service (Section 15(a)(2)(C))

16. Staff reviewed the project's past operational record, as well as NSP's plans and abilities to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. In the 5 years prior to filing their application, there were 30 unscheduled outages at the project, each resulted in a loss of generation. The outages ranged in time from 1 day to one Month. Based on its review, staff concludes that NSP has been operating the project in an efficient manner, within the constraints of the existing license, and is likely to continue to do so under a new license.

Need of the Applicant Over the Short and Long Term for the Electricity Generated by the Project to Serve Its Customers (Section 15(a)(2)(D))

- 17. NSP forecasts supply and demand for its electrical system and develops a system plan as part of the Wisconsin Public Service Commission's Advance Plan. Advance Plan 8 (the most current Advance Plan, covering 1997 to 2016) was finalized in 1998. According to Wisconsin's Advance Plan 8, both statewide electric energy use and statewide peak demand are projected to increase by 1.9 percent annually from 1997 to 2016.
- 18. Power generated by the Dells project is delivered to NSP's transmission and distribution system. NSP owns and operates 45 projects with a total rated capacity of

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- 7,213 megawatts (MW) summer and 7,499 MW winter. While the Dells project represents a small portion of NSP's entire system, it provides a source of low-cost, dependable generation that displaces non-renewable fossil-fuel generation. The project's power contributes to a diversified generation mix and helps meet power needs in the Mid-continent Area Power Pool region.
- 19. We conclude that power from the Dells Project would help meet a need for power and ancillary services in both the short and long term. The project provides low-cost power that displaces non-renewable, fossil-fired generation and contribute to a diversified generation mix.

The Impact of Receiving or Not Receiving the Project License on the Operation, Planning and Stability of Applicant's Transmission System (Section 15(a)(2)(E))

20. If NSP does not receive a new license for the project, transmission system losses would increase by about 0.6 MW on-peak at a value of \$40,800 per year. Not licensing Dells Project would not significantly impact NSP's transmission system, but the project does reduce loading on the bulk transmission system, and reduces transmission system losses. Staff concludes that relicensing the Dells Project is necessary for the efficient use of NSP's transmission system.

Whether the Plans of the Applicant Will be Achieved, to the Greatest Extent Possible, in a Cost Effective Manner (Section 15(a)(2)(F))

- 21. NSP proposes no new construction or changes in project operation. The project, under a new license, would operate as a re-regulation facility, and the existing project, which has had it's debt significantly reduced over the previous license, would continue to be a very valuable source of economical electric power. The project, with all the proposed and recommended enhancement measures included as part of this license, would produce about 48,029 MWh of power annually, at a cost of about 59.8 mills per kilowatt-hour.
- 22. Staff reviewed NSP and the City's record as licensee for the Dells Project. Based on this review, staff concludes that the plans of the applicant would be achieved, to the extent possible, in a cost-effective manner.

# Actions Affecting the Public (Section 15(a)(3)(B))

23. The Dells Project generates electricity used to serve the needs of the public. NSP and the City provide project lands and access sites for public and civic groups recreation

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usage, and also provide public safety measures at Dells dam. Environmental enhancement measures included in the license will generally improve environmental quality, and will have a beneficial effect on public use of project facilities for recreational purposes.

#### ANCILLARY SERVICE BENEFITS

- 24. In analyzing public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary benefits). These benefits include their value as almost instantaneous load-following response to dampen voltage and frequency instability on the transmission system, system-power-factor-correction through condensing operations, and a source of power available to help in quickly putting fossil-fuel-based generating stations back on line following a major utility system or regional blackout.
- 25. Ancillary benefits are now mostly priced at rates that recover only the cost of providing the electric service at issue, which don't resemble the prices that would occur in competitive markets. In the competitive northeast market, the ability of hydropower projects to provide ancillary services to the system can increase the benefits derived from the project.

#### SETTLEMENT AGREEMENT

26. In 2001, NSP and the City entered into the Lower Chippewa River Settlement Agreement with the U.S. Fish and Wildlife Service, WDNR, NPS, and several non-governmental organizations on proposed operations and non-operational protection and enhancement measures covering NSP's five hydropower projects, and the Dells Project, located on the Chippewa River.<sup>5</sup> The proposed action in the EA would implement the terms of the Settlement Agreement. It strives to protect and enhance water quality, fish and wildlife resources, including threatened and endangered species, and recreational opportunities in the Chippewa River. The Settlement Agreement proposes to increase minimum flows, restrict reservoir fluctuations, and establish the Chippewa River Protection Fund and a Habitat Management Fund. The Settlement Agreement also

<sup>&</sup>lt;sup>5</sup>The non-governmental organizations consist of the River Alliance of Wisconsin, Wisconsin Conservation Congress, Chippewa Rod and Gun Club, Lake Holcombe Improvement Association, Lake Wissota Improvement Association, Lower Chippewa Restoration Coalition.

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addresses fish passage, lake sturgeon mortality, woody debris management, control exotic and nuisance species, land management, and future dam responsibilities.

27. As part of the Settlement Agreement, NSP included a recreational flow release plan, low contingency plan, plant outage plan, drawdown management plan, fish stranding remediation plan, woody debris management plan, bald eagle management plan, threatened and endangered resources plan, exotics control plan, land mangement plan, shoreline erosion protection plan, and a recreation facilities improvement plan, which I am approving as part of this license.

#### COMMENTS ON THE ENVIRONMENTAL ASSESSMENT

28. Comments on the EA were received from the NPS, WDNR, and NSP. The comments were supportive of staff's conclusions regarding the proposed action. The NPS and WDNR suggest that if any components of the proposed action were determined to be outside of the Commission's jurisdiction those components should be referenced in the license and a rationale provided to easily determine that the proposed action addresses an area beyond the Commission's jurisdiction. The WDNR, also, commented that, although the proposed action addresses their concerns, the geographic scope of staff's cumulative effects analysis should have been expanded to the Chippewa River's confluence with the Mississippi River. NSP provided minor clarifications to the proposed action. Those clarifications are incorporated in the articles of this license

## WATER QUALITY CERTIFICATION

- 29. Under Section 401(a)(1) of the Clean Water Act (CWA),<sup>6</sup> the Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency either has issued a water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the State certification shall become a condition on any federal license or permit that is issued.<sup>7</sup>
- 30. The Wisconsin Department of Natural Resources (WDNR) issued a conditional water quality certificate for the project on May 8, 2001. The water quality certificate

<sup>&</sup>lt;sup>6</sup>33 U.S.C. § 1341(a)(1).

<sup>&</sup>lt;sup>7</sup>33 U.S.C. § 1341(d).

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includes conditions which are set forth in Appendix A of this order,<sup>8</sup> and incorporated in the license (<u>see</u> ordering paragraph F).

#### COASTAL ZONE MANAGEMENT PROGRAM

31. The Dells Project is not located in the coastal zone boundary designated by the Wisconsin Coastal Zone Management Program. The Wisconsin Coastal Zone Management Program is limited to the 15 counties that have frontage on Lake Superior, Lake Michigan, and Green Bay. The county containing the project (Chippewa) is not included within this coastal zone. For this reason, no coastal zone consistency is needed.

## SECTION 18 OF THE FEDERAL POWER ACT (FISHWAYS)

32. Section 18 of the FPA provides that the Commission shall require a licensee, at its own expense, to construct, operate, and maintain such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate. By letter dated February 8, 2001, the Secretary of the Interior requested reservation of its authority to prescribe, through the U.S. Fish and Wildlife Service (USFWS), the construction, operation, and maintenance of appropriate fishways at the Dells Project. Consistent with the Commission's policy, Article 407 reserves the Commission's authority to require such fishways that may be prescribed by Interior, through the USFWS, for the Dells Project.

<sup>&</sup>lt;sup>8</sup>As the Commission has acknowledged in Kennebec Water Power Company, 81 FERC ¶ 61,254 (1997), it is required by the decision of the United States Court of Appeals in <u>American Rivers</u>, <u>et al.</u> <u>v. FERC</u>, 129 F.3d 99 (D.C. Cir. 1997), to accept all conditions in a water quality certification as conditions on a license, even if it believes that the conditions may be outside the scope of Section 401. While I have included certain of the provisions as license articles, all of the Section 401 conditions are conditions to this license. In any event, nothing in the conditions of the water quality certification shall be viewed as restricting the Commission's ability or the licensee's obligation, under the FPA, to take timely action necessary to protect human life or the environment.

<sup>&</sup>lt;sup>9</sup>33 U.S.C. § 1341(a)(1).

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#### **ENDANGERED SPECIES ACT**

- 33. Section 7(a)(2) of the Endangered Species Act of 1973<sup>10</sup> requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of their critical habitat.
- 34. The heavily forested project land contains habitat used by the federally listed (threatened) bald eagle (*Haliaeetus leucocephalus*) and the federally listed (endangered) gray wolf (*Canis lupis*). The Karner blue butterfly (*Lycaeides melissa samuelis*), also federally listed as endangered, occurs in oak-savanna habitat found in the vicinity of the project area. The FWS concluded that if the licensee implements protection measures proposed in the license applications and in the Settlement Agreement, including the establishment of the Chippewa River Protection and Restoration Fund, implementation of the bald eagle management plan and the threatened and endangered resources plan the continued operation of the Dells Project would not affect federally-listed threatened and endangered species (letter from W. R. Taylor, Director, Office of Environmental Policy and Compliance, Department of Interior to D.P. Boergers, Secretary, FERC, January 28, 2002). Consistent with the proposed action and the Settlement Agreement, I have included these plans in the license which precludes further action as required under the Endangered Species Act.

# RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

35. Section 10(j) of the FPA<sup>11</sup> requires the Commission, when issuing a license, to include license conditions based on the recommendations of the federal and state fish and wildlife agencies, submitted pursuant to the Fish and Wildlife Coordination Act,<sup>12</sup> to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat) affected by the project." Staff addressed the concerns of the Federal and state agencies in the EA and this license contains conditions consistent with the agencies recommendations and the Settlement Agreement.

<sup>&</sup>lt;sup>10</sup>16 U.S.C. § 1536(a).

<sup>&</sup>lt;sup>11</sup>16 U.S.C. § 803(j).

<sup>&</sup>lt;sup>12</sup>16 U.S.C. § 661 et seq.

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36. Section 10(j) of the FPA<sup>13</sup> requires the Commission, when issuing a license, to include license conditions based on the recommendations of the federal and state fish and wildlife agencies, submitted pursuant to the Fish and Wildlife Coordination Act,<sup>14</sup> to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat) affected by the project."

#### **COMPREHENSIVE PLANS**

37. Section 10(a)(2) of the FPA<sup>15</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>16</sup> Of the 66 comprehensive plans filed with the Commission, staff identified and reviewed 9 plans relevant to the project.<sup>17</sup> No inconsistencies were found. Staff also reviewed 3 state plan

Wisconsin: (1) Wisconsin Department of Natural Resources. 1985. Wisconsin statewide comprehensive outdoor recreation plan, 1986-1991. Madison, Wisconsin.
September 1985. Nine volumes; (2) Wisconsin Department of Natural Resources. 1991. Wisconsin statewide comprehensive outdoor recreation plan for 1991-1996. Madison, Wisconsin. October 1991. 312 pp. and survey form; (3) Wisconsin Department of Natural Resources. 1994. Wisconsin Water Quality Assessment Report to Congress. Madison, Wisconsin. August 1994; (4) Wisconsin Department of Natural Resources. 1995. Wisconsin's biodiversity as a management issue. Madison, Wisconsin. May 1995; (5) Wisconsin Department of Natural Resources. 1995. Wisconsin's Forestry Best Management Practices for Water Quality. Madison, Wisconsin. March 1995; (6) Wisconsin Department of Natural Resources. 1996. Upper Chippewa River Basin water quality management plan. Madison, Wisconsin. February 1996, 304 pp.

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

<sup>&</sup>lt;sup>13</sup>16 U.S.C. § 803(j).

<sup>&</sup>lt;sup>14</sup>16 U.S.C. § 661 et seq.

<sup>&</sup>lt;sup>15</sup>16 U.S.C. § 1536(a).

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

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relevant to the project, but that is not listed as a Commission-approved comprehensive plan.<sup>18</sup> No inconsistencies with these plans were found.

#### COMPREHENSIVE DEVELOPMENT

- 38. Sections 4(e) and 10(a) of the FPA,<sup>19</sup> require the Commission to give equal consideration to the purposes of power development and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's judgement would be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.
- 39. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*, <sup>20</sup> staff employs an analysis that uses current costs to compare the costs of the project and likely alternative power, with no forecasts for potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license. In making its decision, the

<sup>&</sup>lt;sup>17</sup>(...continued) the Interior, Washington, D.C. January 1982. 432. pp.

<sup>&</sup>lt;sup>18</sup>(1)Wisconsin Department of Natural Resources. 1986. Wisconsin Osprey Recovery Plan, Report 23. C.M. Gieck; (2) Wisconsin Department of Natural Resources. 1996. Lower Chippewa River Basin water quality management plan. Madison, Wisconsin. May 1996; (3) Wisconsin Department of Natural Resources. 1999. Wisconsin Statewide Karner Blue Butterfly Habitat Conservation Plan. Volume 1: Statewide Habitat Conservation Plan. March 1999.

<sup>&</sup>lt;sup>19</sup>16 U.S.C. §§ 797(e) and 803(a)(1).

<sup>&</sup>lt;sup>20</sup>72 FERC ¶ 61,027 (1995).

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Commission considers the project power benefits, both with the applicant's proposed measures, as Part of the Settlement Agreement, and no-action.

- 40. As proposed by NSP and the City, as part of the Settlement Agreement, staff estimates that the annual cost of the project would be about \$2,975,500 (61.9 mills/kWh). The annual power benefit, for the estimated annual generation of 56,288 MWh, would be \$1,896,760 (33.7 mills/kWh). The resulting annual net benefit would be -\$1,078,740 (-19.1 mills/kWh). The developmental changes and environmental enhancements proposed by NSP and the City would increase annual costs by \$99,700, but the proposal would increase the annual net benefit by \$477,460 over no-action.
- 41. Based on our independent review and evaluation of the Dells Project, as proposed by NSP and the City, as Part of the Settlement Agreement, and the no-action alternative, as documented in the EA, I have selected the Dells Project, as proposed by NSP and the City, as the preferred alternative. I selected this alternative because: (1) issuance of the license would allow NSP to continue to operate the project as a beneficial, dependable, and inexpensive source of electric energy; (2) operation of the 11.6-MW project would avoid the need for an equivalent amount of fossil-fueled fired electric generation and capacity, continuing to help conserve these non-renewable energy resources and reduce atmospheric pollution; and (3) the recommended environmental measures would improve water quality and recreation, as well as protect and enhance fisheries, terrestrial and cultural resources at the project.
- 42. The preferred alternative includes the following measures:
  - (1) Implement a Low Flow Contingency Plan for reservoir levels, should drought conditions prevent adherence to proposed reservoir level limits (ordering paragraph E);
  - (2) Implement a Plant Outage Plan, in the event of an unscheduled outage, and an Operational Compliance Monitoring Plan, to report any violations of agreed-to conditions, resulting from an unscheduled outage (articles 405 and 415);
  - (3) Implement a Drawdown Management Plan for procedures that should be followed by NSP, for three types of drawdowns: maintenance, emergency, and "other" (ordering paragraph E and article 409);
  - (4) Develop and implement an Operations Testing Plan, to determine NSP's ability to operate the projects under the terms of the Settlement Agreement,

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with the provision to modify such operations, if necessary, as resolved by the settlement implementation team (article 417);

- (5) Continue coordination of Chippewa River operations with the St. Paul District of the Corps, including provision of next-day water release forecast information (article 406);
- (6) Implement a Fish Stranding Remediation Plan to reduce the occurrence of fish stranding and associated mortality downstream of the project ordering paragraph E and article 414);
- (7) Implement a Lake Sturgeon Mortality Plan, to determine the cause of lake sturgeon mortalities observed in the vicinity of the Wissota Project, and to develop appropriate protection measures (ordering paragraph E and article 413);
- (8) Establish a Chippewa River Protection and Restoration Fund, which would consist of two sub-accounts: the Fish Protection Fund, for provision of future fish protection measures at the Chippewa River Projects; and the Natural Resource Fund, for environmental protection, protection, or restoration activities and studies (article 402);
- (9) Implement the Bald Eagle Management Plan for the Lower Chippewa River Hydro Projects, and the Threatened and Endangered Resources Plan, independent of the Natural Resource Fund, and provide a one-time contribution to the Natural Resource Fund, for potential future introduction of listed species to upstream reaches of the Chippewa River (ordering paragraph E, and articles 402,and 411);
- (10) Implement an Exotics Control Plan, independent of the Natural Resource Fund, and provide a one-time contribution to the Natural Resource Fund for plan implementation (article 412);
- (11) Develop a recreational facilities brochure for the Lower Chippewa River, describing the location and extent of project-related facilities (article 419);
- (12) Implement the Future Dam Responsibility Plan, which outlines NSP's and the City's commitments should they decide to sell the project, surrender the license, or conduct life extension activities at the project (ordering paragraph E).

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- (13) Operate the project as a re-regulation facility, using the useable storage capacity of Dells Pond to the maximum extent possible, while complying with minimum and maximum flow release limits, which vary by season and by the volume of inflow to the project (article 403);
- (14) Maintain the elevation of Dells Pond within a 1-foot range (elevation 794.0 795.0 feet) from April 1 through May 31, and within a 2-foot range (elevation 793.0 795.0 feet) the remainder of the year (article 401);
- (15) Implement down-ramping of flow releases during reduction of generation, depending on the level of inflow to the project and other conditions, such that there is at least one step-wise reduction in discharge (to the midpoint between the ongoing discharge and the required minimum flow), with at least 30 minutes elapsing before the next reduction in discharge (although NSP operators may, at their own discretion, add more steps or extend the time between steps) (article 404);
- (16) Provide for future upstream fish passage at the project, should such passage become a future management objective of the state or federal resource agencies, with the reservation of the authority of the Interior to prescribe upstream or downstream fish passage, pursuant to Section 18 of the FPA (article 407 and 408);
- (17) Implement a Trash/Woody Debris Management Plan for managing trashrack debris, with the objective of returning as much debris as possible to the river to maintain and enhance aquatic habitat, consistent with boating safety requirements (ordering paragraph E and article 410);
- (18) Implement the Dells Land Management Plan and the Shoreline Erosion Protection Plan (articles 416 and 418); and
- (19) Implement the Recreational Facility Improvement Plan for the Dells Project (article 419).
- (20) Implement the Wisconsin Statewide Programmatic Agreement (article 421).

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#### LICENSE TERM

- 43. Pursuant to Section 15(e) of the FPA,<sup>21</sup> relicense terms shall not be less than 30 years nor more than 50 years from the date on which the license is issued. The Commission's general policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental protection, mitigation, and enhancement measures; 40-year terms for projects with a moderate amount of such activities; and 50-year terms for projects with extensive measures.<sup>22</sup>
- 44. Section 2.2.4 of the Settlement Agreement recommends a license term that expires on September 30, 2033. It is the desire of the stakeholders to synchronize, to the extent possible, the expiration date of the licenses for the six Chippewa River hydropower projects. The expiration date recommended in the Settlement Agreement would closely align the license expiration date of five of the six Chippewa River projects and is consistent with the Commission's policy to coordinate the expiration dates of licenses to the maximum extent possible, to maximize future considerations of cumulative impacts.<sup>23</sup> Therefore, this license will expire on September 30, 2033, a term of 30 years and 9 months.

#### SUMMARY OF FINDINGS

- 45. The EA for the Dells Project contains background information, analysis of effects, support for related license articles, and the basis for a finding that the project will not result in any major, long-term adverse environmental effects. The 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.
- 46. Based on the review and evaluation of the project, as proposed by the applicant, and with the additional staff-recommended environmental measures, I conclude that the continued operation and maintenance of the project in the manner required by the

<sup>&</sup>lt;sup>21</sup>16 U.S.C. § 808(e).

<sup>&</sup>lt;sup>22</sup>See Consumers Power Company, 68 FERC ¶ 61,077 at pp. 61,383-84 (1994).

<sup>&</sup>lt;sup>23</sup> Policy Statement on Use of Reserved Authority in Hydropower Licesnses to Ameliorate Cumulative Impacts, 59 Fed. Reg. 66,714 (Dec. 28, 1994), FERC Stats. & Regs., Reg. Preambles ¶ 31,010 at 31,219.

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license, would protect and enhance fish and wildlife resources, water quality, recreational, aesthetic, and cultural resources. The electricity generated from this renewable water power resource would be beneficial because it would continue to offset the use of fossil-fueled generating stations, thereby conserving non-renewable resources and reducing atmospheric pollution.

### The Director Orders:

(A) This license is issued to Northern States Power Company (licensee), effective the first day of the month in which this order is issued and to expire on September 30, 2033, in order to continue to operate and maintain the Dells Hydroelectric Project. This license is subject to the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

## (B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by Exhibit G, filed on August 21, 1998:

Exhibit G Drawing	<u>FERC No.2670-</u>	Showing
G-1	1005	Project Map Lower Portion
G-2	1006	Project Map Upper Portion

(2) The project works consisting of: (1) a concrete spillway, 396 feet long with 13 steel Taintor gates, each 26 feet wide and 15 feet high with an invert elevation of 773.9 feet NGVD; (2) Dells Pond, with a surface area of 1,183 acres at a normal maximum elevation of 794.4 feet NGVD, 11,158 acre-feet of gross storage, and 2,000 acre-feet of useable storage; (3) Powerhouse A, 162 feet long, with integral intakes and an intake flume section, and containing: (i) one vertical-shaft propeller-type turbine-generator unit rated at 2,000 kW under 25 feet of head with a maximum discharge of 1,500 cfs, and (ii) four horizontal-shaft propeller-type turbine-generator units, each rated at 1,600 kW under 25 feet of head with a maximum discharge of 800 cfs; (4) Powerhouse B with integral intakes, and containing: (i) one horizontal Francis turbine-generator unit rated at 500 kW under 24 feet of head with a maximum discharge of 400 cfs, and (ii) one horizontal Francis turbine-generator unit rated at 600 kW under 25 feet of head with a maximum discharge of 400 cfs, and (ii) one horizontal Francis turbine-generator unit rated at 600 kW under 25 feet of head with a maximum discharge of 400 cfs; (5) an outdoor transformer bank at which a 1,884-foot-long 69 kV transmission line dead-ends; and (6) appurtenant facilities. The

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license proposes to increase the total installed capacity from 9.55 MW to 11.6 MW after rehabilitation of the electrical equipment.

The project works generally described above are more specifically described in Exhibit A of the relicense application (pages A-1 to A-9 and C-4) and shown by Exhibit F drawings, filed August 21, 1998:

Exhibit F Drawing	FERC No. 2670-	<u>Description</u>
Sheet-1	1001	Plan and Elevation
Sheet-2	1002	Sections of Spillway and
		Unit #1 in Powerhouse A
Sheet-3	1003	Sections of Units #2-#3-#5
		and of #6-#7 in
		Powerhouses A and B
Sheet-4	1004	Wall at East End of Dam
		Along West End of Paper
		Mill

- (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) Exhibits A, F, and G, listed above, are approved and made part of this license.
- (D) Some of the plans approved in this order are modified by license articles. These modifications are not intended to materially change the protection and enhancement measures identified in the approved plans. Rather these modifications are to ensure that the Commission maintains its responsibilities under the FPA.
  - (E) The following plans are approved and made a part of this license:
  - (1) Low Flow Contingency Plan, Appendix D to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
  - (2) Plant outage Plan, Appendix E to the Lower Chippewa River Settlement Agreement, filed February 1, 2001, as modified by article 415;

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- (3) Operation Compliance Monitoring Plan, Appendix F to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (4) Drawdown Management Plan, Appendix G to the Lower Chippewa River Settlement Agreement, filed February 1, 2001, as modified by article 409;
- (5) Lake Sturgeon Mortality Plan, Appendix H to the Lower Chippewa River Settlement Agreement, filed February 1, 2001, as modified by article 413;
- (6) Fish Stranding Remediation Plan, Appendix I Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (5) Trash and Woody Debris Management Plan, Appendix J to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (6) Bald Eagle Management Plan, Appendix K to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (7) Threatened and Endangered Species Resources Plan, Appendix L to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (8) Exotics Control Plan, Appendix M to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (9) Dells Land Management Plan, Appendix P to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (10) Shoreline Erosion Protection Plan, Appendix Q to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (11) Recreational Facilities Protection Plan, Appendix T to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (12) Future Dam Responsibility Plan, Appendix U to the Lower Chippewa River Settlement Agreement, filed February 1, 2001;
- (F) This license is subject to the conditions submitted by the State of Wisconsin Department of Natural Resources under Section 401 of the Clean Water Act, as those conditions are set forth in Appendix A to this order.

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(G) This license is subject to the articles set forth in Form L-5 (revised October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters and Lands of the United States," and the following additional articles.

<u>Article 201</u>. The licensee shall pay the United States the following annual charges:

(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 existing installed capacity for that purpose is 8,680 kilowatts.. This annual charge shall be effective as of the first day of the month in which this license is issued.

In addition to the above charge a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized proposed additional capacity for that purpose is 11,600 kilowatts. This annual charge shall be effective as of the date of commencement of construction of the new capacity. 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 use, occupancy and enjoyment of 6.6 acres of its lands, other than for transmission line right-of-way.

Article 202. Within 45 days of the date of issuance of the license, the licensee shall file three sets of aperture cards of the approved exhibit drawings. The set of originals 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. The licensee shall submit one copy of FORM-587 with the aperture cards.

Prior to microfilming, the FERC Drawing Number (2670-1001 through 2670-1006) 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.

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

Article 203. The licensee shall clear and keep clear to an adequate width all lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which result from maintenance, operation, or alteration of the project works. All clearing of lands and disposal of unnecessary material shall be done with due diligence to the satisfaction of the authorized representative of the Commission and in accordance with appropriate federal, state, and local statutes and regulations.

Article 204. Pursuant to Section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The Licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the Licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The Licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The Licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the Licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

<u>Article 205</u>. If the licensee's project is directly benefited by the construction work of another licensee, a permittee, or of the United States of a storage reservoir or other headwater improvement, the licensee shall reimburse the owner of the headwater

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improvement for those benefits, at such time as they are assessed. The benefits will be assessed in accordance with Subpart B of the Commission's regulations.

Article 401. Pursuant to Section 3.1.6 and Table 1 of the Lower Chippewa River Settlement Agreement, filed February 1, 2001, as corrected by letter dated May 16, 2001, the licensee shall maintain the water surface elevation of Dells Pond between 794.0 and 795.0 feet National Geodetic Vertical Datum (NGVD), from the end of spring run-off, defined as the first time after March 1 that streamflow has peaked after snowmelt at the Wissota Project and flow has receded to 9,600 cfs or April 1, whichever is latter, through May 31, and 793.0 and 795.0 feet NGVD, June 1 until the initiation of spring run-off, or April 1, whichever is latter.

These elevations may be temporarily modified if required by operating emergencies beyond the control of the licensee, to implement the Plant Outage Plan (see, Lower Chippewa River Settlement Agreement, Appendix E, filed February 1, 2001), to implement the Low Flow Contingency Plan (see Lower Chippewa River Settlement Agreement, Appendix D, filed February 1, 2001), or for short periods of time upon mutual agreement between the licensee, U.S. Fish and Wildlife Service and the Wisconsin Department of Natural Resources. If the impoundment elevations are so modified, the licensee shall notify the Commission, the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources as soon as possible, but no later than 10 days after each such incident.

Article 402. Within 120 days of the effective date of the license, the licensee shall submit for Commission approval a plan to implement the provisions of the Chippewa River Protection and Restoration Fund (see Section 4.1 Lower Chippewa River Settlement Agreement, filed February 1, 2001).

The licensee shall prepare the implementation plan after consultation with the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife Service. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

Article 403. Pursuant to Section 3.1.6.3 and Table 1 of the Lower Chippewa River Settlement Agreement, filed February 1, 2001, as corrected by letter dated May 16, 2001,

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the licensee shall, from the end of spring run-off, defined as the first time after March 1 that streamflow has peaked after snow melt at the upstream Wissota Project and flow has receded to 9,600 cfs or April 1, whichever is later, through May 31, discharge a continuous flow equal to  $\pm$  15 percent of the average daily inflow to Dells Pond.

From June 1 to the start of spring run-off the licensee shall release flows from the Dells Project according to the following schedule:

Dells Pond Inflow	Minimum Flow	Maximum Flow	
< 1,800 cfs	90 percent of inflow	115 percent of inflow, except for power demand contingencies	
1,800 to 2,500 cfs	1,800 cfs	4,000 cfs except for power demand contingencies	
2,501 to 4,000 cfs	2,200	5,600 cfs, except for power demand contingencies	
4,001 to 5,000 cfs	2,600	6,500 cfs, except for power demand contingencies	
5,001 to 6,000 cfs	3,000	7,500 cfs, except for power demand contingencies	
6,001 to 7,500 cfs	4,000	Unlimited	
7,501 to 9,600 cfs	5,000	Unlimited	
9,601	run-of-river	run-of-river	

Power demand contingencies shall be defined as: 1) any emergency condition on the licensee's electrical system where hydropower generation on the Chippewa River is necessary to prevent a system brown-out or black-out; and 2) for 263 hours per year, based on a rolling average that may be used at the discretion of the licensee. Power demand contingencies shall not affect the minimum flows.

The purpose of these flows are to re-regulate peaking inflow to Dells Pond to simulate to the extent possible an instantaneous run-of-river flows in the Chippewa River downstream of the Dells Project.

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These flows may be temporarily modified if required by operating emergencies beyond the control of the licensee, to implement the Plant Outage Plan (see, Lower Chippewa River Settlement Agreement, Appendix E, filed February 1, 2001), to implement the Low Flow Contingency Plan (see Lower Chippewa River Settlement Agreement, Appendix D, filed February 1, 2001), or for short periods of time upon mutual agreement between the licensee, U.S. Fish and Wildlife Service and the Wisconsin Department of Natural Resources. If the flows are so modified, the licensee shall notify the Commission, the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources as soon as possible, but no later than 10 days after each such incident.

Article 404. Pursuant to Section 3.1.6.3 of the Lower Chippewa River Settlement Agreement, filed February 1, 2001, the licensee shall incrementally decrease flows discharged from the Dells Project under the following conditions: 1) when inflow to Dells Pond is between 1,800 cfs and 6,000 cfs and project discharge is more than twice the minimum flow required in article 403; and 2) during power demand contingencies as defined in article 403. Incremental discharge flow decreases shall consist of at least one step reduction for at least 30 minutes approximately midway,  $\pm$  11 percent, between the initial discharge and the minimum flow required in article 403.

This ramping rate may be temporarily modified if required by operating emergencies beyond the control of the licensee, to implement the Plant Outage Plan (see, Lower Chippewa River Settlement Agreement, Appendix E, filed February 1, 2001), to implement the Low Flow Contingency Plan (see Lower Chippewa River Settlement Agreement, Appendix D, filed February 1, 2001), or for short periods of time upon mutual agreement between the licensee, U.S. Fish and Wildlife Service and the Wisconsin Department of Natural Resources. If the ramping rate so modified, the licensee shall notify the Commission, the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources as soon as possible, but no later than 10 days after each such incident.

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

- (1) maintenance of an automatic headwater and tailwater level monitoring device sensor;
- (2) maintenance of a staff gage headwater and tailwater staff gage on the powerhouse wall;

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- (3) maintenance of hourly headwater and tailwater elevations, turbine operations, generation, and flow releases through the powerhouse and spillways; and
- (4) a daily log book summarizing maintenance work, unit outages, or any other item relevant to the operation of the project.

When requested by the Commission, Wisconsin Department of Natural Resources, or U.S. Fish and Wildlife Service, operation log records shall be available as provided in the plan.

Article 406. Within one year of the effective date of the license, the licensee shall file for Commission approval a plan to coordinate next-day water release forecasts from selected Chippewa River Hydroelectric Projects, pursuant to section 3.2.4 of the Lower Chippewa River Settlement Agreement, filed February 1, 2001.

The licensee shall prepare plan after consultation with the U.S. Army Corps of Engineers (Corps). 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 Corps, and specific descriptions of how the Corps comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the Corps 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 to the plan required by the Commission.

Article 407. 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 408. After notice and opportunity for hearing, 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 upstream fishways, provide for operational changes, re-introduction of fish species upstream of the project, or trap and transfer activities, pursuant section 4.2 of the Lower Chippewa River Settlement Agreement, filed February 1, 2001.

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Article 409. The licensee shall conduct any drawdowns of Dells Pond beyond normal operating limits and excluding the drawdown allowed under articles 401, in accordance with the provisions of the reservoir drawdown plan approved in ordering paragraph (E). For maintenance or other drawdowns, after consultation with the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources, the licensee shall file for Commission approval the licensee's drawdown proposal.

The licensee's drawdown proposal shall include, but not be limited to: 1) the reason for the drawdown; 2) the anticipated duration of the drawdown; 3) the date the drawdown will begin; 4) drawdown and re-fill rates; 5) the amount of time required to draw down the impoundment to minimum specified level; 6) the minimum required impoundment elevation; 7) the anticipated date refill will begin; and 8) the date the impoundment is anticipated to reach its minimum normal operating elevation as required in article 401.

The licensee shall include with the drawdown proposal, documentation of consultation, copies of comments and recommendations on the drawdown proposal after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the drawdown proposal. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the drawdown proposal 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 drawdown proposal. Upon Commission approval, the licensee shall implement the drawdown proposal including any changes to the drawdown proposal required by the Commission.

Article 410. The licensee shall dispose of trash and woody debris accumulated on the project trashracks in accordance with the provisions of the trash and woody debris disposal plan approved in ordering paragraph (E).

Article 411. The licensee shall implement the measures and procedures of the bald eagle management plan and the threatened and endangered resources management plan in ordering paragraph (E).

Article 412. The licensee shall conduct annual shoreline monitoring for purple loosestrife, including reporting and consultation with the Wisconsin Department of Natural Resources and U.S. Fish and Wildlife Service, in accordance with the provisions of the exotics control plan approved in ordering paragraph (E).

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Article 413. The licensee shall implement the procedures and measures identified in the lake sturgeon mortality plan approved in ordering paragraph (E) to minimize the lake sturgeon mortality due to the operation of the Dells Project. If, in consultation with the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife service it is determined that significant lake sturgeon mortality is a result of project operations, the licensee shall file for Commission approval a remediation, prevention, or mitigation plan to address lake sturgeon mortality that results from the operation of the Dells Project.

The licensee shall include with the plan, documentation of consultation, copies of comments and recommendations on the modified 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 414. The licensee shall implement the procedures and measures identified in the fish stranding remediation plan approved in ordering paragraph (E) to minimize the incidence of fish stranding following high flow events and spillway gate closures immediately downstream of the project spillway section.

Article 415. The licensee shall implement the procedures and measures identified in the plant outage plan approved in ordering paragraph (E). If the licensee, after consultation with the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources, recommends a modified plant outage plan, the licensee shall file for Commission approval the licensee's modified plant outage plan. The licensee shall include with the modified plan, documentation of consultation, copies of comments and recommendations on the modified plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the modified 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.

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The Commission reserves the right to require changes to the modified plan. Upon Commission approval, the licensee shall implement the modified plan including any changes required by the Commission.

Article 416. Within one year of the issuance date of the license, the licensee shall, after consultation with Wisconsin Department of Natural Resources (Wisconsin DNR), the U.S. Fish and Wildlife Service (FWS), the State Historical Society of Wisconsin (Wisconsin SHPO), and the City of Eau Claire, file for Commission approval a final Shoreline Erosion Protection Plan for the Dells Hydroelectric Project to monitor and control stream and impoundment shoreline erosion at the project. Furthermore, the licensee shall develop the final Shoreline Erosion Protection Plan in conjunction with the Historic Resources Management Plan required in Article 418.

The final Shoreline Erosion Protection Plan shall include the provisions, applicable to the Dells Hydroelectric Project, as specified in Appendix Q (Shoreline Erosion Protection Plans: Holcombe, Wissota, and Dells Hydro Projects), pages Q-2 and Q-3, of the Lower Chippewa River Settlement Agreement, filed February 1, 2001, and also include: (1) identification of proposed measures to control soil erosion and an assessment of such measures; (2) functional design drawings of all soil erosion control measures; and (3) a specific implementation schedule and details for monitoring.

The plan shall include documentation of consultation with the Wisconsin DNR, FWS, Wisconsin SHPO, and the City of Eau Claire, 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 prior to filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on conditions at the site.

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

Article 417. Within 60 days of the effective date of the license, the licensee shall submit to the Commission the licensee's operations testing plan developed in consultation with the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife Service. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the plan.

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Article 418. The licensee shall manage project lands as specified in the portions of the Dells Land Management Plan (see Lower Chippewa River Settlement Agreement, Appendix P, filed February 1, 2001) approved in ordering paragraph (E).

Article 419. Within two years of the issuance date of the license, the licensee shall, after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR), National Park Service (NPS), the City of Eau Claire, and State Historical Society of Wisconsin (Wisconsin SHPO), file for Commission approval a final Recreational Facility Improvement Plan for the Dells Hydroelectric Project.

The final Recreational Facility Improvement Plan shall include, but not be limited to, the measures as specified in Appendix T (Recreational Facility Improvement Plan for the Dells Project), pages T-2 to T-5, of the Lower Chippewa River Settlement Agreement, filed February 1, 2001. Furthermore, the licensee shall develop the final Recreational Facility Improvement Plan in conjunction with the Historic Resources Management Plan required in Article 417, so that recreational enhancements do not conflict with the cultural resources in the project area.

The plan shall include, for the Dells Hydroelectric Project, a construction schedule, appropriate soil erosion and sediment control measures, a discussion of how the needs of the disabled were considered in the planning and design of the recreation facilities, documentation of agency consultation, copies of comments and recommendations on the plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments and recommendations are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment prior to 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.

The licensee shall construct the facilities after consultation with the Wisconsin DNR, NPS, LHIA, and Wisconsin SHPO. Drawings of the facilities, constructed pursuant to the plan, must be filed for Commission approval within 90 days of the finish of construction.

Article 420. The licensee shall, after consultation with the Wisconsin Department of Natural Resources, National Park Service, and the City of Eau Claire, monitor recreation use of the Dells Hydroelectric Project area to determine whether existing

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recreation facilities are meeting recreation needs. Concurrent with filing FERC Form-80, required by Section 8 of the Commission's Regulations (18 CFR 8.11), the licensee shall file a report with the Commission on the monitoring results. This report shall include: (1) annual recreation use figures; (2) a discussion of the adequacy of the licensee's recreation facilities at the project site to meet recreation demand; (3) a description of the methodology used to collect all study data; (4) if there is a need for additional facilities, a recreation plan proposed by the licensee to accommodate recreation needs in the project area; (5) documentation of agency consultation and agency comments on the report after it has been prepared and provided to the agencies; and (6) specific descriptions of how the agencies' comments are accommodated by the report.

The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the report with the Commission. The Commission reserves the right to require changes to the report.

Article 421. 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 License 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 (PA) is terminated, the licensee shall implement the provisions of its approved HRMP. The Commission reserves the authority to require changes to the HRMP at any time during the term of the license. If the PA 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 422. (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 are 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.

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If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and water for which the licensee may grant permission without prior Commission approval are: (1) landscape plants; (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 rip rap would be adequate to control erosion at the site; and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline.

To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and Federal approvals have been obtained; (2)storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor

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access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary Federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is 5.0 acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year.

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

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

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- (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 boundary may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G drawings would be filed for approval for other purposes.
- (g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

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- (H) 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.
- (I) This order is issued under authority delegated to the Director and is final unless a request for a 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 a rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except

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as specifically ordered by the Commission. The licensee's failure to file a request for rehearing of this order shall constitute acceptance of the license.

J. Mark Robinson Director Office of Energy Projects

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#### APPENDIX A

Water Quality Certification Conditions for the Dells Hydroelectric Project No. 2670 Issued by State of Wisconsin Department of Natural Resources under Section 401 of the Clean Water Act.

# **Notice for State Water Quality Certification**

Dells Hydroelectric Project

Northern States Power Company, a Wisconsin Corporation, d/b/a Xcel Energy (applicant), 1414 West Hamilton Ave. Eau Claire, WI 54702, and the City of Eau Claire, 203 S. Farwell Street, P.O. Box 5148, Eau Claire, WI 54702 have filed an application with the Wisconsin Department of Natural Resources for water quality certification under section 401, Federal Clean Water Act, and Chapter NR299, Wisconsin Administrative Code.

The project is located in the City of Eau Claire, Eau Claire County, Wisconsin.

The project consists of relicensing of the Dells hydroelectric project (FERC project # 2670) under the Federal Energy Regulatory Commission re-licensing process. The Federal Energy Regulatory Commission (FERC) requires that the applicant obtain state water quality certification or waiver thereof before a new license can be issued. The projects future operations will impact over 61 miles of the lower Chippewa River and Dells Pond.

The Department has reached a settlement agreement with the applicant, the City of Eau Claire and eight other stakeholders in relationship to six hydroelectric projects on the lower Chippewa River. The Department has determined that implementation of the Lower Chippewa River Settlement Agreement, signed and dated January 17, 2001, as well as the conditions within the settlement agreement will meet the standards found in section NR 299.04 and certification is granted with the following conditions.

The following conditions are part of the certification.

- A. The applicant shall comply with all federal, state and local permit requirements.
- B. For the full term of the FERC (re)license, the applicant must meet the most current water quality standards that apply to this project. As with all other affected operations, the applicant would be required to meet any revised state water quality standards.

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C. To protect aquatic habitat, allow for reasonable and quality public recreation use and otherwise protect public interest values throughout the term of the FERC (re)license, the applicant shall operate the Dells project as a re-regulation facility while complying with the following minimum and maximum tailwater flow limitations as well as the following seasonal reservoir surface water elevations.

Operations at the Dells Project shall be based on inflow to Dells Pond<sup>1</sup> and subject to the following flow discharge restrictions for water releases from the Dells powerhouse and/or spillway:

From the end of spring run-off <sup>2</sup> or April 1 (whichever is later) until May 31: Discharge shall approximately equal run-of-river (± 15% from inflow to Dells Pond), <u>unless</u> flows are rapidly rising or falling due to runoff events, then operator judgment shall be used to release flows that simulate run-of-river, to the extent feasible.

From June 1 until initiation of spring run-off or April 1 (whichever is later):

IF INFLOW IS:	MINIMUM FLOW SHALL EQUAL OR EXCEED:	MAXIMUM FLOW SHALL NOT EXCEED:	
< 1,800 cfs <sup>3</sup>	Inflow, -10%	Inflow +15%, except for power demand contingencies <sup>4</sup>	
1,800 to 2,500 cfs	1,800 cfs	4,000 cfs, except for power demand contingencies	
2,501 to 4,000 cfs	2,200 cfs	5,600 cfs, except for power demand contingencies	
4,001 to 5,000 cfs	2,600 cfs	6,500 cfs, except for power demand contingencies	
5,001 to 6,000 cfs	3,000 cfs	7,500 cfs, except for power demand contingencies	
6,001 to 7,500 cfs	4,000 cfs	Unlimited	
7,501 to 9,600 cfs	5,000 cfs	Unlimited	
>9,601 cfs	Run-of-river	Run-of-river	

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The applicant shall maintain the surface water elevation<sup>5</sup> of Dells Pond within the following seasonal limits.

April 1<sup>6</sup> to May 31 Elev. 794.0 to 795.0 ft June 1 to March 31 Elev. 793.0 to 795.0 ft

D. The applicant shall comply will all agreements from Sections 3.0 and 4.0 as detailed in the lower Chippewa River Settlement Agreement in relationship to the Dells hydro-electric project that are not highlighted in section A, B and C of this certification.

If you would like to know more about this project, contact Heath Benike, WDNR, West Central Regional Headquarters, 1300 West Clairemont Avenue, Eau Claire, WI 54702. Reasonable accommodations, including the provision of informational materials in an alternative format, will be provided for qualified individuals with disabilities upon request.

<sup>&</sup>lt;sup>1</sup> Inflow to the Dells Pond shall be determined by the applicant using the Vista Decision Support System or comparable computer software installed at the Wissota Project (see Appendix E, *Operational Compliance Plan in Settlement Agreement*).

<sup>&</sup>lt;sup>2</sup> End of spring runoff means the first time each year after March 1 that stream flow has peaked after snowmelt at the Wissota Project and flow has receded to less than 9,600 cfs.

<sup>&</sup>lt;sup>3</sup> For natural flows #1,000 cfs, the *Low Flow Contingency Plan* (Appendix C, in Settlement Agreement) is to be implemented.

<sup>&</sup>lt;sup>4</sup> Power demand contingencies include the following conditions or events: 1) any emergency condition on the applicants electrical system where Chippewa River hydropower generation is necessary to prevent a system brown-out or black-out; and 2) for 263 hours per year, based on a 12-month rolling average, that may be used at the applicants discretion. The power demand contingency applies only to the maximum flows that are to be discharged; the prescribed minimum flows shall be released at all times, including during power demand contingencies.

<sup>&</sup>lt;sup>5</sup> All elevations are feet above mean sea level referenced to National Geodetic Vertical Datum.

<sup>&</sup>lt;sup>6</sup> This is a target date that may be earlier or later in the year determined by the end of spring runoff (defined in footnote 2).

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#### **NOTICE OF APPEAL RIGHTS**

If you believe that you have the right to challenge this decision, you should know that the Wisconsin Statues and Wisconsin Administrative Code establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. 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 for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. 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 judicial review.

All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code. This section of the code requires that the grounds for the petition for hearing be identified. Pursuant to section NR 2.05(5), Wis. Adm. Code, and section 227.42, Wis. Stats., you are required to include specific information demonstrating all four of the following:

- 1. The substantial interest of the petitioner which is injured in fact or threatened with injury by the Department's action or inaction;
- 2. That there is no evidence of legislative intent that this interest is not to be protected.
- 3. That the injury to the petitioner is different in kind or degree from the injury to the general public caused by the Department's action or inaction; and
- 4. That there is a dispute of material fact (you must specify the disputed facts).

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This notice is provided pursuant to section 227.48(2), Wis. Stats.

Dated at Eau Claire, WI on May 8, 2001

# WISCONSIN DEPARTMENT OF NATURAL RESOURCES

B	J		

Heath Benike Regional Large Rivers Specialist West Central Region-Eau Claire