# 144 FERC ¶ 62,268 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Wisconsin Electric Power Company

Project No. 11831-095

#### ORDER AMENDING LICENSE AND REVISING ANNUAL CHARGES

(Issued September 27, 2013)

1. On October 24, 2012, Wisconsin Electric Power Company, licensee for the Twin Falls Project No. 11831, filed an application to amend its license to demolish its existing powerhouse in Michigan and construct a new powerhouse and spillway in Wisconsin. The project is located on the Menominee River in Iron and Dickinson counties, Michigan and Florence County, Wisconsin.

# **Background**

The Commission issued the license for the Twin Falls Project on 2. January 12, 2001.<sup>2</sup> The project consists of: (a) a 350-foot-long, 20.7-foot-high left dike; (b) a 70-foot-long, 21-foot-high concrete left forebay wall; (c) a 60-foot-long, 21-foothigh left intake wall with four bays leading into two 9-foot-diameter steel penstocks; (d) a 70-foot-long concrete right intake structure with six bays leading into three 9-footdiameter steel penstocks; (e) a 123-foot-long by 80-foot-wide powerhouse containing three 1,248 kilowatt (kW) generating units and two 1,200 kW generating units, for a total installed capacity of 6,144 kW; (f) a 320-foot-long, 69-kilovolt (kV) overhead transmission line; (g) a 117-foot-long concrete right forebay wall; (h) a 50-foot-long, 32foot-high concrete gravity dam on the Michigan side of the river; (i) a 174-foot-long, 43foot-high concrete gravity main spillway with four 29-foot-wide by 15-foot-high Tainter gates and a sluice gate; (j) a 234-foot-long, 30-foot-high concrete gravity dam on the Wisconsin side of the river; (k) two middle dikes extending approximately 500 feet to a controlled spillway; (1) a 101-foot-long concrete auxiliary spillway that contains three 27foot-wide by 15-foot-high Tainter gates; (m) a 300-foot-long right dike; (n) an impoundment with a 960-acre surface area and a 9.750-acre-foot storage capacity at a normal full pool elevation of 1,112.7 feet National Geodetic Vertical Datum; and (o) appurtenant facilities.

<sup>&</sup>lt;sup>1</sup> Supplemented January 25, February 15, February 22, and April 12, 2013.

<sup>&</sup>lt;sup>2</sup> Wisconsin Electric Power Company, 94 FERC ¶ 61,039 (2001).

## **Proposed Amendment**

- 3. To address dam safety concerns identified in the project's Ninth Part 12 Consultant's Safety Inspection Report, filed December 13, 2010, and increase the project's spillway capacity, the licensee proposes to remove the existing powerhouse, forebay walls, intake structures, and penstocks and to construct a new powerhouse and spillway on the Wisconsin side. The licensee proposes no changes in operations.<sup>3</sup>
- 4. The licensee proposes to construct a new concrete powerhouse that would be up to 110 feet wide, 123 feet long, and 89 feet high and would contain two new 4,500-kW Kaplan turbine-generator units, for a total installed capacity of 9,000 kW. The project's hydraulic capacity would increase from 2,530 to 2,900 cubic feet per second (cfs). Integral to the powerhouse would be a new intake structure designed for a two-foot-per-second approach velocity with 1-inch clear spacing trash racks. The licensee also proposes to construct on the Wisconsin side, and adjacent to the new powerhouse's forebay, a new 76-foot-long and 40-foot-high spillway with three 20-foot-high by 20-foot-wide steel Tainter gates. The proposed spillway would be able to pass flows of approximately 17,800 cfs. The licensee proposes to remove about 160 feet of the existing Wisconsin gravity dam to make room for the new powerhouse and spillway.
- 5. Following the construction of the proposed powerhouse, water would pass through the new integral intake structure connected to the new concrete powerhouse on the Wisconsin side. Water from the two new 4,500 kW turbines would then be discharged into the Wisconsin side of the river. Water bypassing the powerhouse would pass over either the proposed spillway located on the Wisconsin side or the existing concrete spillway.
- 6. Power would be carried through a proposed 69-kV overhead project transmission line, beginning at a new 4.16 kV/69-kV transformer next to the proposed powerhouse and traveling approximately 720 feet across the Menominee River to an existing transformer in Michigan. The transmission line would be constructed in compliance with guidelines

<sup>&</sup>lt;sup>3</sup> The licensee also requests that the Commission remove the requirement in license Article 408 to sample sediments within the project's impoundment twenty years from the effective date of the license. The licensee states it sampled sediments in preparation for the proposed construction and provided a report indicating the sediments in the impoundment held no contaminants. We have reviewed the licensee's submittal and found that the sediment sampling requirement in Article 408 has been fulfilled; the licensee does not need to conduct additional sediment sampling in the Twin Falls Project impoundment.

from the Avian Power Line Interaction Committee to minimize the potential for avian mortality.

- 7. The licensee would construct a 130-foot-long, 25-foot-high closure dam, comprised of concrete-filled steel cofferdam cells, across the demolished forebay channel on the Michigan side. The Michigan or left gravity dam would be modified to abut the proposed closure dam.
- 8. The licensee plans to remove the wood bridge and access ramp located over the existing main spillway and improve and extend an access road across the auxiliary spillway to the proposed powerhouse. The extended access road would travel across the auxiliary spillway and the middle and right dikes, requiring the licensee to install a steel auxiliary spillway deck, widen the dikes, and reinforce the dikes with rip-rap.

### **Public Notice and Environmental Analysis**

- 9. On November 29, 2012, the Commission issued public notice that the amendment application was accepted for filing, stating that the project was ready for environmental analysis, and soliciting comments, motions to intervene, protests, recommendations, terms and conditions, and fishway prescriptions. In response, the Wisconsin Department of Natural Resources (Wisconsin DNR) filed a timely notice of intervention with no comments. The U.S. Department of the Interior filed a letter stating it had no comments.
- 10. On June 28, 2013, in cooperation with U.S. Army Corps of Engineers staff, Commission staff issued an Environmental Assessment (EA) for the proposed action. On August 26, 2013, the U.S. Environmental Protection Agency (EPA) filed comments on the EA.
- 11. The motion to intervene and comments have been fully considered in determining whether, and under what conditions, to issue this license amendment.

### **Water Quality Certification**

12. Under section 401(a) of the Clean Water Act (CWA),<sup>4</sup> the Commission may not authorize construction or operation of a hydroelectric project that may result in a discharge from the project unless the state water quality certifying agency either has issued 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

<sup>&</sup>lt;sup>4</sup> 33 U.S.C. § 1341(a) (2006).

year. Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project.<sup>5</sup>

- 13. On October 31, 2012, the licensee applied to the Wisconsin DNR for a new certification for the amendment to the existing license for the Twin Falls Project. On the same date, the licensee applied to the Michigan Department of Environmental Quality (Michigan DEQ) for modification to its existing certification, dated May 14, 1998. Wisconsin DNR and Michigan DEQ received these requests on November 2, 2012.
- On July 19, 2013, the Wisconsin DNR issued certification, which was filed with 14. the Commission on August 27, 2013. By letter filed on September 16, 2013, Michigan DEQ stated that it supports the conditions of Wisconsin's certification. Wisconsin's certification includes 15 conditions, which are set forth in Appendix A of this order and are incorporated through ordering paragraph (C). The non-administrative conditions require the licensee to: (1) maintain impoundment elevations in accordance with the Wilderness Shores Settlement Agreement (WSSA); (2) operate the project in accordance with the WSSA; (3) monitor compliance of the project's operations, including impoundment elevations and powerhouse discharges; (4) implement operations testing plans; (5) implement the approved Impoundment Drawdown Plan; (6) follow temperature and dissolved oxygen requirements for water discharges; (7) comply with WSSA procedures upon any failure to meet WSSA water quality standards; (8) monitor and report water quality; (9) provide woody debris transport and management; (10) develop and implement the Stream and Impoundment Shoreline Erosion Remediation Plan; (11) provide downstream fish protection and passage; and (12) adhere to any other applicable WSSA water quality requirements.
- 15. The existing certification from Michigan DEQ covers eight licensee-owned projects. Once the original powerhouse is demolished, the Michigan DEQ intends to amend the existing certification by removing the Twin Falls Project from that certification.<sup>6</sup>

# **Threatened and Endangered Species**

16. Section 7(a)(2) of the Endangered Species Act of 1973, requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of

<sup>&</sup>lt;sup>5</sup> 33 U.S.C. § 1341(d) (2006).

<sup>&</sup>lt;sup>6</sup> At this time the licensee would need to file an application to amend its license to remove Michigan DEO's existing certification from the Twin Falls Project license.

<sup>&</sup>lt;sup>7</sup> 16 U.S.C. § 1536(a) (2012).

federally listed threatened and endangered species, or result in the destruction or adverse modification of their designated critical habitat.

17. By letter dated March 26, 2012, included in the application, the U.S. Fish and Wildlife Service (FWS) stated it has no records that federally listed threatened or endangered species or their critical habitats are present in the project's immediate vicinity.

### **National Historic Preservation Act**

- 18. Under section 106 of the National Historic Preservation Act<sup>8</sup> and its implementing regulations, <sup>9</sup> federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (National Register) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer (SHPO) to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects. In the event that Indian tribe properties are identified, section 106 requires that the Commission consult with any potentially interested Indian tribes that might attach religious or cultural significance to such properties.
- 19. By letter issued February 14, 2012, the Commission designated the licensee as its representative for consultation purposes under section 106. The licensee consulted with the Wisconsin SHPO on the project's existing powerhouse, which is eligible for inclusion in the National Register. Pursuant to the licensee's Programmatic Agreement and the Historic Resources Management Plan (HRMP), the licensee is required to consult with the Wisconsin SHPO regarding mitigation measures for modifications to project facilities other than in-kind replacements. To mitigate the powerhouse's demolition, the licensee proposes to update the project's HRMP and perform Historic American Building Survey (HABS) and Historic American Engineering Record (HAER) documentation. We are requiring the licensee to perform HABS/HAER documentation in Article 418, and to file a revised HRMP for Commission approval, which incorporates the demolition of the existing powerhouse in ordering paragraph (D).

<sup>&</sup>lt;sup>8</sup> 16 U.S.C. § 470 (2012) et seq.

<sup>&</sup>lt;sup>9</sup> 36 C.F.R. Part 800 (2013).

<sup>&</sup>lt;sup>10</sup> As stated in the Programmatic Agreement, the Michigan SHPO has agreed to coordinate its responsibilities through the Wisconsin SHPO; therefore, the licensee is consulting with the Wisconsin SHPO only.

- 20. Two cultural resource sites were identified as located within or adjacent to the area of potential effect for the proposed action. In the June 28, 2013 EA, Commission staff concluded that the first site would not be impacted, but that the second site, 20DK41, would potentially be affected by construction of the new pedestrian trail within Recreation Area 35, which is a recreational fishing area. Commission staff therefore recommended in the EA that the licensee evaluate site 20DK41to ascertain the site's characteristics and precise location to ensure that cultural resources are appropriately protected. Article 419 requires the licensee to determine the site's location relative to the proposed construction, implement avoidance measures to protect the site if necessary, and evaluate the site for possible inclusion in the National Register and a revised HRMP. If avoidance measures are necessary, the licensee should consult with the Wisconsin SHPO and the Commission to determine the appropriate course of action.
- 21. On May 22, 2013, Commission staff sent a letter to the Wisconsin SHPO stating that the proposed license amendment, incorporating the above mentioned evaluation to site 20DK41, would not adversely affect any historic resources other than the powerhouse. By letter filed June 12, 2013, the Wisconsin SHPO concurred with the Commission's determination.

## **Section 18 Fishway Prescriptions**

22. Section 18 of the Federal Power Act (FPA)<sup>11</sup> provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate. No fishway prescriptions or reservations of authority were filed under section 18 of the FPA.

# **Coastal Zone Management Act**

- 23. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),<sup>12</sup> the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's Coastal Zone Management Program (CZMP), or the agency's concurrence is conclusively presumed by its failure to act within 180 days of its receipt of the applicant's certification.
- 24. The Michigan DEQ manages the approved CZMP for the state of Michigan, and the Wisconsin Department of Administration manages the approved CZMP for the state

<sup>&</sup>lt;sup>11</sup> 16 U.S.C. § 811 (2012).

<sup>&</sup>lt;sup>12</sup> 16 U.S.C. § 1456(3)(A) (2012).

of Wisconsin. The Michigan DEQ, by letter dated March 21, 2012, included in the application, and the Wisconsin Department of Administration, by email dated April 9, 2012, included in the application, stated that the project is located outside their respective states' coastal zones.

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

25. Section 10(j) of the FPA<sup>13</sup> requires the Commission to include license conditions based upon recommendations of 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. No section 10(j) recommendations were filed for this amendment application.

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

26. Section 10(a)(1) of the FPA<sup>15</sup> requires that any project for which the Commission issues a license shall be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes. No section 10(a)(1) recommendations were filed for this amendment application.

# **Proposed Environmental Protection Measures**

#### A. Recreational Enhancements

27. As licensed, there are four existing recreational facilities within the project boundary: (1) Area 7; (2) Area 33; (3) Area 35; and (4) a canoe portage trail. Recreation Area 7 provides informal, or plowed, access to the impoundment for winter

<sup>&</sup>lt;sup>13</sup> 16 U.S.C. § 803(j) (2012).

<sup>&</sup>lt;sup>14</sup> 16 U.S.C. §§ 661 (2012) et seq.

<sup>&</sup>lt;sup>15</sup> 16 U.S.C. § 803(a)(1) (2012).

<sup>&</sup>lt;sup>16</sup> The licensee has 39 numbered recreation areas located among its eight Commission-licensed projects on the Brule, Menominee, Paint, and Pine rivers in northeast Wisconsin and Michigan's Upper Peninsula.

ice fishing. Recreation Area 33, also known as Vagabond Park, is located on the Wisconsin side and has picnic areas, parking, restrooms, fishing flat-outs, a trail, and a boat launch. Recreation Area 35, a tailwater fishing area, is located on the Michigan side and has a trail, fishing platform, parking area, and a vault toilet. The canoe portage trail, located on the Wisconsin side, is 0.34 miles long and features canoe take-out and put-in areas.

- 28. The licensee proposes modifications to Recreation Area 33, Recreation Area 35, and the canoe portage trail, and no modifications to Recreation Area 7. At Recreation Area 33, the licensee plans to construct a new pedestrian trail to the auxiliary spillway and install signs showing recreation areas with an updated map and describing the history of the Twin Falls Project. At Recreation Area 35, the licensee proposes to construct a new pedestrian trail north of the dam, relocate the vault toilet and fishing platform, as necessary, and install new signs describing historic and recreation resources at the project. The licensee also plans to relocate the portage trail from the Wisconsin side to Recreation Area 35 on the Michigan side.
- 29. We have reviewed the proposed changes and agree that they would help develop the project's recreational resources. Because the licensee proposes significant changes to the recreational facilities, we require the licensee to file a revised Comprehensive Recreation Plan, for Commission approval, in Article 420.

#### **B.** Environmental Protection Plans

30. The licensee filed eight plans related to its amendment request: (1) a Stormwater Management and Erosion Control Plan to prevent erosion and manage runoff during and following construction activities; (2) a Public Communications Plan to communicate the project status to interested individuals; (3) a Dewatering Plan to avoid stranding of fish and mussels during dewatering of cofferdam areas; (4) a Materials Management Plan to address proper disposal of construction and demolition wastes; (5) an Invasive Species Construction Management Plan to prevent the spread of invasive species during construction; (6) a Wood Turtle Management Plan to protect the state threatened wood turtle during and after construction; (7) a Bald Eagle Management Plan to help avoid construction related impacts to bald eagles; and (8) a Spill Prevention Control and Countermeasures Plan to help prevent and control the spill of hazardous substances during construction. We have reviewed these plans and found them to be acceptable. These plans are approved and required to be implemented by the licensee in ordering paragraph (E).

<sup>&</sup>lt;sup>17</sup> The licensee filed the first two plans on October 24, 2012, the next five plans on February 15, 2013, and the last plan on July 22, 2013.

- 31. The licensee also states that it would prepare and complete an Oil Pollution Prevention Plan at least 60 days before the start of construction. Article 301 requires the licensee to submit this plan to the Commission's Division of Dam Safety and Inspections-Chicago Regional Office (D2SI-CRO) for review.
- 32. Mussel and fish surveys were recently conducted at the project in 2012 and 2010, respectively. The licensee proposes to conduct surveys for mussels and fish upon completing the proposed construction. To ensure that any impacts on mussels or fish from the proposed action are quantified, we require, in Articles 421 and 422, that the licensee file reports providing the results of each survey, including a comparison to the pre-construction surveys. The licensee should provide the Wilderness Shores Implementation Team (WSIT) an opportunity to comment on the results prior to filing each report with the Commission. <sup>18</sup>
- 33. The licensee currently implements a Water Quality Monitoring Plan pursuant to Article 408 of the project license which requires the licensee to monitor and record, among other parameters, temperature and dissolved oxygen every five years at the Twin Falls Project. As part of the proposed action, for the first two years of operating the proposed facilities, the licensee plans to continuously monitor temperature and dissolved oxygen between June 1 and September 30 at two locations, one within the new tailrace and another downstream of the project. The proposed monitoring would be in addition to the monitoring already conducted under license Article 408. Following the first monitoring year, the licensee states it would consult with the WSIT to plan the second monitoring year and prepare a report to file with the Commission. In Article 423, we require the licensee to conduct its proposed monitoring and file the specified report and each year's monitoring results with the Commission.

## **Other Issues**

### A. Non-Native and Invasive Species

34. Constructing the proposed powerhouse and demolishing the existing powerhouse would disturb terrestrial and riparian areas creating areas devoid of vegetation. Left unplanted, these areas would be susceptible to colonization by invasive species and would provide poor habitat value for wildlife. In the EA issued for the proposed action, Commission staff recommended that the licensee develop and implement a Revegetation Plan that includes planting native species and monitoring and evaluating plant survival

<sup>&</sup>lt;sup>18</sup> The WSIT, established under section 9.1 of the WSSA, comprises the licensee, Michigan Department of Natural Resources (Michigan DNR), Wisconsin DNR, FWS, National Park Service, River Alliance of Wisconsin, and Michigan Hydro Relicensing Coalition.

and growth to ensure that these efforts are successful in revegetating the disturbed areas. To help ensure successful revegetation of areas disturbed during the proposed powerhouse work, Article 424 requires the licensee to file, within 6 months of the issuance of this order, for Commission approval, a Revegetation Plan. The plan is to be prepared in consultation with the FWS, Michigan DNR, and Wisconsin DNR.

#### **B.** Avian Collisions

35. As noted above, the licensee plans to construct the proposed transmission line following Avian Power Line Interaction Committee guidelines to minimize the potential for avian mortality. Additionally, in the EA issued for the proposed action, Commission staff recommended that the licensee consult with the FWS, Michigan DNR, and Wisconsin DNR on the need to install aerial marker spheres, with 100-foot spacing, along the segment of the proposed transmission line that crosses the river. Article 425 requires the licensee to consult with the FWS, Michigan DNR, and Wisconsin DNR on avian protection measures for the project's transmission line and file a report with the Commission.

### C. Project Aesthetics

36. The new spillway and Tainter gates on the Wisconsin side and the closure dam on the Michigan side would negatively affect aesthetics for downstream users. To minimize these visual effects, in the EA issued for the proposed action, Commission staff recommended that the licensee select a gray color for the Tainter gates in the proposed Wisconsin spillway and treat the downstream side of the proposed closure dam with a color that minimizes the visibility of this feature. Ordering paragraph (F) requires the licensee to show that it has taken measures to reduce the new facilities' aesthetic impacts.

## **Comprehensive Plans**

37. Section  $10(a)(2)(A)^{19}$  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 waterways affected by the project. Staff reviewed thirteen plans that address resources relevant to the Twin Falls Project. No conflicts were found.

<sup>&</sup>lt;sup>19</sup> 16 U.S.C. § 803(a)(2)(A) (2012).

<sup>&</sup>lt;sup>20</sup> Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2013).

<sup>&</sup>lt;sup>21</sup> See section 5.3 of the EA for a complete list of all relevant comprehensive plans.

## **Applicant's Plans and Capabilities**

#### A. Conservation Efforts

- 38. Section  $10(a)(2)(C)^{22}$  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, restriction, and requirements of state regulatory authorities. The licensee is a public utility and the project's generation is used to offset the licensee's load purchases to meet its customers' projected energy needs.
- 39. The licensee provides financial incentives and specialized technical assistance to its residential and commercial customers who reduce their energy consumption through efficiency upgrades. We conclude that, given its efforts to encourage its customers to reduce energy usage and improve efficiency, the licensee complies with section 10(a)(2)(C) of the FPA.

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

40. Commission staff has reviewed the licensee's management, operation and maintenance of the Twin Falls Project pursuant to the requirements of 18 C.F.R. Part 12 of the Commission's regulations and the Commission's Engineering Guidelines and periodic Independent Consultant Safety Inspection Reports. Staff concludes that the proposed project works would be safe and that there is no reason to believe that the licensee cannot continue to safely manage, operate, and maintain these facilities under an amended license.

### **Project Economics**

41. In determining whether to grant this license amendment, 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*, <sup>23</sup> the Commission 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 amendment 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

<sup>&</sup>lt;sup>22</sup> 16 U.S.C. § 803(a)(2)(C) (2012).

<sup>&</sup>lt;sup>23</sup> Mead Corporation, Publishing Paper Division, 72 FERC ¶ 61,027 (1995).

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 amendment.

- 42. Commission staff applied this analysis to the licensee's application to amend its license for the Twin Falls Project. The proposed changes would result in an increase in annual generation of approximately 9,800 megawatt-hours (MWh). Using a regional estimated alternative energy value of \$27.70/MWh and a capacity value of \$158/kilowatt-year, based on replacement of project energy with gas-fired generation and a capacity value for dependable capacity, the total value of this additional generation and capacity would be \$2,060,920 annually. As proposed by the licensee with staff recommended measures, the levelized annual cost of implementing the proposed action would be \$9,861,910. To determine whether the proposal is economically beneficial, the proposal's cost is subtracted from the value of the energy gains. Therefore, the net cost of the licensee's proposal, including total capital costs and generation benefits, would be approximately \$7,800,990 annually.
- 43. Although our analysis shows that the project as amended herein would cost more to operate than our estimated cost of alternative power, it is the applicant who must decide whether to accept the amendment and any financial risk that it entails.
- 44. Staff does not explicitly account for the effects inflation may have on the future cost of electricity; although, the fact that hydropower generation is relatively insensitive to inflation compared to fossil-fueled generation is an important economic consideration for power producers and the consumers they serve. This is one reason project economics is only one of the many public interest factors the Commission considers in determining whether or not, and under what conditions, to issue a license amendment.

# **Comprehensive Development**

- 45. Sections 4(e) and 10(a)(1) of the FPA<sup>24</sup> require the Commission to give equal consideration to power development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be, in the Commission's judgment, best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to issue this license amendment, and the terms and conditions included herein, reflect such consideration.
- 46. Staff's June 28, 2013 EA for the licensee's proposal contains background information, analysis of effects, and support for related environmental protection

<sup>&</sup>lt;sup>24</sup> 16 U.S.C. §§ 797(e), 803(a)(1) (2012).

requirements. Based on the record of this proceeding and the analysis performed in the EA, issuing an amendment to the Twin Falls Project license as described in this order would not constitute a major federal action significantly affecting the quality of the human environment. The project would be safe if operated and maintained in accordance with the license requirements.

- 47. Based on staff's independent review and evaluation of the project and the noaction alternative, as documented in the EA, we have selected the licensee's proposal, with staff's recommendations, and find that it is best adapted to a comprehensive plan for improving or developing the Menominee River.
- 48. We selected this alternative because: (1) issuance of the amendment would maintain a beneficial and dependable source of electric energy; (2) the proposed and staff-recommended environmental measures would protect and enhance project resources; and (3) the project, with an increased annual generation of 9,800 MWh, would eliminate the need for an equivalent amount of fossil fuel produced energy, which helps conserve these nonrenewable resources and decreases atmospheric pollution.

### **Administrative Conditions**

#### A. Federal Lands

49. As licensed, the Twin Falls Project occupied 12.53 acres of federal lands administered by the U.S. Bureau of Land Management (BLM). Pursuant to the Michigan Public Lands Improvement Act of 1988, the United States Congress transferred ownership of the 12.53 acres to the state of Michigan. Where Congress acts to reopen power site reservation lands to reentry, it has the opportunity to determine if FPA section 24 land restrictions apply. We did not find any evidence in the Michigan Public Lands Act of 1988 that Congress intended FPA section 24 restrictions to apply to the land conveyances. Thus, the 12.53 acres are no longer considered federal lands or section 24 lands.

## **B.** Annual Charges

50. The Commission collects annual charges from licensees for administration of Part I of the FPA. The licensee's proposal raises the authorized installed capacity of the project from 6,144 to 9,000 kW. Therefore, Article 201(a) of the license will need to be revised accordingly. In accordance with 11.1(c)(5) of the Commission's regulations, the

<sup>&</sup>lt;sup>25</sup> Pub. L. No. 100-537, 102 Stat. 2711 (1988).

<sup>&</sup>lt;sup>26</sup> See Ketchikan Public Utilities, 82 FERC ¶ 61,162, at 61,592 (1998).

assessment of annual charges starts on the date the licensee commences construction of the additional capacity.<sup>27</sup> As such, ordering paragraph (G) requires the licensee to notify the Commission of the date when it commences construction of facilities authorized in this order so the Commission can revise the project's annual charges.

51. License Article 201(b) requires the licensee to recompense the United States for the use, occupancy, and enjoyment of 12.53 acres of its lands. Because these lands are no longer federal or section 24 lands, ordering paragraph (H) deletes Article 201(b) from the license.

#### C. Standard Articles

52. The current license is subject to the articles set forth in Form L-5 entitled "Terms and Conditions of License for Constructed Major Projects Affecting Navigable Waters and Lands of the United States." Because the project no longer contains federal lands or lands to which the United States retains an interest, ordering paragraph (N) exchanges standard articles set forth in Form L-5 for standard articles set forth in Form L-3 entitled "Terms and Conditions of License for Constructed Major Projects Affecting Navigable Waters of the United States."

### **D. Project Description**

53. The licensee filed an Exhibit A with the application that pertains to the proposed demolition and construction. We reviewed the exhibit and have determined that it fulfills the Commission's requirements. In ordering paragraph (I), the filed exhibit is approved and supersedes the existing Exhibit A.

# E. Exhibit Drawings

- 54. The licensee filed 12 Exhibit F drawings with the October 24, 2012 license amendment application. After reviewing these drawings, we determine that Exhibits F-3 and F-4 will be removed from the license as these exhibits show the existing powerhouse that will be demolished under the proposal. The other drawings show the new facilities and proposed modifications to remaining facilities and omit the structures that are to be removed. We reviewed these 10 Exhibit F drawings and have determined that they meet the Commission's rules and regulations and will be approved by this order. Ordering paragraph (J) approves the 10 Exhibit F drawings and requires the licensee to file them in aperture card and electronic formats as shown in ordering paragraph (K).
- 55. The licensee filed an Exhibit G drawing with the October 24, 2012 application, and filed a revised drawing on January 25, 2013. In light of the findings in this order

<sup>&</sup>lt;sup>27</sup> 18 C.F.R. § 11.5(c)(5) (2013).

regarding the lands transferred to the state and the relocation of the canoe portage trail to an area outside the current project boundary, ordering paragraph (L) requires the licensee to revise and file for Commission approval, an Exhibit G drawing that shows all project works within the project boundary, including all recreational facilities.

56. Article 303 requires the licensee, within 90 days upon completing construction activities, to submit as-built Exhibits A, F, and G, as appropriate, to reflect the construction of the facilities approved in this order.

## F. Review of Final Plans and Specifications

57. Article 301 requires the licensee to provide the Commission's D2SI-CRO with final contract drawings and specifications, together with a supporting design report consistent with the Commission's engineering guidelines. In its comments on the EA, the EPA requested further analysis of blasting impacts on human health and the environment. The Blasting Plan, one of the preconstruction requirements of Article 301, should reduce the possibility of adverse impacts from blasting noise and vibration on recreationists, local landowners, and wildlife. Article 302 requires the licensee to provide the Commission's D2SI-CRO with cofferdam construction drawings.

## **Conclusion**

58. We have reviewed the licensee's application to amend its license in order to construct a new powerhouse and spillway and demolish the existing powerhouse including the proposed environmental protection measures and plans to monitor the project area following construction of the new facilities. We conclude that the licensee's proposal, incorporating the licensee's environmental protection measures and those measures recommended by staff, would benefit energy development while adequately protecting fish, wildlife, and recreational resources. Therefore, the amendment application will be granted, as considered herein.

### The Director orders:

- (A) Wisconsin Electric Power Company's request for amendment of the license for the Twin Falls Project, FERC No. 11831, filed October 24, 2012, and supplemented January 25, February 15, February 22, and April 12, 2013, is approved as provided by this order, effective the day this order is issued.
  - (B) Ordering paragraph (B)(2) of the license is revised to read as follows:
- (a) a 350-foot-long, 20.7-foot-high left dike; (b) a 130-foot-long, 25-foot-high closure dam consisting of 30-foot-diameter concrete filled steel cofferdam cells; (c) a 50-foot-long, 32-foot-high concrete abutment; (d) a 174-foot-long, 43-foot-high concrete gravity main spillway with four 29-foot-wide by 15-foot-high Tainter gates and a sluice

- gate; (e) a 90-foot-long, 30-foot-high concrete gravity dam; (f) a 76-foot-long, 40-foot-high concrete Wisconsin spillway with three 20-foot-wide by 20-foot-high Tainter gates; (g) a 110-foot-long by 123-foot-wide powerhouse containing two Kaplan turbine-generator units rated at 4,500 kilowatts (kW) each, for a total installed capacity of 9,000 kW; (h) a 720-foot-long, 69-kilovolt transmission line; (i) two middle dikes extending approximately 500 feet to a controlled spillway; (j) a 101-foot-long steel decked concrete auxiliary spillway that contains three 27-foot-wide by 15-foot-high Tainter gates; (k) a 300-foot-long right dike; (l) an impoundment with a 960-acre surface area and a 9,750-acre-foot storage capacity at a normal full pool elevation of 1,112.7 feet National Geodetic Vertical Datum; and (m) appurtenant facilities.
- (C) The license is subject to the conditions submitted by the Wisconsin Department of Natural Resources under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1) (2006), as those conditions, filed August 27, 2013, are set forth in Appendix A to this order.
- (D) Within one year of the issuance of this order, the licensee shall file, for Commission approval, a revised Historic Resource Management Plan that incorporates documentation of the demolition of the existing powerhouse. The revised plan shall include documentation of approval from the Wisconsin State Historic Preservation Officer.
- (E) The Stormwater Management and Erosion Control Plan and the Public Communications Plan filed October 24, 2012; the Dewatering Plan, Materials Management Plan, Invasive Species Construction Management Plan, Wood Turtle Protection Plan, and Bald Eagle Management Plan filed February 15, 2013; and the Spill Prevention Control and Countermeasures Plan filed July 22, 2013, are approved and shall be implemented by the licensee.
- (F) Within 30 days of completion of construction, the licensee shall file color photographs with the Commission showing the Tainter gates located on the Wisconsin spillway with a gray colored or other unobtrusive coating and the downstream side of the closure dam with a treatment that minimizes its visual impact.
- (G) Within 30 days of the start of construction for the facilities, the licensee shall file with the Commission notification of the construction commencement date. The Commission will use the commencement of construction date to revise the project's annual charges under license Article 201(a).
  - (H) Article 201(b) is deleted from the license.
- (I) The Exhibit A, filed October 24, 2012, superseding the previous Exhibit A, is approved and made part of the license.

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(J) The following exhibit drawings filed on October 24, 2012, for the Twin Falls Project conform to the Commission's rules and regulations and are approved and made part of the license. Exhibit F-3 (Drawing No. 11831-3), Exhibit F-4 (Drawing No. 11831-4), and the superseded drawings shown below are removed from the project license.

EXHIBIT	FERC DRAWING No.	SUPERSEDED FERC DRAWING No.	FERC DRAWING TITLE
F-1	11831-13	11831-1	General Layout
F-2	11831-14	11831-2	Site Plan
F-5	11831-15	11831-5	Gravity Dam Details
F-6	11831-16	11831-6	Tainter Gate Spillway
F-7	11831-17	11831-7	Auxiliary Spillway
F-8	11831-18	11831-8	Dike Sections & Profiles
F-9	11831-19		Powerhouse Plan & Sections
F-10	11831-20		Powerhouse Elevations
F-11	11831-21		Wisconsin Spillway Plan & Section
F-12	11831-22		Closure Dam Plan & Sections

- (K) Within 45 days of the issuance of this order, the licensee shall file the approved Exhibit F drawings in aperture card and electronic file formats.
  - a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" x 7-3/8") aperture cards. Prior to microfilming, the FERC Project-Drawing Number (i.e., P-11831-13, etc.) shall be shown in the margin below the title block of the approved drawings. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-1 etc.), Drawing Title, and date of this order shall be typed on the upper left corner of each aperture card (See Figure 1).

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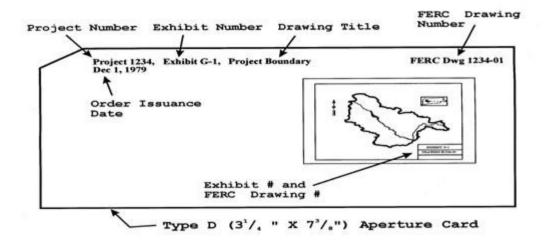


Figure 1 Sample Aperture Card Format

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

b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections Chicago Regional Office. Exhibit F drawings must be segregated from other project exhibits and identified as Critical Energy Infrastructure Information (CEII) material under 18 C.F.R. § 388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this order, and file extension in the following format [11831-13, F-1, General Layout, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

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

(L) Within 60 days of the issuance of this order, the licensee shall file for Commission approval, a revised Exhibit G drawing that shows all project facilities, including Commission approved recreational amenities, within the project boundary. The exhibit shall label each recreation amenities and shall comply with sections 4.39 and 4.41(h) of the Commission's regulations.

- (M) The licensee shall commence construction of the project works within two years from the issuance date of this order and shall complete construction of the project works within five years from the issuance date of this order.
- (N) The license is no longer subject to the articles set forth in Form L-5. The license is subject to the articles set forth in Form L-3 (October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the United States," and the following additional articles:
- Article 301. Contract Plans and Specifications. At least 60 days prior to the start of any construction, the licensee shall submit one copy of its plans and specifications and supporting design documentation to the Commission's Division of Dam Safety and Inspections (D2SI) Chicago Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI). As part of the preconstruction requirements, the submittal to the D2SI Chicago Regional Engineer must also include: a Quality Control and Inspection Program, a Temporary Construction Emergency Action Plan, a Blasting Plan, and an Oil Pollution Prevention Control Plan. The licensee shall not begin any construction until the D2SI Chicago Regional Engineer has reviewed and commented on the plans and specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction.
- Article 302. Cofferdam and Deep Excavation Construction Drawings. The licensee shall: (1) review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction; and (2) shall ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days before starting construction of any cofferdams or deep excavations, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspection (D2SI) Chicago Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Director, D2SI) of (1) the approved cofferdam and deep excavation construction drawings and specifications and (2) licensee's letters of approval.
- Article 303. As-built Drawings. Within 90 days of completion of construction of the facilities authorized by this license amendment, the licensee shall file for Commission approval revised exhibits A, F, and G, as applicable, to describe and show these project facilities as built. A courtesy copy shall be filed with the Commission's Division of Dam Safety (D2SI) Chicago Regional Office; the Director, D2SI; and the Director, Division of Hydropower Administration and Compliance.
- Article 418. *Historic Documentation*. At least six months prior to commencing the demolition of the existing powerhouse, the licensee shall perform Historic American Building Survey (HABS) and Historic American Engineering Record (HAER) documentation. The licensee shall, to the extent practicable, complete full documentation of the remaining original machinery and associated building interior to the HABS Level 1

standard and complete Level 2 HABS documentation for the remainder of the powerhouse's interior and exterior. Photographs shall document views of all four elevations and include at least one photograph for each interior room. Existing architectural drawings and historic construction photographs shall also be included. The licensee shall not commence powerhouse demolition until the Wisconsin State Historic Preservation Officer has determined the HABS/HAER documentation is acceptable and the licensee has filed a report with the Commission, documenting that the Wisconsin State Historic Preservation Officer is satisfied with the documentation.

Article 419. Historic Site Evaluation. Prior to commencing construction of the pedestrian trail upstream of the project's dam in Recreation Area 35, the licensee shall evaluate site 20DK41 to determine the site's eligibly for inclusion in the National Register of Historic Places, whether the site should be included in the revised Historic Resources Management Plan, and whether measures are necessary to protect the site during construction. The licensee shall implement those measures prior to trail construction. Within 90 days of conducting this evaluation, the licensee shall file a report describing the evaluation and its results, any avoidance or protection measures proposed, and justification for the determination as to the site's eligibility for inclusion, or not, in the National Register of Historic Places and the site's eligibility for inclusion, or not, in the revised Historic Resources Management Plan.

The licensee shall prepare the report in consultation with the Wisconsin State Historic Preservation Officer. The licensee shall include with the report documentation of consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to the Wisconsin Historical Society, and specific descriptions of how the agency's comments are accommodated by the report. The licensee shall allow a minimum of 30 days for the Wisconsin Historical Society to comment and make recommendations 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.

The licensee shall not commence construction near site 20DK41 until authorized by the Commission. The Commission reserves its right to require additional measures to protect site 20DK41, if necessary.

Article 420. Revised Comprehensive Recreation Plan. Within six months of the issuance of this order the licensee shall file, for Commission approval, a revised Comprehensive Recreation Plan that complies with the requirements of license Article 413 and incorporates the proposed modification to and construction of recreational facilities at the Twin Falls Project.

The licensee shall prepare the plan in consultation with the U.S. Fish and Wildlife Service, National Park Service, Michigan Department of Natural Resources, and 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 make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The licensee shall not implement the plan until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan including any changes required by the Commission.

Article 421. Mussel Survey. Within three years of the completion of construction and demolition activities, the licensee shall conduct a mussel survey following, as nearly as possible, the same methodologies as the pre-construction survey performed in 2012. The licensee shall consult with members of the Wilderness Shores Implementation Team to discuss the survey results and develop any further actions that may be required to protect aquatic resources. By March 1 of the year following the survey, the licensee shall file a report with the Commission that describes the conducted survey methodology and the sample locations, provides survey results with comparisons to the results of the preconstruction survey, and proposes mitigation measures to improve mussel habitat, if determined necessary during consultation with the Wilderness Shores Implementation Team.

The licensee shall prepare the report in consultation with the U.S. Fish and Wildlife Service, National Park Service, Michigan Department of Natural Resources, Wisconsin Department of Natural Resources, River Alliance of Wisconsin, and Michigan Hydro Relicensing Coalition. The licensee shall include with the report documentation of consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to these agencies and organizations, and specific descriptions of how the agencies and organizations' comments are accommodated by the report. The licensee shall allow a minimum of 30 days for the agencies and organizations to comment and make recommendations 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 422. Fisheries Survey. Within three years of the completion of construction and demolition activities, the licensee shall conduct a survey for fish species within the impoundment and below the dam. The licensee shall consult with members of the Wilderness Shores Implementation Team to develop methodologies for the survey(s), discuss the survey results and develop any further actions that may be required to protect aquatic resources. By March 1 of the year following the survey, the licensee shall file a

report with the Commission that describes the conducted survey methodologies and the sample locations, provides survey results with comparisons to historical data on fish populations at the project, and proposes actions to improve fish habitat, if determined necessary in consultation with the Wilderness Shores Implementation Team.

The licensee shall prepare the report in consultation with the U.S. Fish and Wildlife Service, National Park Service, Michigan Department of Natural Resources, Wisconsin Department of Natural Resources, River Alliance of Wisconsin, and Michigan Hydro Relicensing Coalition. The licensee shall include with the report documentation of consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to these agencies and organizations, and specific descriptions of how the agencies and organizations' comments are accommodated by the report. The licensee shall allow a minimum of 30 days for the agencies and organizations to comment and make recommendations 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 423. Water Quality Monitoring. Beginning on the first day of June after the licensee commences operation of the new powerhouse, the licensee shall monitor water temperature and dissolved oxygen concentrations within the new tailrace and at another location downstream of where the project's tailrace flows become riverine. Monitoring shall be continuous, recording values every hour, from June 1 through September 30 for two years. Upon completing the first monitoring year, the licensee shall consult with members of the Wilderness Shores Implementation Team to discuss corrective actions, if necessary, and to develop possible changes for the second monitoring year. By December 31 of the first monitoring year, the licensee shall file with the Commission, a report including all data collected during the monitoring period and any actions or proposals developed during consultation. The licensee shall conduct monitoring during the second year, following the same practices conducted during the first monitoring year, unless otherwise modified during consultation or by the Commission. The licensee shall file a report with the Commission by December 31 of the second monitoring year, including all data and justification for continuing the monitoring program, if warranted.

The licensee shall prepare the reports in consultation with the U.S. Fish and Wildlife Service, National Park Service, Michigan Department of Natural Resources, Wisconsin Department of Natural Resources, River Alliance of Wisconsin, and Michigan Hydro Relicensing Coalition. The licensee shall include with the reports documentation of consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to these agencies and organizations, and specific descriptions of how the agencies and organizations' comments are accommodated by the reports. The licensee shall allow a minimum of 30 days for the agencies and organizations to comment and make recommendations before filing each 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 424. Revegetation Plan. Within six months of the issuance of this order, the licensee shall file, for Commission approval, a Revegetation Plan. The plan shall, at a minimum:

(1) identify disturbed areas to be restored; (2) list native species to be used for planting and reseeding; (3) describe a monitoring program to record successful native species establishment; (4) define criteria for determining successful establishment; and (5) identify measures for additional planting to implement if success criteria are not achieved.

The licensee shall prepare the plan in consultation with the U.S. Fish and Wildlife Service, Michigan Department of Natural Resources, and 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 make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The licensee shall not implement the plan until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan including any changes required by the Commission.

Article 425. Avian Protection Measures. Before commencing operation of the new powerhouse, the licensee shall consult with the U.S. Fish and Wildlife Service, Michigan Department of Natural Resources, and Wisconsin Department of Natural Resources on the need to install aerial marker spheres, or other avian marker devices, along the segment of the new project transmission line that crosses the Menominee River. At least 30 days prior to commencing operation of the new powerhouse, the licensee shall file for Commission approval, a report detailing the results of the consultation and stating whether marker spheres or other such devices will be installed and a schedule for this installation, if necessary.

The Commission reserves its right to require the licensee to install avian line markers to reduce collision based on consultation with the agencies.

- (O) 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.
- (P) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the Federal Power Act, 16 U.S.C. § 825*l* (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2013). 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. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

Steve Hocking Chief, Environmental Review Branch Division of Hydropower Administration and Compliance Project No. 11831-095

#### APPENDIX A

## WISCONSIN DEPARTMENT OF NATURAL RESOURCES

# WATER QUALITY CERTIFICATION FOR THE TWIN FALLS PROJECT (FERC NO. 11831)

### Filed August 27, 2013

- 1. Wisconsin Electric Power Company (WE) shall maintain impoundment elevations in accordance with Wilderness Shores Settlement Agreement (WSSA) Paragraphs 3.1.6.1 (Twin Falls Impoundment),
- 2. WE shall operate the projects in accordance with WSSA Paragraphs 3.1.6.2 through 3.1.6.4 (Twin Falls Dam), including arrangements for the re-regulation of the upstream peaking flows as stated in WSSA Paragraphs 3.1.9.1 through 3.1.9.4 and 3.1.9.6.
- 3. WE shall provide for compliance monitoring of the projects' operations including impoundment elevations and powerhouse discharges as stated in WSSA Paragraphs 3.1.6.5 and 3.1.6.6 (Twin Falls Dam and Impoundment).
- 4. WE shall implement any requirements of the License or implementation plans developed by WE in connection with operations testing completed in accordance with WSSA Section 3.2.
- 5. WE shall implement the approved Impoundment Drawdown Plan which addresses all impoundment drawdown situations in accordance with WSSA Paragraphs 3.3.1 through 3.3.4.4.
- 6. WE shall not discharge water that exceeds the temperature and dissolved oxygen requirements specified in WSSA Paragraphs 4.1.2, 4.1.3, and 4.1.5.
- 7. In the event that any of the Water Quality Standards listed in WSSA Paragraphs 4.1.2, 4.1.3, and 4.1.5 are not met, WE shall follow the procedure listed in WSSA Paragraph 4.1.6.
- 8. WE shall monitor and report water quality in accordance with WSSA Paragraphs 4.1.4 and 4.1.7 through 4.1.14.

- 9. WE shall provide for woody debris transport and management in accordance with WSSA paragraph 4.5.1.
- 10. WE shall develop and implement a plan to remediate stream and impoundment shoreline erosion sites caused by the operation of the projects in accordance with WSSA Paragraph 5.1.5.
- 11. WE shall provide for downstream fish protection and passage in accordance with WSSA Section 4.3.
- 12. The state reserves the right to seek civil or criminal penalties and liabilities under applicable law.
- 13. Nothing herein shall relieve WE from the requirement to obtain any other necessary permits, licenses, or approvals from other federal or state departments or agencies.
- 14. The addresses or contact points for consultations, approvals, and submittals of plans and reports as referred to in this document are as follows:

#### WDNR:

Name: WDNR FERC Coordinator, Cheryl Laatsch Address: N7725 Highway 28, Horicon WI 53032

E-mail: Cheryl.laatsch@wisconsin.gov

#### WE:

Name: Wisconsin Electric Power Company, Mr. Todd Jastremski

Address: 800 Industrial Drive, Iron Mountain, MI 49801

E-mail: todd.jastremski@we-energies.com

15. Wisconsin Electric shall implement and follow any other water quality requirements of the Wilderness Shores Settlement Agreement that may be applicable to the Twin Falls hydroelectric project not mentioned above.

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Document Content(s)
P-11831-095.DOC1-26