

Information for File #2012-00210-CKK

Applicant: Wisconsin Electric Power Company

Corps Contact: Nick Domer, U. S. Army Corps of Engineers, 211 North Broadway, Suite 221, Green Bay, Wisconsin 54303; nicholas.t.domer@usace.army.mil; (920) 448-2824.

Primary County: Florence

Location: Sections 2, 11, and 12, Township 39N, Range 19E

Information Complete On: 7-19-2013

Posting Expires On: 8-22-2013

Authorization Type: Section 404 Letter of Permission

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified below. An approved jurisdictional determination may be made prior to reaching a permit decision, if an approved determination is made, it will be posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/>.

PROJECT DESCRIPTION AND PURPOSE: Wisconsin Electric Power Company (Wisconsin Electric) has applied for a Department of the Army permit to discharge dredged and fill material into waters of the United States to construct a new powerhouse at the Twin Falls Hydroelectric Project located on the Menominee River in Florence County, Wisconsin, and in Dickinson and Iron Counties, Michigan (Figure 1). The new powerhouse would be located on the Wisconsin side of the Menominee River and would replace an existing powerhouse located on the Michigan side of the Menominee River near Iron Mountain, Michigan (Figure 2). In addition to the new powerhouse, Wisconsin Electric proposes to remove the exiting powerhouse, install added spillway capacity, place riprap along the Wisconsin gravity dam, and install a closure dam at the site of the existing powerhouse forebay. The purpose of the project is to address regulatory and safety concerns identified in a safety inspection report filed with the Federal Energy Regulatory Commission on December 13, 2010.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: Approximately 0.10 acre of the Menominee River would be permanently filled for the construction of the new powerhouse, the closure dam, and gravity wall facing and 0.67 acre would be temporarily filled in association with the placement of three temporary cofferdams, one upstream and two downstream of the existing powerhouse. The three temporary cofferdams would be placed in the river during construction and removed upon completion. A secondary impact of the closure dam installation is post-construction dewatering of the existing 0.46 acre forebay. Excavation would also occur in the forebay and tailrace areas of the new powerhouse and would impact 0.25 acre of the Menominee River.

ALTERNATIVES CONSIDERED: The no-action alternative would avoid impacts to waters of the United States; however the alternative was eliminated by Wisconsin Electric because it failed to address the need and purpose of the project. Additional alternatives considered and dismissed by the applicant include:

$\frac{3}{4}$ Repair alternative.

$\frac{3}{4}$ Rebuild (New Powerhouse in Michigan) Alternative.

Under the Repair Alternative, Wisconsin Electric would continue to operate and maintain the existing powerhouse and would repair or replace the deteriorating forebay walls, intake structure, and penstocks. The cost of this option when compared to the proposed option has a capital cost that is approximately 8% higher and revenue requirements of close to 20% higher than the proposed option. The Repair Alternative would require the existing powerhouse to be taken off line for two years, which presents a safety concern and would put at risk Wisconsin Electric's ability to meet its licensed operation obligations. According to the applicant, during frozen conditions, it would be impossible to provide the required flow control to maintain license conditions on a daily basis and workers would be exposed to dangerous conditions during de-icing operations which would be necessary to maintain tainter gate functionality. The Repair Alternative was dismissed by Wisconsin Electric because of increased costs, safety concerns, and licensed obligation requirements. Wisconsin Electric considers the Rebuild Alternative not-practicable.

Under the Rebuild Alternative, Wisconsin Electric would remove the existing powerhouse and replace it with a newly constructed powerhouse in Michigan. The estimated capital cost of the Rebuild Alternative is higher than the Repair Alternative and does not include the purchase of replacement power. Capital costs and revenue requirements comparable to the proposed alternative were not developed for this alternative. Under the Rebuild Alternative, the powerhouse and associated equipment would be new with some environmental and recreational enhancements offered. Demolition and construction would take a minimum of four years for this alternative with in-water impacts similar to those for the repair option. Safety and operational considerations as described in the Repair Alternative would apply to this option. Since

the powerhouse currently provides the majority of water control year round and all water control during freezing conditions, loss of this control for four years would increase risk at the site. Concerns identified in the Repair Alternative regarding worker safety, gate operation, and potential gate failure during winter operation would be exacerbated by the longer construction time frame. These concerns, in addition to increased cost led Wisconsin Electric to dismiss the Rebuild Alternative. Wisconsin Electric considers the Rebuild Alternative to be not practicable.

COMPENSATORY MITIGATION: To compensate for unavoidable adverse impacts to the Menominee River, Wisconsin Electric proposes to restore 0.15 acre of the Menominee River occupied by the existing powerhouse back to river channel. Wisconsin Electric further proposes to enhance existing pool habitat downstream of the auxiliary spillway by maintaining a minimum flow release through the auxiliary spillway. The pool habitat to be enhanced is approximately 0.19 acre and is connected to a channel that was constructed at the time the auxiliary spillway was constructed. Increased flows through the pool habitat and channel are expected to support and enhance water quality, fishery resources, and riparian wildlife habitat. Wisconsin Electric has reached an agreement with Michigan DNR, Wisconsin DNR, and the U.S. Fish and Wildlife Service to maintain a flow of no more than 15 cubic feet per second through the spillway. Finally, Wisconsin Electric proposes to place riprap in the form of large boulders and rocks along 900 feet of the Wisconsin embankments to a depth of approximately 8 feet below the ordinary high water mark. The added rock would provide cover for fish and aquatic invertebrates within the flowage. This area would particularly benefit younger and smaller fish by providing them refuge from larger predatory fish. The placement of rock along the Wisconsin embankments would provide approximately 7,200 square feet of additional compensation area for a total of 0.51 acres of aquatic resource enhancement and/or restoration.

RESPONSE TO THIS NOTICE: Interested parties are invited to submit to the Corps contact identified above written facts, arguments, or objections within 30 days of the date of this notice. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant.

DRAWINGS: See attached.

Figure 1. Project Vicinity Map

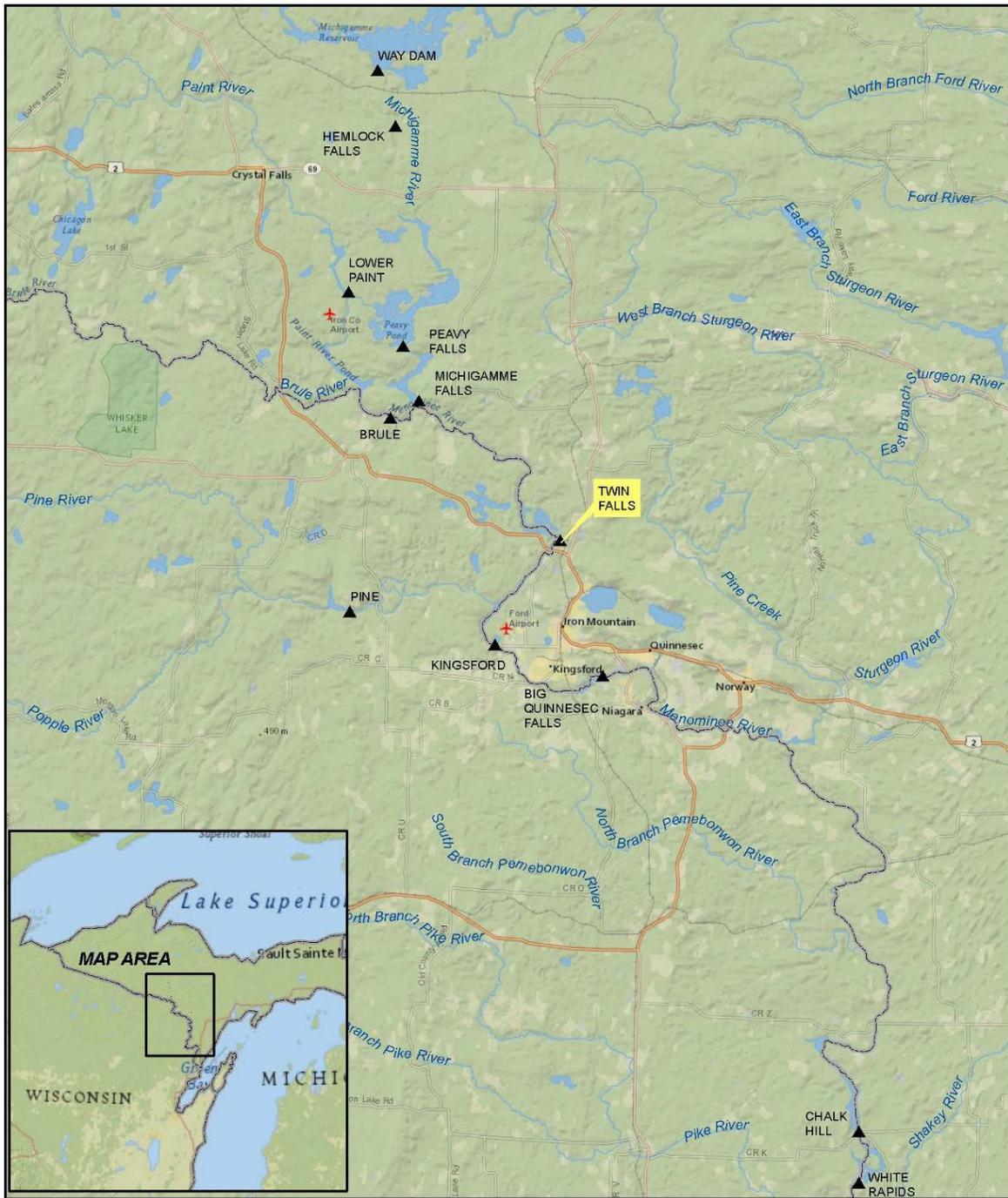


Figure 1: Project Vicinity Map
 Menominee River Basin

Legend
 ▲ Dam Locations
 — State Line

Map Printed Date: 4/4/2012
 R:\Data\Info\ESR\Hydro
 Tim Marquardt, 414-221-4783

WARNING: Do not use for construction purposes.
 For underground facility locations call Diggers Hotline in Wisconsin at 1-800-242-8511, or Miss Dig in Michigan at 1-800-482-7273.
 This document, in whole or in part, may not be reproduced in any form or by any means without the written consent of Wisconsin Electric Power Company 333 W. Everett St., Rm. A259, Milwaukee, WI 53202.

THIS HAS THE DATA AND ALL CONSULTING RELATING THERETO IS PROVIDED AS IS, WITHOUT ANY WARRANTY OF ANY KIND, EXCEPT FOR A WARRANTY OF BOUNTY/INDEMNIFICATION OF COPYRIGHT AND TRADE SECRETS. IT IS EXPRESSLY AGREED THAT THERE IS NO WARRANTY OF ACCURACY, MERCHANTABILITY, OR FITNESS FOR ANY PURPOSES, REGARDLESS OF WHETHER EXPRESS OR IMPLIED. LICENSEE WILL BE USING THE DATA AND INFORMATION PROVIDED HEREIN AT ITS OWN RISK. THIS, EXCEPT FOR THE WARRANTY NOTED IN THIS PARAGRAPH, UNDER NO CIRCUMSTANCES WILL THE COMPANY BE LIABLE FOR ANY INCIDENTAL, DIRECT OR CONSEQUENTIAL DAMAGES OR REVENUES OF ANY KIND, INCLUDING LOSS OF PROFITS, ARISING IN CONNECTION WITH USE OF THE DATA OR CONSULTING INFORMATION.

Figure 2. Existing and Proposed Project Structures Associated with the Twin Falls Powerhouse

