United States Department of the Interior

FISH AND WILDLIFE SERVICE
Twin Cities Field Office
4101 American Blvd E.
Bloomington, Minnesota 55425-1665

May 19, 2014

Mr. Ray French
City of River Falls
222 Lewis Street
River Falls, Wisconsin 54022

Re: FERC Project No. 10489
River Falls Hydroelectric Project
Comments on PAD and Study Requests
Kinnickinnic River, Pierce County, Wisconsin

Dear Mr. French:

The U.S. Fish and Wildlife Service (FWS) has reviewed the Pre-Application Document (PAD) and attended the Joint Meeting: First Stage Consultation for the relicensing of a Federal Energy Regulatory Commission license on March 17, 2014, in River Falls, Wisconsin. In accordance with 18 CFR, Section 16.8(b)(5), the FWS is filing these comments no later than 60 days after the joint meeting held under 18 CFR, Section 16.8(b)(3). Our comments on the PAD and general comments and request for further information follow.

Regulations created pursuant to the Federal Power Act (FPA), as amended, require consultation with the FWS and other resource agencies (18 C.F.R. § 4.38(a) and 18 C.F.R. § 5.1(d)). This response is provided in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852; 42 U.S.C. 4321 et seq.), the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d), the Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), and the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

GENERAL COMMENTS

The River Falls Hydroelectric Project consists of two hydroelectric dams: (1) Upper facilities with (a) a 140-foot-long and 32-foot-high concrete dam; (b) a 15.5-acre reservoir with a storage capacity of 142.7 acre-feet; (c) an 80-foot-long by 6-foot diameter penstock; (d) a powerhouse containing one 250 kW generator, and (2) Lower Facilities with; (a) a 110-foot-long and 16.5-foot-high concrete dam located approximately 0.5 mile downstream of the upper dam; (b) a 15.4 acre reservoir with a storage capacity of 37 acre-feet; and (c) a powerhouse containing one 125-kW generating unit; for a combined total installed generating capacity of 375 kW.

A unique feature of this project is its proximity to the high quality cold-water trout fisheries of the Upper and Lower Kinnickinnic River. The Kinnickinnic River is designated as a premier cold-water trout fishery, and is one of only a few in this category in Wisconsin. The hydroelectric dams at River Falls bisect the Kinnickinnic River into high quality cold-water trout fisheries upstream and downstream, with a marginal warm-water fishery in the vicinity of the dams.

COMMENTS ON SCOPING AND STUDIES

As mentioned above, and pursuant to Section 10(j) of the FPA, the FWS is concerned with the adequate and equitable protection of fish and wildlife resources in relation to the presence and operation of the River Falls Hydroelectric Project. In particular, the FWS is concerned with how the operation and maintenance of the project may impact fish and wildlife resources in the areas upstream and downstream of the dams.

Based on information provided in the PAD, the FWS is concerned with reports that hydropower manipulations may cause daily (and sometimes hourly) flow changes downstream of the dams. These daily manipulations were suggested to potentially result in a 5-10 percent fluctuation in the downstream flow. In addition to fluctuations in flow, it was mentioned at the public meeting, and in communications with local stakeholders, that the impoundments created by the dams may increase water temperature downstream, potentially impacting the delicate cold-water fishery.

Based on these comments, the information provided in the PAD, and concerns raised by local stakeholders, the FWS recommends the following studies to further evaluate the continued operation of this hydroelectric project.

Bathymetry, Sediment, and Aquatic Habitat Survey

To develop a baseline by which to effectively assess impacts of hydroelectric operations on the upstream and downstream environment, it is recommended that the applicant conduct an aquatic habitat and bathymetry survey in the project area. It is also recommended that the applicant conduct a benthic sediment survey within the impoundments to determine the quality and composition of the substrate. The purpose of this survey would be to help the Agencies determine the quantity and quality of aquatic habitat in the area, including the areas immediately upstream and downstream of the dams. Information gathered could be used to determine the rate of sedimentation in the impoundments and the suitability of habitat to native fish and mussel species. The applicant should work with the FWS to develop survey parameters prior to implementation.

Hydrology Study

There appears to be little information on how the flow of the river is impacted by the dams, including sediment transport and current reservoir capacity. In addition to information gathered by surveying the current benthic environment, it is recommended that the applicant analyze sediment transport through the project and quantify the sediment that has accumulated in the

dams impoundments. Also, it is recommended that the applicant verify compliance with the run-of-river condition, which is required by Article 402 of the current project license.

To better understand how the dams impact this high quality river system, both upstream and downstream, it is important to know how water and sediment travel through the system. Run-of-river condition is necessary to mimic the natural flow regime, which is critical to the biotic environment downstream (e.g., mussels and spawning fish). In addition, understanding sediment loading in the river will help to determine if the impoundments are starving the system by trapping these sediments above the dams. Sediment trapping can reduce nutrient transport downstream; impacting the downstream biota and creating nutrient sinks in the impoundments. These sediment and nutrient sinks can create eutrophication and can add to the problem of downstream thermal pollution, which is a concern regarding the status of the Kinnickinnic River as a cold-water trout fishery. The applicant should work with the FWS and other stakeholders to develop study parameters prior to implementation.

Water Quality and Temperature Study

There is concern regarding the water quality and temperature impacts from the impoundments created by the dams. To better understand how these impoundments impact the upstream and downstream river system, it is recommended that the applicant conduct a water quality study, including temperature monitoring. The purpose of this study is to determine how project operation my impact the aquatic environment in the Kinnickinnic River. As mentioned in the PAD, the Kinnickinnic River is a high quality, Class I trout fishery and is considered a large-scale Priority Watershed project through the Wisconsin Nonpoint Source Water Pollution Abatement Program. Because of this distinction, it is important for the applicant to fully assess how the hydroelectric project may impact the quality of the Kinnickinnic River. The applicant should work with stakeholders to develop study parameters prior to implementation.

Fish and Mussel Survey

It is recommended that the applicant conduct an updated fish and mussel survey in the project area, including both impoundments and river adjacent to the project. Previous watershed plans and studies cited in the PAD have identified likely and potential impacts to the excellent cold-water fishery found in the Kinnickinnic River outside the project area. The rest of the river is a Class I trout stream while the impoundments have created a limited warm-water fishery and raise downstream water temperatures. A fisheries and freshwater mussel survey should be conducted to inventory the fish and mussels of the two impoundments, as well as upstream and downstream, to establish the conditions, differences, and likely impacts of the project on injury or mortality, assemblage quality, and recruitment to the impoundments and the river.

In addition to these comments, the FWS concurs with comments provided by the Kinnickinnic River Land Trust, Kiap-Tu-Wish Chapter of Trout Unlimited, River Alliance of Wisconsin, Wisconsin DNR, and National Park Service. We recommend that the applicant schedule a meeting with the agencies and stakeholders to discuss specific parameters for the proposed studies.

We appreciate having the opportunity to provide these comments and recommendations. For further coordination on matters related to fish and wildlife resources, please contact Mr. Nick Utrup of this office at 612-725-2548, extension 2204.

Sincerely,

Lisa Mandell

for Peter Fasbender
Field Supervisor

cc. Ms. Kimberly Bose, Federal Energy Regulatory Commission, Washington, D.C.
Cheryl Laatsch, Wisconsin Department of Natural Resources, Horicon, WI
Denny Caneff, River Alliance of Wisconsin, Madison, WI
Randall Thoreson, National Park Service, St. Paul, MN
Kent Johnson, Kiap-Tu-Wish Chapter Troup Unlimited, Hudson, WI
David Fodroczi, Kinnickinnic River Land Trust, River Falls, WI