

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 12514-074 -- Indiana  
Norway-Oakdale Hydroelectric Project  
Northern Indiana Public Service  
Company

November 10, 2016

Mr. Scott Pruitt  
Field Supervisor  
Bloomington Field Office  
U.S. Fish and Wildlife Service  
620 S. Walker St.  
Bloomington, IN 47403

Subject: Request for concurrence under the Endangered Species Act

Dear Mr. Pruitt:

On October 2, 2014, Northern Indiana Public Service Company (NIPSCO or licensee) filed with the Federal Energy Regulatory Commission (Commission) an application to amend its license for the 16.4-megawatt (MW) Norway-Oakdale Project located on the Tippecanoe River in Carroll and White counties, Indiana. NIPSCO proposes to revise article 403 of the project license issued on October 2, 2007<sup>1</sup> to include a low-flow definition of abnormal river conditions in order to implement the protocols outlined in the U.S. Fish and Wildlife Service's Technical Assistance Letter (TAL) dated August 13, 2014. NIPSCO included the TAL in exhibit A of its October 2, 2014 amendment application.

The TAL is a set of operating rules under which "run-of-river" flows from Oakdale Dam are determined by scaling, based on drainage area, the previous 24-hour daily average flow measured at the U.S. Geological Survey (USGS) Winamac gage (No. 03331753) to the flow discharged at Oakdale Dam. The purpose of the TAL is to avoid take of federally listed mussel species including clubshell (*Pleurobema clava*), rayed bean (*Villosa fabalis*), sheepnose (*Plethobasus cyphus*), snuffbox (*Epioblasma triquetra*),

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<sup>1</sup> *Northern Indiana Public Service Company*, 121 FERC ¶ 62,009 (2007).

fanshell (*Cyprogenia stegaria*), and the threatened rabbitsfoot (*Quadrula cylindrica cylindrica*), including its designated critical habitat.

Under the TAL, a new abnormally low-flow (ALF) condition would be added to the definition of abnormal river conditions. ALF conditions would be defined as a 24-hour daily average of river flow of  $\leq 300$  cubic feet per second (cfs) as measured at the Winamac gage or in the event of an equipment or operation issue at Oakdale Dam unrelated to upstream weather conditions, a 24-hour daily average of river flow of  $\leq 570$  cfs at the USGS Oakdale gage (No. 03332605). When ALF conditions occur, the licensee would release from Oakdale Dam a flow equal to 1.9 times the previous day's flow measured at the Winamac gage. In addition to accommodate implementation of the TAL, the licensee proposes to maintain the fluctuation of Lake Shafer's surface elevation to within 0.75 foot above and 0.25 foot below elevation 647.47 feet NGVD and Lake Freeman's surface elevation to within 0.75 foot above 612.45 feet NGVD. A detailed description of the licensee's proposal can be found in section 2.2.1 of our final environmental assessment (EA) issued on November 10, 2016.

Our analysis indicates that several factors are likely to impede the effectiveness of the TAL at simulating run-of-river operation of Oakdale Dam under ALF conditions. These factors relate primarily to inaccuracies associated with estimating inflows to the project using data from a stream gage that is located 45 miles upstream of Oakdale Dam, including changes in the accuracy of flow measurements over time, lag time for the measured flows to reach the project, and the influence of local hydrologic events. All of these factors would contribute to flow releases that are not representative of run-of-river conditions.

Removing the lower water surface elevation requirement at Lake Freeman would allow NIPSCO to use storage from Lake Freeman to comply with the flow releases from Oakdale Dam required by the TAL. Our analysis provided in the final EA indicates that the potential exists for Lake Freeman to be drawn down substantially during low-flow periods to meet the flows required by the TAL. These drawdowns would result in frequent and substantial adverse effects on resources associated with Lake Freeman. Adverse effects could include: (a) impaired use of docks and boat lifts, (b) impaired public access at boat ramps, (c) the potential for hazardous boating conditions, (d) noxious odors due to the mortality of fish and mussels in the lake, (e) diminished recreational experiences, (f) temporary adverse effects on businesses that rely on consistent lake surface elevations for summer tourism, (g) exposure of cultural resources present in the lake, and (h) potential long-term effects on property values along the shoreline of the lake due to the potential that drawdowns may be required in the future, especially during summer low flow periods.

We recommend our staff alternative instead of the licensee's proposal to follow the protocols in the TAL. Under this alternative, as with the licensee's proposal, a new ALF definition would be added defined as a 24-hour daily average river flow of  $\leq 300$  cfs

as measured at the Winamac gage, or in the event of an equipment or operation issue at Oakdale Dam unrelated to upstream weather conditions, a 24-hour daily average of river flow of  $\leq 500$  cfs at the USGS Oakdale gage.

When ALF conditions occur, the licensee would immediately cease generation at the Oakdale development and operate the gates at each development to maintain the water surface elevation of Lake Freeman at the elevations occurring when the developments ceased generation. This would implement run-of-river operation. A detailed description of the staff alternative can be found in section 2.3 of our final EA.

In our final EA, we conclude that under the recommended staff alternative, flow fluctuations downstream of Oakdale Dam associated with project operations would be eliminated by requiring that lake elevations be held constant during ALF conditions. This would enhance conditions for listed mussels downstream of the project compared to the conditions that have existed since the project was constructed more than 85 years ago, by reducing flow fluctuations and the risk of the potential for mussel stranding, desiccation, and predation. In addition, under the staff alternative, potential adverse effects on recreation, public access, cultural resources, tourism, and other economic effects in and around Lakes Shafer and Freeman would be avoided.

In section 3.4.3 of our final EA, we conclude that our staff alternative is not likely to adversely affect the clubshell, rayed bean, sheepsnose, snuffbox, fanshell, and the threatened rabbitsfoot, including its designated critical habitat. We also conclude that our staff alternative would not affect the Indiana or northern long-eared bat because the proposed action does not include any activities that would directly affect these species or their potential habitat, such as removal of vegetation or forests, or disturbance to the existing forested or riparian areas along the project reservoirs or Tippecanoe River.

A copy of our final EA with our ESA determinations is attached to this letter. Please review our findings and, within 30 days of the date of this letter, provide your concurrence with our not likely to adversely affect determination for the six mussel species discussed above and designated critical habitat for the rabbitsfoot mussel.

If you do not agree with our determinations, please give us your biological opinion on our findings no later than 135 days from receipt of this request, as required by 50 CFR § 402.14(e). If we don't hear from you within 30 days, we will assume that you have sufficient information to initiate formal consultation and will provide us with your biological opinion.

The Commission strongly encourages electronic filing. Please file the requested information using the Commission's eFiling system at <http://www.ferc.gov/docs-filing/efiling.asp>. For assistance, please contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), (866) 208-3676 (toll free), or (202) 502-8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy

Regulatory Commission, 888 First Street NE, Washington, D.C. 20426. The first page of any filing should include docket number P-12514-074.

Thank you for your assistance. If you have any questions concerning this matter, please contact Mark Pawlowski at (202) 502-6052.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Hocking".

Steve Hocking, Chief  
Environmental and Project Review Branch  
Division of Hydropower Administration and  
Compliance

Enclosure: Final Environmental Assessment

cc: Anthony Sayers  
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