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

February 16, 2017

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

Subject: Additional Information and Request for Concurrence or Biological Opinion

Dear Mr. Pruitt:

This letter responds to your letter filed with the Commission on December 9, 2016, requesting addition information to proceed with formal consultation under section 7 of the Endangered Species Act (ESA).

On October 2, 2014, Northern Indiana Public Service Company (NIPSCO or licensee) filed with the Commission an application to amend its license for the 16.4-megawatt Norway-Oakdale Project located on the Tippecanoe River in Carroll and White counties, Indiana. NIPSCO proposes to revise Article 403 of the project license[1] to include a low-flow definition of abnormal river conditions to implement the protocols outlined in the U.S. Fish and Wildlife Service's (FWS) August 13, 2014 Technical Assistance Letter (TAL). NIPSCO included the TAL in Exhibit A of its amendment application.

On February 12, 2015, Commission staff issued a notice of the licensee's amendment application and solicited comments, motions to intervene, and protests. On October 9, 2015, Commission staff issued a draft environmental assessment (EA) for the

[1] Northern Indiana Public Service Company, 121 FERC ¶ 62,009 (2007).

project. The draft EA evaluated the proposed action and two alternatives: the no-action alternative and the staff-recommended alternative. Under the staff-recommended alternative, NIPSCO would operate the Oakdale dam run-of-river by maintaining a stable impoundment elevation during low-flow events.

The following participants filed comments on the draft EA: FWS; Indiana Department of Natural Resources; NIPSCO; Shafer and Freeman Lakes Environmental Conservation Corporation; Carroll and White Counties, Indiana; the City of Monticello, Indiana; and the U.S. Environmental Protection Agency. On May 10, 2016, Commission staff hosted a technical conference in Monticello, Indiana, to discuss the differences between the proposed action and the staff-recommended alternative as presented in the draft EA.

On November 10, 2016, Commission staff issued a final EA. The final EA addresses the comments received on the draft EA and continues to recommend the staff-recommended alternative. The final EA concludes that adopting the staff-recommended alternative is not likely to adversely affect the endangered Northern riffleshell (Epioblasma torulosa rangiana), clubshell (Pleurobema clava), rayed bean (Villosa fabalis), sheepnose (Plethobasus cyphus), snuffbox (Epioblasma triquetra), and fanshell (Cyprogenia stegaria), and the threatened rabbitsfoot (Quadrula cylindrica cylindrical), including its designated critical habitat downstream of Oakdale Dam. On November 10, 2016, we also sent you a letter requesting your concurrence with our determinations for the above species. If you did not concur, we asked you to consider the information in our final EA as our Biological Assessment (BA) and requested initiation of formal consultation and your Biological Opinion (BO) within 135 days.

By letter dated December 9, 2016, you stated that you do not concur with our not likely to adversely affect determinations. You explained that additional information is needed before you can initiate formal consultation and identified six data gaps.

Attached is our response to the six data gaps you identify. You now have all the best available scientific and commercial information. We are not preparing a separate BA or revising our final EA. Please provide us with your concurrence with our not likely to adversely affect determinations for the above species or, if you do not concur, we ask that you initiate formal consultation under section 7 of the ESA and provide us with your BO within 135 days from the date of this letter pursuant to 50 CFR § 402.14(e).

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

Sincerely,

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

cc: Anthony Sayers
General Manager-Generation
Northern Indiana Public Service Company
801 E. 86th Avenue
Merrillville, IN 46410

Response to the U.S. Fish and Wildlife Service's December 9, 2016 Request for Additional Information

1. **The EA does not estimate take, which in and of itself makes it problematic as a BA.**

   The final EA does not estimate take because it concludes that adopting the staff-recommended alternative is not likely to adversely affect federally listed mussels located in the Tippecanoe River downstream of Oakdale Dam.

2. **Critical habitat has been designated for the rabbitsfoot mussel throughout the 18 miles downstream of Oakdale Dam. There is no discussion how the proposed operating procedures constitute an effect on critical habitat.**

   The final EA concludes that adopting the staff-recommended alternative would not likely adversely affect designated critical habitat located in the Tippecanoe River for the rabbitsfoot mussel.

3. **The Service has demonstrated and NIPSCO has stated in meetings and in writing that it cannot both maintain lake levels within the existing requirements and maintain stable flows downstream (natural flow). The BA therefore must discuss how the frequency, quantity, and durations of flow downstream will be disrupted (or vary from the natural flow) to maintain stable lake levels.**

   The staff-recommended alternative would only be implemented when low flows occur in the river as a result of natural low-flow conditions (i.e., drought). By maintaining a stable reservoir elevation, the frequency, quantity, and duration of flow would be dictated by natural low flows within the river basin because there would be no change in the storage of water during low flow periods particularly at Lake Freeman. Section 3.4.1.2 of the final EA finds that the frequency of low-flow events, defined as 500 cfs at the Oakdale gage, occurs 11 percent of the time. Table B-6 provides the frequency of low-flow events by event duration. Table 3-8 summarizes monthly flow data into Lake Freeman (mean, maximum, minimum, and select exceedance for flows) and Figure B-14 provides flow duration curves for the gages located at Ora and Winamac, and the synthesized flows at Winamac based on prorated flows from the Ora gage. In summary, the final EA provides the data and analysis needed to support the conclusion that the frequency, quantity, and duration of flow downstream would not be disrupted (or vary from natural flow) under the staff-recommended alternative.

4. **Maintaining stable lake levels also necessitates increased flow (i.e., dumping water to maintain lake level during high flows). The BA must discuss how this affects the listed mussels at various times of the year, especially its potential effects on mussel reproduction during the spring, summer, and autumn.**

The staff-recommended alternative would only be implemented when low flows occur in the river as a result of natural events (i.e., drought). Therefore an analysis of spill occurring as a result of high flow events is not necessary to understand the effects of the staff-recommended alternative. Further, the period of concern for listed mussels is when flows are too low, not high. The final EA contains the data and analysis needed to support the staff-recommended alternative that addresses low-flow events.

Both the staff-recommended alternative and the proposed action would allow NIPSCO to store more water outside of low-flow periods to return the water surface elevation of Lake Freeman to normal. However, we conclude that under the staff-recommended alternative less water would be needed to return the water surface elevation of Lake Freeman to normal, because the proposed action does not account for water lost through evaporation, water withdrawals, evapotranspiration, and whether a particular stretch of river is a losing or gaining reach. These water losses, or in some cases gains, are taken into account under the staff-recommended alternative because no change in storage would be permitted during low-flow events.

5. **The Service has documented that there are vulnerable habitats within the 18 miles of the Tippecanoe River downstream of Oakdale Dam. The Service has also documented that the rabbitsfoot is a shallow habitat specialist and that other listed species frequently use shallow habitats within the Tippecanoe. Bathymetric data showing the amount (number and size) of these vulnerable habitats in the affected area is necessary to develop a reasonable estimate of the take (including harm and mortality).**

As mentioned above, the final EA does not estimate take because it concludes that adopting the staff-recommended alternative is not likely to adversely affect federally listed mussels located in the Tippecanoe River downstream of Oakdale Dam. Therefore, we conclude that additional bathymetric data is not needed. A discussion of results from mussel surveys conducted in 2003 and 2008 can be found in sections 3.4.1 and 3.4.3 of the final EA. The 2003 survey was conducted on behalf of NIPSCO (ESI 2003b).[2] The 2008 survey was conducted by NIPSCO, the Indiana Department of Natural Resources, and the FWS.[3]

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[2] Ecological Specialist Inc. 2003b. Final Report: Characterization of Tippecanoe River Unionid communities, Pulaski, White, and Carroll Counties, Indiana. Prepared for Montgomery Watson Harza Americas, Inc. under contract to Northern Indiana Public Service Company, Monticello, IN. ESI, O'Fallon, MI. August 2003. 40pp. Available at: http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=10180886.

[3] Montgomery Watson Harza Americas, Inc. 2008b. Tailwater rampdown rate monitoring report (license article 408) April-May drawdown events. Prepared for

6. Data from the systematic, quantitative sampling of mussels throughout the 18 mile reach is needed to establish the likely impact of the proposed operating procedures on the mussel populations.

The final EA contains the data and analysis needed to support the conclusion that the staff-recommended alternative is not likely to adversely affect listed mussels. Therefore, we conclude that additional data from the systematic and quantitative sampling of mussels downstream of the project is not needed.

Northern Indiana Public Service Company, Monticello, IN. MWH, Chicago IL. September 2008. 59 pp. Available at: http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11810184.