



United States Department of the Interior



FISH AND WILDLIFE SERVICE
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March 29, 2013

Laura Quinn-Willingham
Environmental Project Branch 2
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
Mail Stop: T-6 C32
Washington, DC 20555

RE: Bell Bend Nuclear Power Plant
USFWS Project #2009-0501

Dear Ms. Quinn-Willingham:

This documents ongoing consultation between the Fish and Wildlife Service (Service), Nuclear Regulatory Commission, U.S. Army Corps of Engineers, and Pennsylvania Power and Light regarding PPL's proposed construction and operation of the Bell Bend Nuclear Power Plant (BBNPP) in Salem Township, Luzerne County, Pennsylvania. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

In our letter of May 7, 2012, we provided comments on the *Indiana Bat Biological Evaluation and Management Plan for the Proposed Bell Bend Nuclear Power Plant Site*, dated November 2011. In response, the applicant's August 2012 biological evaluation provided additional information and clarification with respect to the issues that were raised. This letter details our comments on the August 2012 biological evaluation (BE), which was prepared by Normandeau Associates, Inc. for the project applicant. We understand the Nuclear Regulatory Commission will be using the BE to develop a biological assessment for the purpose of initiating formal consultation with the Service due to the anticipated adverse effects of the project on the federally-listed, endangered Indiana bat (*Myotis sodalis*). These comments are provided to assist the Nuclear Regulatory Commission in working with the applicant to ensure the resulting biological assessment adequately addresses effects on the Indiana bat.

Summer Surveys

We understand the applicant proposes to conduct summer surveys, beginning approximately June 1, 2013. As the Indiana bat summer survey protocol is currently undergoing review and revision, we recommend that PPL periodically check for developments related to summer survey guidelines for 2013 (see <http://www.fws.gov/midwest/Endangered/mammals/inba/index.html>). If the acoustic protocol is finalized before the 2013 survey season, it would be prudent to implement both mist-net and acoustic surveys rather than just acoustic surveys. If the acoustic

survey detects Indiana bats, we will not know whether this represents a maternity colony unless a female or juvenile is captured via a mist-net survey. If a maternity colony is detected, the BE should be expanded to evaluate effects on the maternity colony and its habitat.

Habitat Fragmentation and Disturbance

The revised BE acknowledges that forest clearing, project construction and project operation will isolate some forest blocks. As a result of habitat loss, habitat fragmentation and project-related disturbance, these forest blocks will be rendered unsuitable or of diminished habitat quality either permanently or temporarily. There will be extensive construction disturbance and habitat alteration during and after project implementation, such that Indiana bat use of many of the isolated forest fragments will be unlikely. The rate at which Indiana bats are displaced from these parcels will vary, based on construction sequencing, as well as the proximity and type of disturbance. However, by the end of project construction, there will be a low likelihood of Indiana bat occupation of the isolated forest fragments.

The revised BE includes two maps depicting "isolated forest fragments". Under Scenario 1 (Figure 3), 2.8 acres of forest are isolated while under Scenario 2 (Figure 4) 129.3 acres of forest are isolated. Scenario 2 comes closest to depicting the isolated forest fragments within which Indiana bats are likely to be disturbed or displaced. However, some of the forest fragments in Figure 4 are far enough from project activities that any Indiana bats using those forested areas would not be expected to be adversely affected. Specifically, forest fragments shown in the northeastern part of the map should not be counted against the proposed project. We have provided a modified Figure 4 (enclosed), to assist the applicant in adjusting the extent of isolated forest fragments. This adjustment should be reflected in Appendix D as well.

Compensatory Mitigation

Indiana Bat Conservation Fund

The USFWS has no objection to PPL mitigating for forest impacts using an in-lieu fee instrument, such as the Indiana Bat Conservation Fund (IBCF), as proposed in Appendix D of the BE. However, this mitigation option should be implemented prior to tree clearing (*i.e.*, impacts on Indiana bat habitat) rather than "prior to the initiation of any site construction" (BE, page 30).

The BE notes (p. 30) that the amount of the in-lieu contribution would be subject to change based on the results of the planned 2013 summer mist-net surveys. We concur that the amount may increase should a maternity colony be found. However, *summer* survey results do not address the expected use of forest habitat near hibernacula during the *spring* and *fall*. Also, while mist-net surveys are fairly reliable in documenting the presence of maternity colonies, which represent a high-density assemblage of bats, these surveys are much less reliable in documenting the presence of male and non-reproductive female Indiana bats, which occur at very low densities across the summer landscape. In particular, male Indiana bats tend to use forest habitat close to their hibernacula throughout the spring, summer and fall. Consequently, while negative mist-net survey results are a good indication that maternity colonies are not present in the project area, they do not discount the presence of male Indiana bats during the

spring, summer and fall, considering the close proximity of this project to three known Indiana bat hibernacula.

The impact acres on the Calculation Sheet for Indiana Bat Habitat Compensation should be adjusted to account for modifications to the extent of isolated forest fragments (BE, Figure 4).

On-site Mitigation

The BE describes an on-site mitigation alternative that includes reforestation, natural succession and conservation of existing forest lands. As noted in our letter of May 7, 2012, conservation lands proposed for compensatory mitigation would be subject to a permanent conservation easement, to be held by a conservation entity that is willing and able to hold and manage such lands in perpetuity for the benefit of the Indiana bat. Both the easement and its associated Resource Management Plan are subject to review and approval by the Service, and both should be in place prior to any project-related forest clearing. The Resource Management Plan would include an inventory of the conservation lands and detail specific management guidelines that would achieve high quality foraging and roosting habitat for Indiana bats. It would replace Appendix E of the BE.

While on-site forest conservation provides for compensation immediately adjacent to the impacted forests, habitat compensation via the IBCF can optimize the location of conserved lands where it will have the greatest benefit to Indiana bats in Pennsylvania. Also, the conservation benefit would be realized much sooner via the IBCF as lands would be purchased and permanently protected within a few years of the deposit, while reforested areas on-site would not provide high-quality habitat for many years.

In the current BE, there is a preferred (IBCF) and alternative (on-site) habitat mitigation option. However, in the biological assessment that will be submitted to initiate formal consultation, the NRC will need to clearly identify the actual compensation method (either IBCF or on-site habitat conservation). The Service will need to know which option will actually be implemented to conduct its effects analysis and issue a biological opinion.

Please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

Please contact Robert Anderson of my staff at 814-234-4090 if you have any questions or require further assistance.

Sincerely,



Sarah Gannon-Nagle
Acting Field Office Supervisor

Enclosure

cc:

PGC – Librandi-Mumma

COE – Amy Elliott

PPL – Gary Petrewski

Readers file

ES file

Response type: custom (comments on BE)

ES:PAFO:ckc: 03/11/2013

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Figure 4. BBNPP Isolated Forest Fragments, Scenario 2 (MODIFIED by USFWS on March 11, 2013)

NOTE: Within area bounded by solid white polygon, do not include these forests as isolated or disturbed due to the proposed BBNPP project

