



August 30, 2012

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

**BELL BEND NUCLEAR POWER PLANT
INDIANA BAT BIOLOGICAL EVALUATION AND
MANAGEMENT PLAN**

BNP-2012-193 Docket No. 52-039

Reference: 1) C. Riley, USFWS, to L. Quinn-Willingham, NRC, USFWS Project No. 2009-0501,
“Comments on the *Indiana Bat Biological Evaluation and Management Plan for
the Proposed Bell Bend Nuclear Power Plant Site*, dated November 2011”,
May 7, 2012.

The purpose of this letter is to submit the PPL Bell Bend, LLC. (PPL) *Indiana Bat Biological
Evaluation and Management Plan for the Bell Bend Nuclear Power Plant Project* (BEMP). The
responses to the associated NRC Requests for Additional Information, which reflect the
referenced U.S. Fish and Wildlife Service (USFWS) comments on the November 2011 draft
plan, have been accounted for in the BEMP, and are provided in tabular format as Enclosure 1.
No changes to the Bell Bend Nuclear Power Plant Combined License Application are being
proposed as a result of this information.

In the attached BEMP (Enclosure 2) PPL has identified payment to the Indiana Bat
Conservation Fund as its preferred mitigation alternative. An on-site mitigation alternative is
also presented in the BEMP, however, USFWS conservation easement requirements may
preclude implementation of this alternative. PPL is available to discuss this and any other
matters further as the consultation process proceeds.

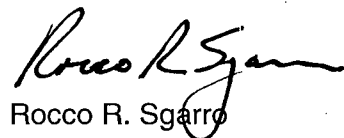
Should you have questions or need additional information regarding these responses, please
contact Gary Petrewski of our staff (gpetrewski@pplweb.com or 610-774-5996), or the
undersigned.

There are no new regulatory commitments in this letter.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 30, 2012.

Respectfully,


Rocco R. Sgarro

RRS/kw

Enclosures: 1) Table providing responses to associated NRC RAIs
2) Indiana Bat Biological Evaluation and Management Plan for the Bell Bend
Nuclear Power Plant Project, Revision 0, dated August 2012 (Provided on Disc)

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HPO

cc: (w/ Enclosures on disc)

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Enclosure 1

Table providing responses to associated NRC RAIs

NRC RAI	Question Summary	PPL Response
TE-39	Provide any plans to re-survey the BBNPP project area in 2013 for the Indiana bat, taking into consideration the supporting information provided.	PPL intends to undertake a new mist net survey in 2013. A study plan will be developed in consultation with the NRC and USFWS, and filed for inclusion in the record prior to initiation of the study work. Field work in 2013 would be expected to commence on or about June 1. A report on the results of the 2013 survey would be filed with the NRC within 90 days of completion of the field work.
TE-40	Provide a series of figures that subdivide and cover the BBNPP project area depicting the sizes of forest parcels that would remain after site development, the distances that would separate them, and the project infrastructure that would separate them during both the construction and operation phases of the project. Describe the construction activities, including duration, which would occur in the land areas that separate these forest parcels, and the future uses of and the activities that would occur within these land areas during plant operation. Describe how potential impacts to Indiana bats from forest fragmentation would affect the current mitigation compensation ratio of 1.6:1 (386 ac preserved: 234 ac impacted) in the October 2011 <i>Indiana Bat Biological Evaluation and Management Plan</i> .	With respect to forest fragmentation and isolation, the approach taken by PPL in the BEMP was to bracket the potential range of forest fragmentation and isolation that may occur on the Bell Bend site based on available published research on this topic, and in consideration of both construction and post-construction impacts. Scaled figures illustrating the range of potential forest fragmentation and isolation are provided as Figures 3 and 4 of the BEMP. Separation distances between forest fragments can be readily scaled from these figures, however, this exercise is not believed to be warranted. Forest areas on these figures have been overlain on site infrastructure to permit an understanding of both potential construction and post-construction impacts. In addition, as requested by the USFWS, construction sequencing diagrams have been included in Appendix B.
TE-41	Provide a figure that depicts hardwood and mixed-hardwood forest habitat available within a 10 mi radius of BBNPP site, as depicted in Figure 4 of the October 2011 <i>Indiana Bat Biological Evaluation and Management Plan</i> . Provide a determination of the percentage of the total hardwood and mixed-hardwood forest habitat available in this area that would be lost by development of the BBNPP site.	The requested figure is provided as Figure 6 of the BEMP. Section 5.2 of the BEMP discusses this figure with respect to the percentage of the total hardwood and mixed-hardwood forest habitat available in this area that would be lost by development of the BBNPP site.
TE-42	Provide any plans or procedures for adhering to the alternative process recommended by FWS for performing	PPL has fully adopted USFWS recommended emergency tree cutting procedures as specified in their letter of

	an emergency cutting of a potential roost tree from April 1 to November 15, as described in the FWS May 7, 2012 letter to the NRC (ML121450545).	May 7, 2012 letter to the NRC (ML121450545). These procedures are contained in Section 6.1 of the BEMP.
TE-43	Provide an explanation of the types and acreages of compensatory mitigation for impacts to forest habitat for the Indiana bat, and include any areas of passive reforestation if such areas are part of the mitigation plan. Revise Figures 2 and 5 of the <i>Indiana Bat Biological Evaluation and Management Plan</i> to include areas of passive reforestation if such areas are part of the mitigation plan.	<p>It should be noted that following the October 2011 Joint Permit Application meeting where USFWS provided verbal comments on the draft BEMP, PPL subsequently revised the draft BEMP and informally provided a copy to USFWS via e-mail (copy to NRC) for further consideration. The comments contained in the May 7, 2012 USFWS letter to the NRC (ML121450545) were based on this revised draft which is the reason for the discrepancies noted in this RAI.</p> <p>PPL's preferred mitigation plan which includes forested wetlands mitigation and funding the Indiana Bat Conservation Fund is contained in Section 7.3 of the BEMP. An alternative mitigation option consisting of reforestation, natural succession, and habitat conservation is contained in Section 7.4 of the BEMP. Figures 8 and 9 illustrate this mitigation alternative.</p>
TE-44	Provide any plans to place all Indiana bat compensatory mitigation lands (forest preservation [386 acres], active reforestation [58 acres], and passive reforestation through natural succession [137 acres] [Note that inclusion of the 137 acres is questioned in a related RAI], totaling 581 acres) into a conservation easement for permanent protection and develop a corresponding resource management plan prior to any disturbance of Indiana bat habitat on the BBNPP site, as described in the supporting information. Also provide any plans to disclose to FWS, NRC, and a prospective easement holder any factors that could render the conservation easement property vulnerable to future habitat loss.	<p>PPL's preferred mitigation plan, which includes forested wetlands mitigation and funding the Indiana Bat Conservation Fund, is contained in Section 7.3 of the BEMP.</p> <p>An on-site mitigation alternative is also presented in the BEMP (Section 7.4), however, USFWS conservation easement requirements may preclude implementation of this alternative. PPL is available for further discussion as required to clarify this matter before requested disclosures affecting potential conservation easements can be provided.</p>
TE-45	Provide any plans to include the 137 acres of passive reforestation (natural succession) in the long-term monitoring and maintenance plan originally established for the 58 acres of active reforestation, and to provide any plans	<p>PPL's preferred mitigation plan, which includes forested wetlands mitigation and funding the Indiana Bat Conservation Fund, is contained in Section 7.3 of the BEMP.</p> <p>Section 7.4 and Appendix E (Management</p>

	for proactive intervention for both the active or passive reforestation areas to ensure the long-term success of reforestation, as described in the supporting information. Indicate the foreseen duration of the long-term monitoring and maintenance plan based on a conservative estimate of the time required to achieve success.	Plan for Reforestation, Natural Succession and Habitat Conservation Lands) of the BEMP summarizes management actions related to this mitigation option.
TE-46	Provide a figure/map depicting the 11.8 acres of palustrine forested wetland that would be impacted and the extent to which this area overlaps with the area of mitigative reforestation for the Indiana bat. Provide a discussion of how the 10-yr wetland monitoring and corrective action plan specified in Section 3.1.2 of the October 2011 <i>Indiana Bat Biological Evaluation and Management Plan</i> would interface with the long-term monitoring and maintenance plan noted in RAI TE-45 to ensure that any forested wetland mitigation would be successful for the Indiana bat.	<p>The 11.8 acres of impacted palustrine forested wetlands in the October 2011 draft BEMP was an error. The corrected total of 11.34 acres is shown in Table 2 of the Roost Tree Survey which is contained as Appendix C of the BEMP. The corresponding numerically identified wetland areas (3, 5, 8, 9, 10, 12, 26, and 29) are shown in Figure 4 of the Roost Tree Survey Report.</p> <p>With respect to forested wetlands mitigation, PPL has proposed a standard 10-year monitoring period to ensure successful growth of planted wetlands species. Maintenance will include invasive species monitoring and removal, and replanting as may be required to ensure the development of a proper wetlands species mix for Indiana bat.</p>
TE-47	Provide any plans to begin restoration efforts as expediently as possible in areas of both active (58 ac) and passive (137 ac) reforestation, in order to partially offset the permanent loss of resource function for Indiana bats that would occur within the 244 ac of suitable forest habitat that would be impacted by the BBNPP project.	PPL's preferred mitigation plan, which includes forested wetlands mitigation and funding the Indiana Bat Conservation Fund, is contained in Section 7.3 of the BEMP. PPL would propose to place these monies in escrow prior to the initiation of project construction.
TE-48	Provide a summary of the methods used and locations searched in order to determine that no potential Indiana bat hibernacula exist within the BBNPP project boundary.	Section 5.1 of the BEMP provides a summary of the methods used and locations searched in order to determine that no potential Indiana bat hibernacula exist within the BBNPP project boundary.
TE-49	Provide the reference for the requirement on page 26 of the BEMP that at least 70 percent of the total Indiana bat forested habitat to be affected must be reforested, unless off-site mitigation measures are used. Provide the acreages of the offsite (based on BEMP Figure 1, this is east of the Susquehanna River) reforestation	Section 7.4 of the BEMP provides the references for the criterion used as a basis for the alternative mitigation plan including the requirement at least 70 percent of the total Indiana bat forested habitat to be affected must be reforested, unless off-site mitigation measures are used. As noted in this section, reforestation and natural succession may or may not meet this

	<p>and conservation areas, and whether (and if so, how) these are an adequate substitution for the 105 ac (45 percent) of impacted Indiana bat habitat that would not be reforested, as explained in the supporting information.</p>	<p>criterion, as a result PPL has identified habitat conservation lands as a supplemental component of this mitigation alternative.</p>
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Enclosure 2

Indiana Bat Biological Evaluation and Management Plan for the Bell Bend Nuclear Power Plant
Project, Revision 0, dated August 2012 (Provided on Disc)