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April 10, 2014

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

# BELL BEND NUCLEAR POWER PLANTRESPONSES TO MARCH 2014ENVIRONMENTAL AUDIT QUESTIONSBNP-2014-030Docket No. 52-039

The purpose of this letter is to provide responses to questions raised during the NRC Environmental Audit of Bell Bend during the week of March 17, 2014. Eight questions were deemed to require docketed responses; seven of those eight responses are provided in Enclosure 1. The remaining response should be available within the next week; we will keep you informed of our progress.

Incorporation of the changes described in the response to Audit Question 2 into a future revision of the COLA is the only regulatory commitment in this letter.

By copy of this letter, the Army Corps of Engineers and the Pennsylvania Department of Environmental Protection are notified that the response to Audit Question 4 herein contains errata affecting the Joint Permit Application, Revision 1.

Should you have questions, please contact the undersigned at 610.774.7552.

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

Executed on April 10, 2014.

Respectfully,

RRS/kw

Enclosure: As stated.

TELS

#### cc: w/ Enclosure

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Mr. William Dean Regional Administrator U.S. Nuclear Regulatory Commission Region I 2100 Renaissance Blvd., Suite 100 King of Prussia, PA 19406-2713 Enclosure

Responses to Environmental Audit Questions

**Audit Question 2:** Clarify the use of the onsite borrow pit described in ER Section 4.2.1.1 and the offsite borrow site described in FSAR Sections 2.5.4.2.4.1 and 2.5.4.5.1 as sources of backfill for the project. Was the offsite borrow site accounted for in the air emissions study for Bell Bend?

The level of assessment for offsite borrow pits depends on the amount of material that needs to be imported and from where. Would the material be obtained at existing quarries with sufficient permitted capacity? Would new quarries be needed and what would be the potential impacts of the expansion? What are the locations of the quarries to be used? The burrow pit discussion does not provide sufficient detail for Socioeconomic. From a socioeconomics perspective there would be traffic, noise and dust issues associated with bringing tons of material from offsite. It's unclear from where the material would be coming, if accessed from off-site.

# Response:

There is no onsite borrow pit in the current site design. 5.8 million cubic yards of material will be available from site excavation activities. Acceptable material from the areas will be screened and compacted from onsite borrow storage areas to serve as fill or backfill appropriate to the intended purpose, as described in ER Section 4.2.1.2, and FSAR Sections 2.5.4.2.3.2.4, 2.5.4.2.4, and 2.5.4.5. It is conservatively estimated that 1.4 million cubic yards of backfill will be required, which PPL expects to be easily accommodated from the 5.8 million cubic yards of material will be available from site excavation activities. However, as a contingency, an offsite source of acceptable material has been identified as described in FSAR Sections 2.5.4.2.4.1 and 2.5.4.5.1.

If acceptable fill material has to be accessed from offsite, then the planned borrow site is 2.3 miles away and was accounted for in the air emissions study for Bell Bend, which conservatively assumed that this activity could range as far as 50 miles from the site. The relatively short distance of the planned borrow pit from the site will localize any impacts due to traffic, dust and noise. Best Management Practices will be used to control dust at the planned borrow site and in transportation to the site. Traffic noise will increase in the local area due to the hauling of fill material. Noise impacts will not be extraordinary given the source and nature of vehicle noise and the normally varying nature of transient vehicle noise levels. Any impacts to the public will be small and temporary.

## COLA Impact:

ER Section 4.2.1.2 will be revised as follows in a future revision of the BBNPP COLA:

"Backfill material will come from the concrete batch plant, onsite borrow <del>pit and</del> storage areas, or offsite sources."

**Audit Question 3:** For Walker Run Unnamed Tributary #1, what will be the process for removal of the existing culvert, including mitigation of associated impacts on the fish population?

## Response:

PPL will follow the process outlined in the enclosure to letter BNP-2013-114, "Supplemental Information Walker Run Mitigation Plan" from PPL (Petrewski) to ACOE (Elliott) dated August 19, 2013. This process addresses mitigation of impacts on the fish population.

# COLA Impact: None

Audit Question 4: Provide updated information regarding the monitoring sites shown on Figure 8 of the Walker Run Trout Enhancement Plan in the Joint Permit Application based on PPL's statements at the audit.

# **Response:**

Figure 8 of the Walker Run Trout Enhancement Plan (LandStudies, 2010) identifies eight (8) reaches for pre- and post-construction biological and chemical monitoring of Walker Run. The first paragraph on page 22 of the plan indicates that four (4) monitoring reaches are within the proposed restoration area, three (3) reaches are upstream of the proposed restoration, and two (2) reaches are downstream of the proposed restoration. This sentence is incorrect for two reasons.

First, the total number of sampling reaches is eight, not nine as the total of the text references would indicate (4+3+2=9). Based on Figure 8 as shown, there is only one sampling reach downstream of the restoration area, not two. As shown on Figure 8, there are four (4) monitoring reaches are within the proposed restoration area, three (3) reaches are upstream of the proposed restoration, and one (1) reach is downstream of the proposed restoration (4+3+1=8).

Second, at the time that the monitoring plan was developed, the Walker Run mitigation was only a concept, with the original conceptual downstream limit of restoration activities being at the southernmost crossing of North Market Street, as shown by the star on Figure 8. The final Mitigation Plan for Walker Run includes restoration activities extending only to the confluence of Walker Run and Tributary 1, not to the lower North Market Street Crossing. The end of the restoration reach is no longer at the southern-most crossing of North Market Street, as noted on Figure 8, but is now at the confluence of Walker Run and Tributary 1, which is downstream of monitoring Reach 6. Therefore, Sampling Reach 7 is actually now downstream of the proposed restoration, not within the restoration area, three (3) reaches are upstream of the proposed restoration, and two (2) reaches are downstream of the proposed restoration (3+3+2=8).

## COLA Impact: None

**JPA Errata:** The second sentence on page 22 of the Trout Enhancement Plan should be considered revised as follows:

"Monitoring activities 2 through 7 will be completed at the eight reaches shown on Figure 8. Four Three reaches are within the project restoration section, three reaches are located upstream and two reaches are downstream of the restoration reach." Audit Question 5: Resolve conflicting information in COLA Part 11J regarding the number of observations of the Northern cricket frog on the Bell Bend site.

# Response:

Part 11J of the BBNPP COLA is comprised of the report "A Field Survey of Terrestrial Fauna at the Proposed Bell Bend Nuclear Power Plant Site, Luzerne County, Pennsylvania, Rev. 5, September 2011". Appendix A of that report includes a statement that two Northern cricket frogs were heard in November 2007 (Appendix A, Page 87) in Areas F-3 and W-1 on the west side of the Bell Bend Nuclear Power Plant (BBNPP) site near N. Market Street (Appendix A, Figure 2). However, the referenced figure, "Locations of observations for eight species of frogs and toads on the BBNPP site, May through September 2008", inadvertently excluded November 2007 from its title.

Similarly, Figure 5 "Locations of observations for eight species of frogs and toads on the BBNPP site, May through September 2008 and May through June 2010" of the main report excluded the original November 2007 time frame from its title.

As can be seen in each of these figures, the November 2007 locations, in orange, were simply carried through as additional data was taken. No new locations were documented. The two observations in November 2007 were the only ones for the Northern cricket frog on the Bell Bend site.

**COLA Impact:** None – As agreed to at the audit, this explanation is being provided without updating the referenced figure titles.

**Audit Question 6:** Provide clarification of PPL's plans for handling low level radioactive waste and mixed hazardous waste streams.

## **Response:**

The Bell Bend Nuclear Power Plant (BBNPP) plans to manage its waste streams in the same manner as the adjacent Susquehanna Steam Electric Station (SSES). See below for details.

#### Low Level Radioactive Waste

SSES in 2012 shipped Class A low level wastes offsite for processing, treatment, volume reduction, etc. to facilities in Tennessee. No low level Class B or C wastes were shipped in 2012 (Ref. 1). After treatment remaining wastes were then sent to Energy Solutions, LLC's Clive Disposal Site in Clive, Utah for shallow land burial.

The BBNPP COLA Part 3, Environmental Report, Rev. 4, Table 1.3-1, Federal, State and Local Authorization, lists licenses and permits needed from the states of Tennessee and Utah for low level waste shipments. BBNPP will obtain contracts for processing, treatment, and burial similar to those used by the SSES. BBNPP will also utilize shallow land burial for these wastes (COLA Part 3, Environmental Report, Section 5.7.6).

#### Mixed Hazardous Waste

SSES manages Mixed Hazardous Waste in accordance with the Low-Level Mixed Waste Conditional Exemption per 40 CFR Part 266 Subpart N. This storage and treatment conditional

exemption exempts low level waste from the regulatory definition of hazardous waste in 40 CFR 261.3 if it meets eligibility criteria and conditions, which it does.

Mixed Hazardous Waste liquids such as solvents are sent to Perma-Fix DSSI in Oak Ridge, Tennessee for fuel blending and treatment. Mixed Hazardous Waste solids such as lead penetration barrier wastes would be sent out for microencapsulation and then burial at the Energy Solutions site in Clive, Utah.

Reference:

Ref. 1: PPL letter to the US Nuclear Regulatory Commission, PLA-6994, SSES Radioactive Effluent Release Report and Offsite Dose Calculation Manual, Attachment 1, Radioactive Effluent Release Report, April 10, 2013.

## COLA Impact: None

Audit Question 7: A strip of land appears to have been cleared in the vicinity where Bell Bend would tie in to the Susquehanna-Roseland transmission line. When was the strip of land cleared, and for what purpose? How was this clearing accounted for in the project Limit of Disturbance?

## Response:

The cleared land just to the north of Beach Grove Road and west of Confers Lane and Beach Grove Road intersection was cleared in the 2013 timeframe and is part of the Susquehanna-Roseland Project. The Susquehanna-Roseland transmission line right-of-way is independent of the Bell Bend project and is therefore excluded from the Bell Bend project Limit of Disturbance.

#### COLA Impact: None

Audit Question 8: Provide clarification about the acreage of fields that are still being cultivated within the Bell Bend Project Boundary and the time period for which this will continue.

#### Response:

Within the Bell Bend Nuclear Power Plant Project Boundary approximately 205 acres (83 hectares) of land were cultivated in 2013. Agricultural Lease Agreements (Lease) between PPL Nuclear Development, LLC the "Lessor" and the farmers the "Lessee" includes the following statement:

"Notwithstanding the foregoing, Lessor shall have the right to terminate this Lease at any time by giving Lessee sixty (60) days prior written notice."

PPL's current plan is for the farmers to continue to cultivate BBNPP fields annually until the decision is made to build Bell Bend. It is expected that the same amount of acreage will be cultivated in 2014 and in future years until such a decision is made.

#### **COLA Impact:** None