

BellBendEnveRAIPEm Resource

From: Terry, Tomeka
Sent: Tuesday, January 28, 2014 6:45 PM
To: Rocco R. Sgarro (rrsgarro@pplweb.com); Kirkwood, Jon K (jon.kirkwood@unistarnuclear.com)
Cc: Mcdowell, Bruce K (Bruce.Mcdowell@pnnl.gov); 'Leigh, Kimberly D'; Kropp, Roy K (Roy.Kropp@pnnl.gov); Kuntzleman, Nancy; Doub, Peyton; Becker, James M (james.becker@pnnl.gov); Balducci, Patrick J (patrick.balducci@pnnl.gov); Mussatti, Daniel; Anderson, David M (DMA@pnnl.gov); BellBendEnveRAIPEm Resource; Quinn-Willingham, Laura
Subject: Final RAIs
Attachments: Final RAIs ENV-27.pdf

Rocky,

Attached is the final RAI ENV-27 for the Bell Bend COL application. The ENV-27 RAI is related to aquatic and terrestrial ecology, need of power, and socioeconomics .

The NRC assumes technically correct and complete responses within 30 days of receipt of the final RAIs. For any RAIs that cannot be responded to within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30-day period so that the staff can access how this information might impact the schedule. Please contact me if you have any questions.

Thanks!

Tomeka Terry
Environmental Project Manager
Environmental Projects Branch
Mailstop T6-C32
Division of New Reactor Licensing
Office of New Reactors
Nuclear Regulatory Commission
Telephone: 301-415-1488
e-mail address: Tomeka.Terry@nrc.gov

Hearing Identifier: BellBend_COL_Env_RAI
Email Number: 38

Mail Envelope Properties (0A64B42AAA8FD4418CE1EB5240A6FED1015134BC5E6D)

Subject: Final RAIs
Sent Date: 1/28/2014 6:45:04 PM
Received Date: 1/28/2014 6:45:07 PM
From: Terry, Tomeka

Created By: Tomeka.Terry@nrc.gov

Recipients:

"Mcdowell, Bruce K (Bruce.Mcdowell@pnnl.gov)" <Bruce.Mcdowell@pnnl.gov>
Tracking Status: None
"Leigh, Kimberly D" <Kimberly.L Leigh@pnnl.gov>
Tracking Status: None
"Kropp, Roy K (Roy.Kropp@pnnl.gov)" <Roy.Kropp@pnnl.gov>
Tracking Status: None
"Kuntzleman, Nancy" <Nancy.Kuntzleman@nrc.gov>
Tracking Status: None
"Doub, Peyton" <Peyton.Doub@nrc.gov>
Tracking Status: None
"Becker, James M (james.becker@pnnl.gov)" <james.becker@pnnl.gov>
Tracking Status: None
"Balducci, Patrick J (patrick.balducci@pnnl.gov)" <patrick.balducci@pnnl.gov>
Tracking Status: None
"Mussatti, Daniel" <Daniel.Mussatti@nrc.gov>
Tracking Status: None
"Anderson, David M (DMA@pnnl.gov)" <DMA@pnnl.gov>
Tracking Status: None
"BellBendEnveRAIPEm Resource" <BellBendEnveRAIPEm.Resource@nrc.gov>
Tracking Status: None
"Quinn-Willingham, Laura" <Laura.Quinn-Willingham@nrc.gov>
Tracking Status: None
"Rocco R. Sgarro (rrsgarro@pplweb.com)" <rrsgarro@pplweb.com>
Tracking Status: None
"Kirkwood, Jon K (jon.kirkwood@unistarnuclear.com)" <jon.kirkwood@unistarnuclear.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	942	1/28/2014 6:45:07 PM
Final RAIs ENV-27.pdf	95233	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Request for Additional Information No. 7316

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS AE - Ecology/Aquatic

Application Section: Part 3 – Environmental Report

QUESTIONS

ESRP Section 5.2.1 directs the staff's identification, analysis, and description of hydrologic alterations resulting from plant operation and the staff's analysis of the adequacy of the water sources proposed to supply plant water needs. In its Consumptive Use Mitigation Plan submitted October 21, 2013 (BNP-2013-142) and in the response to RAI ENV-19 (12-4-12 ML123490007 PPL BNP-2012-281), PPL described the Rushton Mine option to serve as a low-flow augmentation source for the Montour Generating Station, suggesting that increasing the capacity from the mine to about 14 mgd would cover the present "normal" flow from the mine (6.9 mgd) and the Montour low-flow requirement (8.8 mgd). However, it seems that the total flow required would be 15.7 mgd, of which 0.7 mgd might be provided by switching to the dry sludge disposal as described. Therefore, the proposed option appears to be about 1.0 mgd "short" of the amount actually needed. Provide the correct capacity available from the Rushton Mine to account for the normal mine flow and the additional Montour low-flow mitigation requirement.

Request for Additional Information No. 7320

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS AE - Ecology/Aquatic

Application Section: Part 3 – Environmental Report

QUESTIONS

ESRP Sections 2.4.1 and 2.4.2 direct the staff's description of the terrestrial and aquatic environment and biota at and in the vicinity of the site and other areas likely to be impacted by the construction, maintenance, or operation of the proposed project. ESRP Sections 4.3.1 and 4.3.2 direct the staff's description, quantification, and assessment of the impacts of construction of the proposed facilities on terrestrial and aquatic ecosystems. ER Rev 4, Section 5.2.1.3 (Hydrology) mentions that off-site hydrologic alterations would be expected as a result of construction or operational changes associated with SRBC required mitigation. The ER does not describe the potential effects of the off-site construction or operation changes on the respective off-site ecological communities. The response to RAI ENV-19 (BNP-2012-281) indicates that an expansion of Rushton mine water treatment plant would be required for consumptive use mitigation. Describe this in greater detail and any other expected off-site alterations, facilities and footprints resulting from consumptive use mitigation actions. Identify the extent and characteristics of the stream habitats and biota that would be affected by the alterations. Identify the types and areal extent of wetlands and other terrestrial habitats, and associated biota, that would be affected by the alterations.

Request for Additional Information No. 7322

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS TE - Ecology/Terrestrial

Application Section: Part 3 – Environmental Report

QUESTIONS

ESRP Sections 4.3.1 and 4.3.2 direct the staff's description, quantification, and assessment of the impacts of construction of the proposed facilities on terrestrial and aquatic ecosystems. ER Rev 4, Section 4 presents differing amounts for the acreage that would be affected by the construction. Section 4.1.1.1 states that 677 ac would be disturbed by site preparation and construction activities, but later states that 357 ac would be permanently converted and 306 ac (total 663 ac) would be temporarily affected. Section 4.2.1.2 states that 663 ac would be cleared for road, facility construction, laydown and parking uses. Table 4.1-1 lists 357.4 ac of permanent and 305.9 ac of temporary impacts (Total = 663.3 ac). Section 4.2.2.3 describes 369.3 ac of permanent and 299.7 ac of temporary impacts (Total = 669 ac). Section 4.3.2.1 and Table 4.3-1 state that 669 ac would be disturbed by site preparation and construction activities (669 ac agrees with that mentioned in Section 10.2.1), but later state that 369 ac would be permanently converted and 211 ac would be temporarily affected. Provide the correct acreage of the permanent, temporary, and total impacts resulting from the site preparation and construction activities.

Request for Additional Information No. 7359

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS GEN - General

Application Section: Part 3 – Environmental Report

QUESTIONS

Interim Staff Guidance on Environmental Issues Associated with New Reactors (COL/ESP-ISG-026) and revised rule 10 CFR 50.10 clarified which activities are defined as “construction” and “preconstruction.” The USACE states that it considers all impacts of preconstruction and construction activities as direct impacts from a proposed Federal action. Because the USACE is a cooperating agency in review of the proposed action at Bell Bend, impacts from preconstruction will be discussed in EIS Chapter 4 to satisfy the needs of the USACE and will also be addressed in the cumulative impacts analysis in Chapter 7. ER Table 4.6-2, Revision 4, provides a summary of construction and preconstruction related impacts. Section 1.2.7 of the ER provides a schedule for major activity start and completion dates. It lists “Start of Construction*” as November 2017, with the asterisk referring to “first safety-related concrete”. The staff requests that PPL clarify when pre-construction activities, as defined in 10 CFR 50.10 (a)(2), will start.

Request for Additional Information No. 7333

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS NFP - Need for Power

Application Section: Part 3 –Environmental Report

QUESTIONS

ESRP Section 8.3 and ISG 26 direct the staff's review of electric power supply in the need for power analysis for the EIS. Chapter 8 of ER Rev 4 presents analysis of supply resources as they existed in 2007 and subsequent RAI responses have provided general discussion of the natural gas resource, but do not address the following specific issues. The NRC Staff have observed the recent emergence of the shale gas resource in Pennsylvania and surrounding areas affected by the Marcellus shale gas resource development. We have noted a very rapid movement in PA over the last year to approve substantial new gas-fired generating capacity of roughly 8 GW just in the Marcellus region of PA (Shale Daily, 5/20/2013). We understand some of this new capacity is planned to repower existing coal-fired generation planned for retirement, and some is speculative based on the expectation of a stable supply and relatively low-cost fuel. Given a near term rapid expansion of gas-fired generation in the range of 8-15 GW or more by 2017 (Shale Daily, Feb. 15, 2013), please indicate the current and projected splits between baseload, intermediate load, and peak load resources by fuel in the BBNPP ROI market area. Please indicate how the recent emergence of new gas supplies in PA affects the analysis of need for power presented in Revision 4 of the ER and discussion provided in previous RAI responses.

Request for Additional Information No. 7335

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS SOC - Socioeconomics Impacts

Application Section: Part 3 – Environmental Report

QUESTIONS

ESRP 5.8.2 directs staff to predict the physical demands placed on local public facilities and services (e.g., fire, police, sewer and water) by plant operation and compare these demands with existing facilities and services. In its response to RAI ENV-19 (12-4-12 ML123490007 PPL BNP-2012-281), PPL outlined a series of supplemental water draws necessary for satisfying mitigation requirements set forth by the Susquehanna River Basin Commission. Describe the expected impacts of these supplemental water draws on the potable water supply systems located in Luzerne and Columbia counties. Provide information for each affected major water supply system.

Request for Additional Information No. 7336

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS SOC - Socioeconomics Impacts

Application Section: Part 3 – Environmental Report

QUESTIONS

ESRP 5.8.1 directs staff to identify the potential impacts of plant operation on recreational facilities and to predict the extent and magnitude of the impacts. In its response to RAI ENV-19 (12-4-12 ML123490007 PPL BNP-2012-281), PPL outlined a series of supplemental water draws necessary for satisfying mitigation requirements set forth by the Susquehanna River Basin Commission. Describe the expected impacts on recreational activities resulting from potential water flow, water quality, and pool elevation changes at Moshannon Creek, Cowanesque Reservoir, and the area around the Tioga-Hammond project resulting from the proposed mitigation strategies.

Request for Additional Information No. 7346

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS TE - Ecology/Terrestrial

Application Section: Part 3 – Environmental Report

QUESTIONS

ESRP Section 4.3.1 directs the staff's description, quantification, and assessment of the impacts of construction of the proposed facilities on the terrestrial ecosystem. ER Rev 4, Section 4.3.1 states that about 344 ac of non-wetland terrestrial habitat would be permanently lost due to construction. However, Table 4.3-1 indicates about 368 ac of non-wetland terrestrial habitat would be permanently lost due to construction. Provide the definitive acreage of permanent impacts to non-wetland terrestrial habitats from construction.

Request for Additional Information No. 7351

Issue Date: 1/28/2014

Application Title: Bell Bend Environmental Review Docket Number 52-039

Operating Company: PPL Bell Bend LLC.

Docket No. 52-039

Review Section: EIS TE - Ecology/Terrestrial

Application Section: Part 3 – Environmental Report

QUESTIONS

ESRP Section 4.3.1 directs the staff's description, quantification, and assessment of the impacts of construction of the proposed facilities on the terrestrial ecosystem, and directs staff to describe mitigative actions. The response to RAI TE-37 (BNP-2012-208) (August 29, 2012) states that "The closure or 'vacating' of this small section of Confers Lane is a legislative act that must be approved by the Salem Township Board of Supervisors.....PPL fully anticipates that the section of Confers Lane in the area of the proposed wetlands mitigation plan will be vacated as part of project permitting activities, and that the wetlands mitigation as proposed will be implemented when the plant is constructed. As a result, there is no proposed substitute compensatory mitigation proposed." State the decision of Salem Township, if it has been rendered since issuance of this RAI response. If Salem Township has not rendered a decision, please state whether PPL would develop suitable substitute mitigation in the event Salem Township does not decide to close the section of Confers Lane in the area of the proposed wetlands mitigation.