

## BellBendCOLPEm Resource

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**From:** Imboden, Stacey  
**Sent:** Wednesday, April 15, 2009 1:56 PM  
**To:** RoccoSgarro  
**Cc:** BellBendCOL Resource; Terry, Tomeka; Mcdowell, Bruce K; Leigh, Kimberly D  
**Subject:** FW: Army corp letter  
**Attachments:** Document.pdf

The Army Corps letter is attached. It went into ADAMS as immediate public release so it should be up soon (ML091050461).

Stacey

**Hearing Identifier:** BellBend\_COL\_Public  
**Email Number:** 204

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**Subject:** FW: Army corp letter  
**Sent Date:** 4/15/2009 1:56:19 PM  
**Received Date:** 4/15/2009 1:56:28 PM  
**From:** Imboden, Stacey

**Created By:** Stacey.Imboden@nrc.gov

**Recipients:**

"BellBendCOL Resource" <BellBendCOL.Resource@nrc.gov>

Tracking Status: None

"Terry, Tomeka" <Tomeka.Terry@nrc.gov>

Tracking Status: None

"Mcdowell, Bruce K" <Bruce.Mcdowell@pnl.gov>

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"Leigh, Kimberly D" <Kimberly.L Leigh@pnl.gov>

Tracking Status: None

"RoccoSgarro" <rsgarro@pplweb.com>

Tracking Status: None

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**Priority:** Standard

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**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**



DEPARTMENT OF THE ARMY  
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
P.O. BOX 1715  
BALTIMORE, MD 21203-1715

REPLY TO  
ATTENTION OF

April 9, 2009

Operations Division

U.S. Nuclear Regulatory Commission  
Ms. Stacey Imboden  
11555 Rockville Pike  
MS T - 7E30  
Rockville, Maryland 20852

Dear Ms. Imboden:

This is written in response to your January 6, 2009 notice in the Federal Register for **PPL Bell Bend, LLC; Bell Bend Nuclear Power Plant Application; Notice of Intent To Prepare an Environmental Impact Statement and Conduct Scoping Process** for a proposed nuclear power facility, located on approximately 882 acres, five miles northeast of Berwick, in Luzerne County, Pennsylvania.

Pursuant to Section 10 of the Rivers and Harbors Act, a Department of the Army permit is required for work or structures in navigable waters of the United States and pursuant to Section 404 of the Clean Water Act, a Department of the Army permit is required for the discharge of dredged or fill material into waters of the United States, including jurisdictional wetlands. Any proposal to perform the above activities within the area of Federal jurisdiction will require the prior approval of this office. Since the proposed project involves work in the Susquehanna River, its adjacent waters and wetlands, it would appear that both a Section 10 permit and a Section 404 permit will be required.

In a letter dated December 29, 2008, the Nuclear Regulatory Commission (NRC) accepted the Corps of Engineers (Corps), an agency with jurisdiction by law, as a cooperating agency to ensure that the information presented in the National Environmental Policy Act (NEPA) document is adequate to fulfill the requirements of Corps regulations (33 CFR 320 through 332), the Clean Water Act Section 404(b)(1) Guidelines and the Corps public interest review process. To ensure that all Corps related information and/or issues are considered in the scoping process, the Corps requests to be involved with all writing sessions and to be a full participant in all phases of the draft environmental impact statement (DEIS), including the development of the purpose and need of the project. Based upon our review of the information received to date, the purpose and need of the project, as defined by the Corps, appears to be to "provide 1,600 MWe of additional base load electrical power to the northeast portion of the PJM (the Pennsylvania, Jersey, Maryland Regional Transmission Organization) grid".

As part of the evaluation of permit applications subject to Section 404 of the Clean Water Act, the Corps is required to apply the criteria set forth in the Environmental Protection Agency's (EPA) 404(b)(1) Guidelines (40 CFR Part 230, hereinafter "Guidelines"). The Guidelines establish criteria which must be met in order for the proposed activities to be permitted pursuant to Section 404. Specifically, these Guidelines state, in part, that no discharge of dredged or fill

material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem provided the alternative does not have other significant adverse consequences. An area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered if it is otherwise a practicable alternative.

The Corps is required to evaluate permit applications based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interests. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. Based upon our review of the available NRC information and the Corps defined purpose and need of the project, we have determined that the project, as proposed, will have an adverse impact to aquatic resources. Furthermore, because power generation does not need to be sited in wetlands to fulfill its basic project purpose, there is a presumption that alternatives exist that are less damaging to the aquatic environment. The information presented in the DEIS must be adequate to fulfill the requirements of the Corps 404(b)(1) alternatives analysis and the Corps public interest review (PIR) factors.

To fulfill the Corps requirements for an adequate 404(b)(1) alternatives analysis and the public interest interview, we are requesting that the following information be included in the DEIS:

1. A detailed analysis of all reasonable forms of energy that could meet the Corps' project purpose and need. The analysis should include, but not be limited to, fossil fuel, fission, hydroelectric, biomass, solar, wind, geothermal, and other potential near future options, including a complete description of the criteria used to identify, evaluate, and screen project alternatives. Project alternatives can and should include combinations of alternative forms of energy to meet the project purpose and need;
2. A detailed analysis of alternative locations for the project (or any of the alternative energy sources) that would have less impact to wetlands and waterways. The information presented at the alternative site audits during the week of March 30<sup>th</sup> included data and information relevant to constructing a nuclear power plant facility at three alternate site locations (known as candidate sites): the Sandy Bend site in Mifflin Co., PA; the Montour site in Montour Co., PA; and the Martins Creek site in Warren Co., NJ. While data collected using resource mapping is acceptable, site specific information regarding potential impacts to wetlands, endangered species, historic and archeological resources, floodplains, external substations, and external transmission corridors needs to be provided. For example, two of the candidate sites include access to existing transmission corridors. It is assumed that existing rights-of-ways (ROW's) would be used when possible to avoid unnecessary impacts to wetlands. In addition, when evaluating these candidate sites, the Corps believes that there are several ranking factors (as represented in the environmental report presented by AREVA) that should be excluded when evaluating the alternatives analysis in the DEIS. These ranking factors include, but are not limited to, additional land acquisition, expansion potential, and ownership. In relation to ownership, as stated above, the Guidelines specifically state that an area not presently

owned by the applicant which could be reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered if it is otherwise a practicable alternative;

3. A detailed analysis of the steps taken to minimize the proposed on-site impacts. This on-site analysis does not preclude the necessity to review the off-site alternatives or various forms of energy. This information must include the following:
  - a.) Methods to avoid and minimize impacts to Waters of the U.S. This analysis should include:
    - i.) Methods to relocate or redesign the proposed construction laydown areas to uplands; and
    - ii.) Modification of the construction schedule so that the area proposed for permanent impacts could be utilized as construction laydowns areas.
  - b.) For each on-site alternative, provide acreage and type of waters/wetlands that would be impacted (include both temporary and permanent). For waterways, include both the linear footage of waterway impacts (measured along the centerline of the waterway) and square feet of impact; for wetlands, include both square footage and acreage impacts; and for temporary wetland impacts, quantify any change in wetland classification (e.g., palustrine forested to palustrine emergent, etc.) and method of work to accomplish these changes;
4. Identify all preconstruction activities (associated with the construction of cooling ponds, haul roads, dredging, and other aspects of infrastructure necessary to support the construction of the Bell Bend plant) that will result in a discharge of dredged or fill material into Waters of the U.S., or work within the Susquehanna River (i.e. requiring a Department of the Army Section 404/Section 10 permit);
5. Provide quantities of water demand for Bell Bend's plant operation including water withdraw and consumptive use information. Include the low and the peak demand amounts for proposed water withdraw, water consumed, and water that will be discharged back into the Susquehanna River;
6. Since a permit will be required from the Susquehanna River Basin Commission (SRBC) for water withdraw/consumptive use, The DEIS will need to address the mitigation requirement for the water withdraw/consumptive use permit required from the Susquehanna River Basin Commission (SRBC). The DEIS will also need to address whether this mitigation will require Section 404 and/or Section 10 authorization(s);
7. A narrative to describe and quantify cumulative and *indirect* wetland and stream impacts resulting from the project;
8. The DEIS must incorporate a detailed mitigation and monitoring plan that complies with the Corps final mitigation rule, published April 10, 2008 (33 CFR Part 332). Approval of

9. A narrative addressing public benefits of the proposed project which is separate from the project's proponents' benefits;
10. A description of the relative extent of public and private need for the proposed project;
11. Copies of all previously issued Federal, State, and local permits and plans for the existing facilities at the project site as well as a description and plans for all mitigation completed for these previously authorized projects; and
12. A list of all required Federal, State, and local permits for the proposed project.

Please find enclosed a permit application checklist (Enclosure 1). These items are required for the Corps Individual Permit application package that Pennsylvania Power and Light (PPL) will submit directly to the Corps. In addition, in accordance with the final mitigation rule, PPL's application package must include a statement describing how impacts to waters of the U.S. are to be avoided and minimized.

Please be informed that additional information requests may be needed by the Corps as the EIS is developed. The information requested above, as well as any subsequent requests, is necessary information that the Corps will need to document our final permit decision.

If you have any questions concerning this matter or if you wish to meet with the Corps to discuss this correspondence, please call Mrs. Amy Elliott, at this office at (814) 235-0573.

Sincerely,



William P. Seib  
Acting Chief, Regulatory Branch

Enclosure

**Enclosure 1**  
**PERMIT APPLICATION CHECKLIST**  
(Bell Bend Nuclear Power Plant)

**General**

- ✓ Describe the overall project and provide a general location map of the entire project area
- ✓ Show the relationship of the proposed work location to submerged and terrestrial historic sites; parks; named swamps and wetlands; streams; and any other natural resources of concern
- ✓ Provide a large view overall plan sheet of the project site showing the existing site conditions and the proposed work.
- ✓ Provide large plans and 8 1/2" x 11" plan sheets for proposed impact areas
  - ✓ Provide top view, cross-section and/or profile drawings that include dimensions of all structures and fill proposed, including elevation and materials relative to jurisdictional waterway and wetland boundaries
- ✓ Provide a detailed written description of the project, including dimensions and structural composition of culverts, pipelines, building structures, access roads, stormwater management facilities and any other attendant features of project construction
  - ✓ Identify the disposal site(s) for excess fill material and suitable dredge material disposal, including site capacity and site plans
- ✓ Identify permanent and temporary impacts
  - ✓ Include a definition of temporary by timeframe and describe restoration of the proposed temporary impact
  - ✓ Indicate the anticipated impact area for use of temporary marsh mats, and indicate the dimensions and marsh mat
- ✓ Provide a timeline/schedule for the process of obtaining all Federal, State and local authorizations for the proposed project and provide a construction schedule
- ✓ Describe the purpose and need for the project, including public need and benefit, users, suppliers, any other supporting information
- ✓ Describe the existing land and waterway use of project site location
- ✓ Describe potential cumulative impacts relative to the purpose of the project and prospective for future additional expansion
- ✓ Describe on-site and off-site avoidance and minimization of impacts
  - ✓ Describe why impacts were not avoided
- ✓ Describe maintenance, including preservation, of existing structures and protection methods of those existing structures during the proposed project construction
  - ✓ Indicate the existing roads, buildings and/or facilities that would be removed or relocated
- ✓ Describe how the project construction and maintenance may affect the existing utility or roadways easement corridors relative to their maintenance and potential future expansion and address all potential safety issues relative to construction and operation within these types of corridors
  - ✓ Describe work in right-of-ways, including maintenance and amount of tree clearing in forested areas in these areas
- ✓ Describe the method of work including equipment access; staging areas; maintenance; restoration of pre-construction contours; stream diversion; and sequence of construction
- ✓ Overlay the proposed project plans on aerial photography (source and date indicated)
  - ✓ Overlay the proposed project area on maps showing the following (each of the maps should include the source, page/sheet number and date information):
    - ✓ Wetlands of Special State Concern (i.e. exceptional value – EV)
    - ✓ National Wetland Inventory
    - ✓ County soil surveys
    - ✓ Department of Natural Resources Wetland map
    - ✓ Topography map
- ✓ Provide any other supporting information
- ✓ Provide adjacent property owners names and addresses
  - ✓ Nearby community association names and addresses
    - ✓ The list of adjacent property owners should be provided in the application as well as electronic format (for printing mailing labels for the public notice)

## Wetland/Streams

- ✓ Identify (list) all streams, named wetlands/swamps
  - ✓ The stream name must include a listing of all the downstream waterway links to the Susquehanna River - a description of the connection of the waterway/wetland to navigable waters (nontidal wetland adjacent to an unnamed tributary to X creek, which is a tributary to X river, a tributary to X River, which is a navigable waterway)
- ✓ Indicate the square foot area and acreage of each wetland proposed to be impacted and indicate whether it abuts, is adjacent to a stream or is isolated
  - ✓ Indicate the type of wetland proposed to be impacted
  - ✓ Indicate the total area of the wetland to be impacted and the proposed impact area
  - ✓ Indicate the latitude and longitude coordinates of each wetland proposed to be impacted
- ✓ Indicate the length and average width at the approximate ordinary high water mark of each stream proposed to be impacted
  - ✓ Indicate the total length and area of the stream to be impacted and the proposed impact length and area
  - ✓ Indicate the latitude and longitude coordinates of each stream proposed to be impacted at the upstream and downstream proposed impact limits
  - ✓ Describe the condition of the stream in the proposed impact area

## Dredging (of the Susquehanna River)

Do you wish to have a 10-year maintenance dredging clause for the permit, if issued?

- ✓ Indicate the method of dredging
- ✓ Provide a legible plan showing the currently existing shoreline configuration as well as any other nearby pier facilities and/or remnants; pilings; shoreline erosion control structures; non-tidal wetlands; and property lines with adjacent property owners' names and addresses
- ✓ Show the project relative to any submarine cables; pipelines; outfalls; ditches; or any stormwater conveyance systems.
- ✓ For the proposed dredging, provide a cross-section drawing of the dredge area, including side slopes relative to the bottom substrate; and the ordinary high water mark.
- ✓ Indicate the disposal site, location, and capacity; and provide plans
- ✓ Describe the vessels utilizing the facility including type, length, width, and draft; the expected use of the proposed facility as it relates to navigational activity; the purpose of the proposed project; and the historic use of the property and project area waterway
- ✓ Indicate the distance from the channelward end of the proposed work to the navigational fairway.
- ✓ Identify fisheries and living resources information
- ✓ Identify future maintenance needs - siltation potential (for sloughing/settling); future continuous maintenance dredging; and the rate of sediment deposition based on increased boat wakes, shoreline development, etceteras
- ✓ Provide the bottom sediment substrate composition
- ✓ Provide a sediment analysis for the presence of hazardous dredgate and pollutants (volatiles; acid, basic, neutral compounds; pesticides; and PCBs)?

## Other

- ✓ Describe invasive plant species monitoring and restoration, if necessary in proposed work areas
- ✓ Describe emergency procedures in the event of construction and operation accident
- ✓ Describe potential issues with return water into the Susquehanna River, such as thermal pollution; water quality; bottom scouring at outlet, etceteras
- ✓ Provide a copy of the Corps jurisdictional determination and plans

Note: Additional information may be necessary as determined during project evaluation.