

Enclosure 3

Tabular Response to SRBC Letter Comments of February 22, 2012.

Comment #	Comment Summary by PPL	PPL Response
Consumptive Water Use		
SRBC 1	<p>In accordance with SRBC regulations, PPL must propose (and the SRBC commissioners must approve) mitigation for its requested consumptive water use of 28 MGD. SRBC staff finds appropriate mitigation for consumptive use by a new facility of this magnitude and at this location must be in the form of compensatory water or discontinuance of use during designated low flow periods rather than payment of the mitigation fee.</p> <p>PPL is proposing an innovative approach of pooling its various water storage "assets" to meet its consumptive use mitigation requirements at several existing projects within the basin and at the proposed BBNPP facility. This approach, as presented to the Commissioners in the form of a general concept and not a specific plan on June 23, 2011, may potentially allow for the more effective utilization of PPL's water storage assets in the Susquehanna River basin.</p>	PPL continues to coordinate with the SRBC regarding required mitigation for project withdrawals and consumptive water use. PPL will meet SRBC requirements for mitigation.
SRBC 2	<p>No formal action has been taken to date by SRBC regarding PPL's pooled asset concept, nor has PPL made a formal submission of its request. To develop this concept into an acceptable submission for review and possible approval by SRBC, PPL must establish a suite of storage options and operational alternatives, and designate which generation activities and other PPL projects are to be included in the plan. At a minimum, the plan must identify how PPL proposes to modify the existing approved mitigation methods at each of the facilities addressed by the plan, include applications for any new and increased withdrawals from water supply assets that might initially be added to the asset pool, and include information demonstrating that proposed releases are feasible and adequate to meet PPL's mitigation obligations. SRBC staffs role will be to evaluate the merits of any</p>	As noted in response to comment SRBC 1, mitigation options are currently being examined. PPL will meet SRBC requirements for mitigation.

Comment #	Comment Summary by PPL	PPL Response
	<p>future pooled asset plan to ensure it meets the consumptive use mitigation goals and requirements as described in the SRBC's Comprehensive Plan and regulations.</p> <p>Location and quantity of available storage, as well as acceptable water quality, and timing of operations will be critical factors in staff's review of the plan.</p>	
SRBC 3	<p>Some of the details required in the plan include a list of specific water supply assets located upstream of BBNPP that are being considered as part of the Pooled Assets proposal, including the proposed amount of mitigation and expected licensing/permitting or contractual actions for each asset. In addition to sources of storage being identified, all necessary agreements among the different legal entities, both within the PPL corporate structure and any other project sponsors, must be resolved prior to approval of an "asset" into the plan. As a separate action from the BBNPP applications, SRBC staff will make a recommendation to the commissioners regarding acceptance, modification or rejection of the consumptive use mitigation plan.</p>	<p>By letter dated June 27, 2012 the SRBC advised PPL that use of Holtwood as a component of a pooled asset plan would not be acceptable mitigation for the BBNPP. In a meeting dated July 31, 2012 the SRBC advised PPL that mitigation for BBNPP water use would be required upstream of the project, with the amount of required mitigation to be determined by SRBC based on the results of pending environmental studies. PPL intends to fully satisfy SRBC prescribed mitigation requirements.</p>
SRBC 4	<p>SRBC regulations also require that major projects explore options to limit the quantity or avoid consumptive use of water. PPL has submitted studies that investigate using dry cooling techniques as an alternative to natural draft cooling towers. Utilizing dry cooling technology at BBNPP would significantly reduce the consumptive use; however, this technology has not been utilized for nuclear power plants to date and most likely the cost would be prohibitive. Nonetheless, SRBC staff has outstanding comments pertaining to this issue that have not been resolved at this time.</p>	<p>PPL submitted an updated dry cooling analysis to the SRBC by PPL letter BNP-2012-136 on August 21, 2012. A copy of this letter is provided on the enclosed DVD</p>

Comment #	Comment Summary by PPL	PPL Response
Water Withdrawal		
SRBC 5	<p>In accordance with the standard contained in SRBC regulations, the surface water withdrawal and the groundwater withdrawal may not cause significant adverse impacts to the water resources of the basin. In its evaluation, SRBC staff may consider effects on stream flows and other users, water quality degradation that may be injurious to any existing or potential water use; effects on fish, wildlife, or other living resources or their habitat; and effects on low flows of perennial or intermittent streams. SRBC staff also considers the reasonable foreseeable water needs of a project. SRBC staff evaluates each proposed withdrawal to determine the need for a protective passby flow condition, which restricts the ability to take water during low flow conditions.</p> <p>The groundwater withdrawal application for dewatering major excavations during construction of BBNPP is currently undergoing review. The review process typically requires 12 months to complete. One of SRBC staffs concerns is that appropriate measures are taken to protect wetlands in the vicinity of the excavations. With the withdrawal application, PPL also has submitted an aquifer testing waiver request. This waiver request is also under review.</p>	<p>The project's expected effects to surface waters have been evaluated in "Potential Effects of the Bell Bend Project on Aquatic Resources and Downstream Users", Revision 1 (Aquatics Report, Rev 1), dated May 10, 2012 that was provided to the resource agencies on June 28, 2012. Additional studies of the project's potential impacts to YOY smallmouth bass and mussel species of concern are ongoing. Reports regarding these studies will be filed on a timely basis with the ACOE to permit their consideration in required environmental analyses.</p> <p>The projects impacts associated with the proposed groundwater withdrawal are discussed in JPA Binder 1B Section J, Part J.6, Enclosure D Project Impacts. These impacts are expected to be limited to within the site boundary. Mitigation for these impacts has been proposed. PPL's proposed mitigation plan is contained in JPA Binder 1C, Section R, Part R.2 Dewatering Mitigation Narrative.</p> <p>Additional groundwater withdrawal information can be found in the Sargent & Lundy, "Construction Dewatering Design" report on the attached DVD. The groundwater modeling and calculations discussed in this report were primarily performed by Weaver Boos based on field data obtained and evaluated by Rizzo Associates. The Weaver Boos report is attached as Appendix A to this report.</p>
SRBC 6	<p>Because a passby flow is the "trigger" for projects to cease their withdrawal during low flows, upstream storage is typically necessary for projects pursuing non-interruptible withdrawals to allow continued operations during all flow conditions. Should SRBC determine that the requested surface water withdrawal cannot be approved without a pass by condition, PPL would need to provide for water storage upstream of BBNPP to assure that all sections of the Susquehanna River are protected during periods of low flow.</p>	<p>The Aquatic Report, Rev 1, and results from ongoing YOY bass and mussel studies that will be complete later this year are expected to form the basis for an SRBC determination of the need for a passby flow and an appropriate trigger requirement.</p>

Comment #	Comment Summary by PPL	PPL Response
SRBC 7	As a side note, SRBC is currently evaluating Policy No. 2003-1 to incorporate contemporary science. The recent study, Ecosystem Flow Recommendations for the Susquehanna River by The Nature Conservancy, serves as the scientific framework for a new policy proposal that will provide for limiting alteration to natural flow regimes and the ecological processes they support. SRBC staff has developed the policy proposal collaboratively with water resource agencies of our member jurisdictions, and anticipates its release to the public in the near term. BBNPP will be subject to any standards adopted by the SRBC prior to its action on the pending applications.	PPL Bell Bend understands that it will be subject to any standards adopted by the SRBC prior to its action on the pending applications.
SRBC 8	PPL has completed and submitted to SRBC in the JPA the IFIM study using a 1-D flow model. PPL has not submitted the results of the 2-D analysis they previously completed and findings from other aquatic studies that will be conducted during summer 2012. Therefore, SRBC staff review of the IFIM study, in coordination with agencies of its member jurisdictions, is ongoing.	The results of the 2-D model and a comparison with the 1-D model results are presented in Chapter 2 of the "Potential Effects of the Bell Bend Project on Aquatic Resources And Downstream Users", Revision 1, (Aquatics Studies Report, Rev 1) May 10, 2012. It was provided to the resource agencies on June 28, 2012.
SRBC 9	SRBC comments in Attachment 1, SRBC letter dated October 18, 2011 need to be addressed. SRBC comments in Attachment 2, SRBC letter dated December 21, 2011 need to be addressed.	A PPL response to the referenced letters was provided to the SRBC by PPL letter BNP-2012-080, dated March 23, 2012. A copy of this letter is provided on the enclosed DVD.