

Appendix A - Item 13

PPL Bell Bend Nuclear Power Plant
Salem Township, Luzerne County, PA

ACOE Information Requirement:

“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 within the corridors. Describe work in rights-of-ways, including maintenance and amount of tree clearing in these areas.”

Applicant Response:

Transportation Corridors

US 11

The proposed construction of the BBNPP directly affects the roadway network in the immediate vicinity of the project site. Most notable is US 11, which provides the current access to the SSES site and interchanges with Interstate 80 approximately 11 miles west of the project site. A new access is proposed off of US 11 to the new BBNPP. This access is proposed to be via a new at-grade intersection at US 11 directly south of the Susquehanna Switchyard and immediately east of the crossing of the 500 kV transmission lines. This intersection serves as the primary access road to the BBNPP. Work in this area includes temporarily widening US 11 for turning lanes from both the east and west approaches. Two eastbound to northbound left-turn bays will be provided to facilitate the arriving traffic volume from the west. The new access road will be four lanes wide with additional turning lanes at the US 11 intersection. Two southbound left-turn lanes and two right-turn lanes are needed for traffic exiting the site onto US 11. The turning lanes extend along US 11 approximately 300 feet either side of the proposed access road with an additional 200 feet of lane tapers on each side – bringing the total length of affected US 11 to approximately 1,000 feet. No other direct impacts to US 11 are anticipated.

The “Future Build”, or the operational condition that exists after construction of the BBNPP is complete, can retain the same levels of service (LOS) as the “Future No Build” (baseline)

condition (if the BBNPP plant weren't constructed at all) with minimal adjustments to signal timings at existing signalized intersections in Berwick and Shickshinny. Therefore, the potential traffic impacts to US 11 as a result of the Future Build condition are minor, and no future expansion of US 11 is required as a result of the BBNPP.

The peak daily traffic impact resulting from construction (Construction Phase Peak) is forecast to be 6,078 trips per day (*KLD, 2010*). This construction traffic will access the site via US 11 at the proposed new BBNPP entrance. This construction peak volume is not reflective of the additional traffic volume generated during a scheduled outage. At times of a scheduled outage (which would last for one month), the combined outage and Construction Phase Peak volume rises to approximately 8,900 trips per day (*KLD, 2010*). For the Construction Phase Peak, US 11 at the proposed BBNPP entrance carries significant traffic volume and requires the installation of a temporary signal during the construction period. The trips associated with the scheduled outages would utilize the existing SSES site access off of US 11. A temporary signal at the BBNPP site entrance is sufficient to accommodate both the construction phase traffic to and from the BBNPP construction site and all coincident outage traffic passing through the BBNPP intersection to the existing SSES access off of US 11. A temporary signal is also recommended during the construction period at the SSES site access off of US 11. Additionally, a second through lane is required in the southbound direction of US 11 to improve capacity during the morning peak period.

Most of the remaining mitigation measures along US 11 at other intersections in Berwick and Shickshinny involve low-impact solutions such as signal re-timing and re-striping of lanes. However, there are a few areas that require some additional mitigation measures beyond these types of low-impact solutions. At US 11 and Eaton Street in Berwick, a temporary traffic signal is recommended during the Construction Phase Peak at BBNPP. In Shickshinny, one additional thru lane is recommended in each direction on US 11 at the intersection with S.R. 239 (Union Street). Additionally, a right-turn bay from S.R. 239 to US 11 is also recommended. These mitigation measures are still viewed to be minor; therefore, potential impacts to the US 11 corridor in the vicinity of the project site as a result of Construction Phase Peak are minor.

During construction, some additional maintenance of US 11 may be required as a result of the increased construction labor traffic volume. This may include: repair of potholes and pavement rutting, pavement resurfacing and re-striping. While movement of larger construction elements will be by rail, excess material from on-site excavations will contribute to construction period traffic, and may require street sweeping and dust control measures in addition to repair of potholes or pavement rutting.

Confers Lane

Confers Lane runs generally north and south through the proposed project site. Currently, Confers Lane basically forms the western edge of the existing SSES site between US 11 and Beach Grove Road. However, the addition of the new BBNPP is west of Confers Lane and the area in the vicinity of Confers Lane is needed for construction parking, a construction laydown area, a new access road and a new rail spur. To support this, approximately 3,000 feet of Confers Lane is proposed to be abandoned and removed north of the southern project boundary. Confers Lane will remain open from the south project boundary to US 11 (approximately 3,500 feet) and from Beach Grove Road to a point approximately 2,500 feet to the south. Some adverse impact will result from this closure. Traffic on the north section of Confers Lane will no longer be able to go directly south to US 11, but will need to go north to Beach Grove Road, and east along Beach Grove Road to US 11. This results in an added distance of several thousand feet depending on point of origin. The corresponding condition for the portion of Confers Lane south of the closure results will also result in adverse travel distance. These impacts result in minor changes in travel patterns for a very small portion of local traffic in the area.

Market Street

Market Street runs generally north and south near the western edge of the proposed project boundary. It extends from Beach Grove Road to US 11 in the town of Beach Haven. A new entrance is proposed to the east off of Market Street to the proposed BBNPP access road and to the west to the BBNPP Training Facility approximately 2,300 feet south of Beach Grove Road. Some increase of traffic may be expected as a result of construction. Under the proposed BBNPP project, Market Street can remain open through the construction and operational phases; however, it may experience some increased traffic volume during construction. It is possible that the portion of Market Street from Beach Grove Road to the 90-degree bend (just south of the proposed training and simulator building) could be closed during

Land Development approvals. If this option is exercised, there would be some temporary traffic congestion on Market Street.

Internal road on the BBNPP Site

Due to the Construction Phase Peak traffic volume, a four-lane road is required to facilitate the flow of traffic to and from the construction site and US 11.

New Rail Spur

A new rail spur is proposed that branches off of the existing rail spur leading to the SSES site. The new rail spur runs from east of the SSES site at an intersection with the existing rail line, and extends to the west at a point south of the existing SSES 500kV switchyard. It then crosses Confers Lane, which will be abandoned at this crossing, and crosses the Tributary 1 to Walker Run over a new railroad bridge, then runs between the BBNPP power block and the BBNPP cooling towers.

Transmission Corridors

230 kV Transmission Corridor

The existing 230 kV transmission lines that enter the SSES site from the northwest need to be relocated north of Beach Grove Road near the northern boundary of the BBNPP site. Approximately 3,500 feet of this transmission line are affected by the proposed BBNPP construction. The relocated transmission line will be interconnected with the proposed new BBNPP switchyard and the existing SSES 500 kV switchyard. No additional impacts to existing transmission corridors are expected as a result of the BBNPP site.

Other Transmission Corridors

A new proposed transmission corridor will be constructed to connect the proposed Susquehanna 500 kV switchyard #2 north of Beach Grove Road to the Bell Bend 500 kV switchyard. Construction of this corridor and circuit installation does not result in any permanent impacts to Beach Grove Road. Some temporary impacts (possibly temporary closure) of Beach Grove Road may result when the power lines are being installed. Forest and streamside riparian zones are crossed and require new clearing to accommodate installation of the Susquehanna switchyard #2 and new 500kV circuits.

Additionally, there is a transmission right-of-way that extends south from the existing 500 kV SSES switchyard and crosses US 11. This right-of way is planned to be regraded to support disposal of excess cut/fill. All regulatory clearances for the right-of-way will be maintained.

References

KLD 2010: KLD Engineering, P.C. "Traffic Impact Study Related to the Proposed Construction and Operation of the Bell Bend Nuclear Power Plant Preliminary Findings Report", August 23, 2010.