



Transcontinental Gas Pipe Line Company, LLC

Response to Technical Deficiency
Pennsylvania Department of Environmental Protection

Atlantic Sunrise Project

July 31, 2017

DEP Application No. E19-311, APS No. 878953
Cleveland, Greenwood, Franklin, Jackson,
Montour, Mt. Pleasant, Orange, Hemlock, and
Sugarloaf Townships, Columbia County

Table 1
Transco's Responses to DEP July 11, 2017 Technical Deficiencies Letter

Technical Deficiency Number	Technical Deficiency Description	Response
1	<p>DEP review of the provided technical information found inconsistencies relative to identified resources in various reports, tables and narratives. For example, resource identification numbers may be associated with multiple stream names in different watersheds. Please review all technical drawings, narratives, support documents, and calculations to assure that identified resources, temporary impacts, permanent impacts, and technical information are consistently reported. Provide DEP with the appropriate revisions to the application. [25 Pa. Code §105.13(e)]</p>	<p>Transco conducted a consistency review of the entire Chapter 105 Water Obstruction and Encroachment Application, which resulted in minor revisions to the following Attachments that are being replaced in their entirety:</p> <ul style="list-style-type: none"> • Attachment E-2 – PADEP Impacts Table; • Attachment L-5 – Enclosure D, Proposed Impacts; • Attachment L-5, Appendix 3 – Streambank Stabilization Table;;and, • Attachment P, Appendix P-1 – Resource-Specific Avoidance and Minimization Measures. <p>Additionally, multiple drawings within Attachment H-2 (Engineering Statement and Chapter 105 Impact Mapping) and Attachment 5, Appendices L-4 and L-5 (Hydrotest Plans and Metering Plans, respectively) have been revised based on the findings of the consistency review; however, only the revised drawings associated with these Attachments are provided within this response package.</p> <p>The enclosure to the technical deficiencies response cover letter entitled “PADEP 105 TD Response Materials Tracking Table” provided detail on the location and extent of the replacement pages provided herein.</p>
2	<p>DEP review of the provided Attachment "D", Summary of Pennsylvania Historical and Museum Commission (PHMC) Coordination, revealed a recent submission of April 21, 2017, to further evaluate the remaining portions of the Phase I survey. Provide the subsequent PHMC coordination evaluations and clearance documentation associated with the April 21, 2017 submission. Review all technical drawings, narratives, support documents, and calculations to assure that identified resources, temporary impacts, and permanent impacts are consistently identified and reported in the application. [25 Pa. Code §105.13(e)(1)(x)]</p>	<p>The April 21, 2017 report submission was the Addendum 6 PHMC report submittal, which is documented in the “clearance” correspondence letters (dated May 3 and 24, 2017) provided within revised Attachment D-2 - PHMC Coordination. The final Determination of Effects letter from the PHMC (dated May 25, 2017), which confirms the clearance for all identified resources within the LOD, is also included within Attachment D-2.</p>

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3	<p>The Plan Sheet numbering system as found in the Impact Tables does not match the Plan Sheet Drawing numbers in the Access Road plan set. For Example: Northumberland County Impact Table Number 24-1600-70-09-A/AR-N0-078.1-01 does not match Plan Drawing No. 24-1600- 70-28-A/LL 113_9-AR-N0-078.1. The Lebanon County Section "E" impact number 281 Plan Sheet numbering system does not match the Access Road Plan Set. Inconsistencies like this have also been found in Lebanon, Columbia and Northumberland Counties. Review all technical drawings, narratives, support documents, and calculations to assure that identified resources, temporary impacts, and permanent impacts are consistently identified and reported. Provide DEP with the appropriate revisions to the application. [25 Pa. Code §105.13(e)]</p>	<p>The revised Chapter 105 Impact Table in Attachment E-2 includes a new column of information that identifies the respective Erosion and Sediment Control Plan drawing numbers (Attachment M) associated with individual wetlands and watercourse impacts identified within the above-referenced table.</p>

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4	<p>It appears that a one foot (1 ') roadway depth has been used for all access roads as found in the Section "E" Impact Tables Floodway Fill Column. This includes those access roads that are utilizing existing roadways. Typical Section A, as found in the Access Road Plan Set, details six inches (6") of aggregate on top of the existing roadways. Access Roads along existing roadways contain a note stating that the existing roadway will be used during construction. These roadways; therefore, have no proposed roadway section provided and the note explains that the surface shall be maintained as needed with AASHTO # 57 stone in areas that show signs of erosion. It is unclear how the fill quantities were calculated, how they will be distributed throughout the floodways and which section if any should be used to construct the roadways. Example; Access Road AR-LE-050.3-01; Section "E" Impact tables detail 8,051.13 cu yds. of fill in the floodway of Forge Creek (WW-T40-6002), Attachment H-2 Document tables detail 8,051.3 cu yds. of fill in the floodway of Forge Creek (WW-T40-6002), Layout Plans For Access Roads state that the existing roadway will be used, with no cross sections provided. Review all technical drawings, narratives, support documents, and calculations to assure that identified resources, temporary impacts, and permanent impacts are consistently identified and reported in the application. Provide DEP with the appropriate revisions. [25 Pa. Code §105.13(e)]</p>	<p>Transco inadvertently calculated fill volumes based on an older, expanded LODs for all access roads within a floodway that is no longer being proposed. Fill volumes have been recalculated to reflect the current reduced LOD within the Chapter 105 Impact Table and County-Specific Impact Mapping (Attachments E-2 and H-2, respectively).</p> <p>Cross sections were not provided for existing access roads because Transco is not proposing to grade, widen or otherwise modify the existing road cross section; however, Transco applied a worst case scenario by calculating a maximum one-foot fill for the extent of the LOD within floodways at existing access road locations. This additional fill volume will account for unanticipated field scenarios where a minor road expansion for turning radius or widening an existing gravel road may warrant placement of additional fill.</p> <p>To clarify that there is a difference between the actual proposed fill volume and the fill volume shown in the Chapter 105 Impact Tables within Attachment E-2; therefore, the following note has been added to the Chapter 105 Impact Table within Attachment E-2, the access road plans within the County-Specific Impact Mapping in Attachment H-2, and the Erosion and Sediment Control Plans and narratives associated with access roads within Attachment M:</p> <p>“The calculation of fill volumes provided within the Chapter 105 Application is based on the extent of the access road LOD within the floodplain/floodway to account for worst-case field scenarios requiring the addition of a one foot-depth of gravel for maintenance and/or minor access road widening for improved access. As such, the fill volume is an overestimation and does not reflect the actual volume of fill required by the current access road design, as presented within the Chapter 102 Permit. The inclusion of the overestimated fill volumes within the Chapter 105 Application limits future revisions to the Chapter 105 Application due to minor field adjustments; conversely, revisions to access road design after the 102 Permit issuance will be coordinated with PADEP/CCD.”</p>

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5	Attachment G-1 is a county-specific Pennsylvania Natural Diversity Index (PNDI) summary. The summary provided references and includes all information for Northumberland County. Provide a PNDI summary that is specific to Columbia County. [25 Pa. Code §105.13(e)(1)(x)]	The text within the revised PNDI Summary (Attachment G-1) includes the correct information as applicable to Columbia County. Additionally, updated United States Fish and Wildlife Service correspondence indicating clearance for the entire Atlantic Sunrise Project is included within Attachment G-5.
6	Attachment H-3 shows contingency plan impact mapping for the Susquehanna River to be used if the Horizontal Directional Drilling (HDD) is not successful. Provide mapping for impacts to wetland W-T04-12001C under the contingency plan. [25 Pa. Code §105.13(e)(1)(i)(C)]	The impact mapping for wetland W-T04-12001C was inadvertently omitted from the previous submission, and is now included within revised Attachment H-3.
7	Table 3 in Attachment H-2 on Drawing Number 24-1600-70-28A/LL113_9-BMP-CO-TB, Sheet 2 of 6, lists crossing windows for stream crossings in Columbia County. Stocked trout in-stream restrictions from March 1 to June 15 were not taken into consideration in the table. Adjust the table to remove March 1 to June 15 from the crossing window for Stocked Trout streams and any areas within 0.5 miles of a stocked trout stream. [25 Pa. Code §105.13(e)]	Table 3 within the Best Management Plan and Quantities plan set includes a revision to correct the time of year restrictions, as identified within this technical deficiency. The revised Best Management Plan and Quantities plan set is included within the County-Specific Impact Mapping (Attachment H-2), as well as the ESCGP-2 Narrative and Plan Set (Attachment M).