

ATTACHMENT 7

Memorandum

Date: 16 May 2017
To: Colin Olness, Atlantic Coast Pipeline (ACP)
From: Logan Brant, Ph.D., P.E. and Tony Rice, P.E.
Copies to: Rodolfo Sancio, Ph.D., P.E.
Subject: Response to Forest Service Item No. 8 – 14 May 2017 Letter Captioned
“Reiteration of Previous Information Requests”

On 14 May 2017, the Forest Service (FS) submitted a letter to the Federal Energy Regulatory Commission (FERC) outlining a list of eight items requested from the Atlantic Coast Pipeline (ACP). In this memorandum, Geosyntec Consultants, Inc. (Geosyntec), responds to Item No. 8 from that list.

ITEM NO. 8

8. For the MNF01 site, provide a Geological and Structural Mapping Summary Report as was provided for the GWNF02 site ACP AP-1 MP 84.95 to 85.05.

RESPONSE

Geosyntec conducted a desktop study for, and geological and geotechnical/structural mapping at, the GWNF02 site (ACP AP-1 MP 84.95 to 85.05), as this was a location identified for site specific design, including installation of a geo-structural stabilization system in the form of soil nails and Tecco® Mesh. For the MNF01 site (ACP AP-1 MP 73.20 to 73.50) Geosyntec conducted a desktop study and geological/geotechnical reconnaissance, but because this was not identified as a site for installation of a geo-structural stabilization system the work here was not carried out to same level of detail as at the GWNF02 site. Also, the sites are located in different physiographic provinces and have differing levels of geological complexity. Below we discuss the results of the geological/geotechnical reconnaissance at the MNF01 site.

The MNF01 site is located within the Appalachian Plateau Physiographic Province, an area known for near horizontal geologic structure (that generally parallels bedding planes of the underlying sequences of sedimentary rock), and low relief plateau-like morphology. The GWNF02 site is located within the Appalachian Highlands Valley and Ridge Physiographic Province, an area with long, linear, subparallel ridges erosion resistant sandstone and quartzite and intervening valleys of shale and / or carbonate rock.

Due to the greater complexity and variability at the GWNF02 site, geological and geotechnical/structural mapping was carried out and a detailed report, dated 4 April 2017, was provided as Appendix C of the Computation Package for the Geohazard Mitigation Design at ACP AP-1 MP 84.95 to 85.05.

The structural geology at the MNF01 site is straight forward, compared to the more complex and variability structural geology at the GWNF02 site. The geological/geotechnical reconnaissance at the MNF01 site was limited to the observation of bedrock type and the measurement of bedding plane strike and dip of bedrock exposed in test pits excavated in June 2016 during the Order 1 Soil Survey. Bedrock was exposed in the base of two test pits at this site and recorded measurements indicate that the bedrock structure is dipping at 2 to 4 percent into the slope, which is consistent with our understanding of the near horizontal bedding plane structure expected within the Appalachian Plateau Physiographic Province. The results of the desktop study for, and geological/geotechnical reconnaissance at, the MNF01 site is presented in Appendix A of the Computation Package for the Geohazard Mitigation Design at ACP AP-1 MP 73.20 to 73.50.