ATLANTIC COAST PIPELINE, LLC ATLANTIC COAST PIPELINE

and

DOMINION ENERGY TRANSMISSION, INC. SUPPLY HEADER PROJECT

Supplemental Filing August 25, 2017

APPENDIX A

Plan for Discovery of Unanticipated Paleontological Resources



ATLANTIC COAST PIPELINE, LLC ATLANTIC COAST PIPELINE Docket Nos. CP15-554-000 & CP15-554-001

and



DOMINION ENERGY TRANSMISSION, INC. SUPPLY HEADER PROJECT Docket No. CP15-555-000

Plan for Discovery of Unanticipated Paleontological Resources

Rev. 0

Prepared by



August 23, 2017

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1.0 INTRODUCTION

Atlantic Coast Pipeline, LLC (Atlantic) – a company formed by four major energy companies – Dominion Energy; Duke Energy Corporation; Piedmont Natural Gas Co., Inc.; and Southern Company Gas – proposes to construct and operate approximately 600 miles of natural gas transmission pipelines and associated aboveground facilities in West Virginia, Virginia, and North Carolina. This Project, referred to as the Atlantic Coast Pipeline (ACP), will deliver up to 1.5 million dekatherms per day of natural gas from supply areas in the Appalachian region to demand areas in Virginia and North Carolina. Atlantic has contracted with Dominion Energy Transmission, Inc. (DETI), a subsidiary of Dominion Energy, to construct and operate the ACP on behalf of Atlantic.

In conjunction with the ACP, DETI proposes to construct and operate approximately 37.5 miles of pipeline loop and modify existing compression facilities in Pennsylvania and West Virginia. This Project, referred to as the Supply Header Project (SHP), will enable DETI to provide firm transportation service to various customers, including Atlantic.

2.0 PURPOSE

This *Plan for Discovery of Unanticipated Paleontological Resources* was prepared for the ACP and SHP (collectively, the Projects) to identify procedures to be implemented in the event that significant paleontological resources are found during construction of the Projects.

3.0 POTENTIAL PALEONTOLOGICAL RESOURCES

Atlantic and DETI consulted with the Pennsylvania Department of Conservation and Natural Resources (PADCNR), West Virginia Geological and Economic Survey (WVGES), Virginia Department of Mines, Minerals, and Energy (VADMME), and North Carolina Geological Survey (NCGS) to identify areas and formations crossed by the Projects with the potential to contain significant paleontological resources.

In Pennsylvania, West Virginia, and western Virginia, the geologic formations crossed by the Projects could contain fossiliferous remains of marine invertebrates, animals, and fragmentary plant specimens (Kochanov, 2015; McDowell, 2015; Heller, 2015). While the likelihood of encountering significant paleontological resources during pipeline construction is low, there have been instances where shallow excavations uncovered rare specimens, such as the 2004 discovery of *Fedexia striegeli*, a large amphibian, during construction near the Pittsburgh Airport (Carnegie Museum of Natural History, 2010).

Some geologic formations crossed by the ACP in southeastern Virginia and North Carolina, such as the Newark Supergroup or Black Creek Formation, have the potential to contain marine and terrestrial vertebrate fossils (Heller, 2015; NCGS, 1998). Two known fossil collecting localities were identified in eastern North Carolina: Willis Creek, in Cumberland County, located approximately 1.7 miles southeast of MP 157 of the AP-2 mainline, and Quankey Creek, in Halifax County, located approximately 2.7 miles east-southeast of MP 18 of the AP-2 mainline. Exposures of the Black Creek Formation at Willis Creek have yielded specimens of lignitized wood, seeds, leaves, and silicified logs. Exposures of the Yorktown Formation at Quankey Creek have yielded Pliocene-aged bivalves (NCGS, 1998).

4.0 TRAINING

Prior to the start of construction, Atlantic and DETI will conduct environmental training for Company and Contractor ¹ personnel. The training program will focus on Federal Energy Regulatory Commission's (FERC's) *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures); other construction, restoration, and mitigation plans, including this *Discovery of Unanticipated Paleontological Resources*; and applicable permit conditions. In addition, Atlantic and DETI will provide large-group training sessions before each work crew commences construction with periodic follow-up training for groups of newly assigned personnel.

5.0 UNANTICIPATED DISCOVERY OF PALEONTOLOGICAL RESOURCES

The following measures will be implemented if significant paleontological materials (i.e., fossilized vertebrate remains such as bones, teeth, etc.) are encountered during construction:

- 1. The Contractor will stop work in the area of the find (i.e., within 100 feet of the find or the outer perimeter of a group of finds) to protect the integrity of the find.
- 2. The Contractor will notify Atlantic's/DETI's Environmental Inspector (EI) ² of the find.
- 3. The EI will notify Atlantic's/DETI's Environmental Project Manager.
- 4. The Environmental Project Manager will notify FERC and PADCNR, WVGES, VADMME, or NCGS, as appropriate.
- 5. The Environmental Project Manager will inform the EI when consultation with the appropriate agencies is complete and work can resume in the area of the find.
- 6. The Contractor will not resume work within 100 feet of the find until the EI has granted clearance.

6.0 REFERENCES

Kochanov, W. 2015. Email communication with Pennsylvania Department of Conservation and Natural Resources. Communication on March 26, 2015.

McDowell, R. 2015. Email communication with West Virginia Geological and Economic Survey. Communication on March 23, 2015.

Contractor refers to the company or companies retained by Atlantic/DETI or another contractor to construct the proposed facilities.

The role and responsibilities of an EI are defined in FERC's Plan.

Heller, M. 2015. Email communication with Virginia Department of Mines, Minerals, and Energy. Communication on March 30, 2015.

North Carolina Geological Survey. 1998. Fossil Collecting in North Carolina. Bulletin 89. Raleigh, North Carolina.

Carnegie Museum of Natural History. 2010. Early Terrestrial Amphibian Described by Carnegie Museum of Natural History Scientists. March 15, 2010. Available online at http://www.carnegiemnh.org/press/press/press/elase.aspx?id=18061. Accessed July 2017.

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