# ATLANTIC COAST PIPELINE, LLC ATLANTIC COAST PIPELINE

and

# DOMINION TRANSMISSION, INC. SUPPLY HEADER PROJECT

Supplemental Filing January 27, 2017

## **APPENDIX H**

**Agency Correspondence for the Atlantic Coast Pipeline** 

	APPENDIX H					
Supplemental Summary of Public Agency Correspondence for the Atlantic Coast Pipeline						
Agency/Contact Name(s)	Date of Correspondence	Format	Description			
MULTIPLE AGENCIES						
U.S. Forest Service - Monongahela and George Washington National Forests,	Federal Energy Regulatory	Commission				
Jennifer Adams, Kent Karriker, Adrienne Nottingham, Clyde Thompson, Stephanie Connolly, Steffany Scagline, Tom Bailey, Pamela Edwards, Gertrude Fernandez Johnson	12/12/16	Minutes	Meeting to discuss requirements for topsoil segregation on USFS lands. $^{\rm a}$			
FEDERAL AGENCIES						
National Park Service						
Mary Krueger, Ryan McCormick	1/20/17	Letter	Transmittal of revised Visual Impact Assessment report. (Note: the revised report was previously filed with FERC on 1/20/17.)			
U.S. Fish and Wildlife Service						
Liz Stout	11/22/16	Minutes	Meeting to discuss mitigation. b			
Kimberly Smith	12/7/16 to 12/9/16	Emails	Emails regarding sensitive stream crossings and confirmation that no federally listed mussels occur in the James River.			
Sarah Nystrom	1/6/17	Email	Email regarding the area of influence for rusty patched bumble bee in Virginia.			
Sumalee Hoskin	1/9/17	Email	Indiana bat hibernacula.			
Liz Stout	1/27/17	Letter	Transmittal of updated draft Biological Assessment and Migratory Bird Plan.			
Sumalle Hoskins	1/27/17	Letter	Transmittal of updated draft Biological Assessment and Migratory Bird Plan.			
John Ellis	1/27/17	Letter	Transmittal of updated draft Biological Assessment and Migratory Bird Plan.			
U.S. Forest Service – Monongahela and George Washington National Forests						
Jennifer Adams	1/26/17	Letter	Transmittal of Phase II Report for sites in the GWNF.			
Clyde Thompson	1/27/17	Letter	Wetland and waterbody delineation report.			
Clyde Thompson, Joby Timm	1/27/17	Letter	Second draft of COM Plan.			
Joby Timm	1/27/17	Letter	Wetland and waterbody delineation report.			
STATE/COMMONWEALTH AGENCIES						
WEST VIRGINIA AGENCIES						
West Virginia Department of Environmental Protection						
Jon Bosley	1/24/17	Letter	Transmittal of revied Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan. (Note: the revised plan is provided.as Appendix B.)			
West Virginia Department of Forestry						
Travis Miller	1/19/17	Letter	Transmittal of the Order 1 Soil Survey Report for Seneca State Forest.			

Agency/Contact Name(s)	Date of Correspondence	Format	Description
West Virginia Division of Culture and History			
Susan Pierce	1/26/17	Letter	Section 106 Review – Phase II Investigation at Site 46PH775 Report.
West Virginia Division of Natural Resources			
Cliff Brown	1/24/17	Letter	Transmittal of revied Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan. (Note: the revised plan is provided as Appendix B.)
VIRGINIA AGENCIES			
Virginia Department of Conservation and Recreation			
Jason Bulluck, Rene Hypes	1/24/17	Letter	Transmittal of Cochran's Cave Conservation Area Report.
Jason Bulluck, Rene Hypes	1/24/17	Letter	Transmittal of revied Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan. (Note: the revised plan is provided as Appendix B.)
Virginia Department of Game and Inland Fisheries			
Raymond Fernald	1/24/17	Letter	Transmittal of revied Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan. (Note: the revised plan is provided as Appendix B.)
NORTH CAROLINA AGENCIES			
North Carolina Department of Natural and Cultural Resources			
Ramona Gledhill-Earley	5/2/16	Letter	Comments on Phase I Archaeological Survey Report. c

Although this letter is dated 5/2/16, Atlantic only recently obtained a copy for its records.

# **Multiple Agencies**

U.S. Forest Service – Monongahela and George Washington National Forests, Federal Energy Regulatory Commission

#### TOPSOIL SEGREGATION MEETING NOTES

Date December 12, 2016

**Time:** 2:30pm- 4:00pm (Eastern)/1:30pm-3:00pm (Central)/12:30pm-2:00pm (Mountain)

**Location:** Conference Call & GoTo Meeting

	Forest Service	Jennifer Adams, Kent Karriker, Adrienne	
		Nottingham, Clyde Thompson, Stephanie Connolly,	
		Steffany Scagline, Tom Bailey, Pamela Edwards	
	FERC	Gertrude Fernandez Johnson	
Invitees	Merjent	Kim Jessen, Kate Mize	
	Dominion	Richard Gangle, Brittany Moody, Greg Park, Leslie	
		Hartz, Luke Knapp, Spencer Trichell, Colin Olness	
	West Virginia University	Dr. Jim Thompson	
	Galileo Project	Maria Martin, Alexa Esquivel	

### **Background**

The meeting was scheduled to discuss FS requirements for topsoil segregation on National Forest Lands for the ACP Project.

#### **Discussion**

Stephanie Connolly indicated that topsoil management and productivity are serious concerns for the FS and that the FS has been talking about topsoil segregation with ACP since the beginning of FS involvement with this project. There are specific standards and guidelines in the MNF Land and Resource Management Plan as well as in the Forest Service Manual Chapter 2550-Soil Management that discuss topsoil quality and topsoil productivity. The MNF guidelines and standards for soil management include SW03, SW06, SW07, SW15 and SW16 as well as others. There also is a guideline for substituting materials for topsoil (SW15 and SW18). If the MNF guidelines cannot be met, or need to be manipulated then you (i.e. the FS Deciding Official) would default back to the standard which talks about maintaining soil productivity which then ties back to the FS Handbook/Manual.

Tom Bailey indicated that the GWJNF also has similar standards for maintaining topsoil productivity on projects in the GWJNF. The main direction is to minimize disturbance where possible and to evaluate topsoil productivity in the environmental analysis for every project. One way to mitigate the impacts to topsoil productivity is to segregate topsoil and put it back on the site during the restoration process.

Kent Karriker indicated that the FS default position is that topsoil segregation should occur any time there is a construction impact. This ties back in to the FS goal of maintaining topsoil productivity over the long term.

Stephanie Connolly mentioned that the information in the Order 1 Soil Survey can help inform designs and assist in figuring out the areas where the most intensive efforts will be for topsoil segregation.

Stephanie Connolly indicated that the FS will need a qualified individual on site who understands topsoil separation to determine what is and what is not considered topsoil, what kind

and amount of material should be removed, and where are the transitional zones/layers in the soil being disturbed.

Tom Bailey mentioned that the FS will also need to know more about what is happening in the corridor including impacts of machinery, trenching, stump removal, leveling off ridge tops, etc. Segregation of topsoil is a high priority for the FS.

Richard Gangle raised the concern about removing stumps due to the FS topsoil segregation guidelines that were otherwise going to be undisturbed. Stephanie Connolly asked what ACP plans to do on surfaces where they do not remove stumps. Will they be used for stockpiling spoil or other materials or as an operating surface where heavy equipment will traverse? Richard Gangle indicated that it could be any of those. The only place ACP plans to remove stumps is directly over the trench for safety purposes.

Clyde Thompson indicated that where ACP excavates the default should be to do topsoil segregation unless there is some reason the on-the-ground FS administrator says it is not necessary or feasible. Brittany Moody responded that there are areas where topsoil segregation may not be possible such as in places where the drop off is very steep on both sides and there is no place to pile the topsoil so that you can get to it later. Greg Park asked if the FS wants full topsoil segregation like normally required for FERC. Stephanie Connolly indicated that topsoil is needed for vegetative re-establishment, and the FS does want full topsoil segregation. Clyde mentioned that practical mitigation methods would need to be established for areas where topsoil would not be segregated. Stephanie Connolly said for those areas where topsoil segregation is not possible, there will need to be a separate conversation about what media would be used as a substitute for topsoil. This will influence the seed mixes, fertilizers, etc. that are to be added to the site for reclamation.

The Forest Service asked what ACP plans to do in the areas where they leave stumps in place. Brittany Moody indicated that most stumps will be ground to the surface and left in place which should help on slopes adding stability. ACP will make sure there is a level surface for their travel lane. Kent Karriker asked how ACP will achieve de-compaction on those sites where they have used their heavy equipment. Brittany Moody indicated that typically they would want compaction on steep slopes to help with stability. Stephanie Connolly indicated that recent research and insight into pipeline reclamation and surface mine reclamation projects indicates that compaction may actually be detrimental to slope stability under certain landscape conditions. Free drainage and allowing soils to act as a sponge and move and transfer water instead of shedding water with an impervious surface may help to provide soil stability even on steep slopes. What helps to keep the slope stability on these mountains is to make the soil as porous as possible. Jim Thompson agreed that compaction decreases stability and makes restoration difficult. Jim Thompson suggested that leaving stumps in place on slopes may help with stability due to the physical role of the roots. Clyde Thompson asked about the depth of compaction on slopes. Brittany Moody indicated that they normally measure compaction in agricultural fields but have not measured it on slopes. Also, they do not have experience decompacting on steep slopes with stumps in place. The Forest asked for monitoring data from existing projects to indicate the depth of compaction that is normally seen during construction and post reclamation.

Jim Thompson indicated that stockpiling all of the topsoil (O, A, and AB-BA horizon material) from the area that is going to be compacted would be ideal. He also acknowledged potential

tradeoffs between disturbing additional ground (via removing roots and stumps) in order to segregate topsoil versus leaving roots and stumps in place in order to maintain support of soil on steep slopes. In areas where this is not practical or safe to segregate all of the topsoil, he suggested that it might be beneficial to rake the O horizon material from the area that is going to be compacted and into the undisturbed forestland adjacent to the ROW. After construction the O horizon material would be spread back, which might help with restoring the nutrient value of the soil and re-establishing vegetation.

Clyde Thompson commented that the entire 125 ft. ROW could become a permanent resource commitment if it is compacted to the point that it cannot grow vegetation in the same way it did before. This would then not be compliant with the MNFs LRMP. One of the ways the FS handles that with timber sales is to designate skid trails and monitor the disturbance footprint to limit that footprint. Stephanie Connolly discussed the FS standard (SW05) only allows for 15% of the project area to be impacted in that way. Greg Park indicated that the travel lane next to the ditch would be the most compacted.

Stephanie Connolly asked what ACP plans to do in those areas where they cannot do topsoil segregation. What will the topsoil source media be? Brittany Moody indicated that they have crossed many miles of forest on past projects and have never segregated topsoil in the forests. Brittany Moody also mentioned that FERC, as well as other permitting agencies, require that successful vegetative cover be achieved. Stephanie Connolly asked about re-growth rates and monitoring data. Brittany Moody responded that they have been successful with re-growth and asked what was done on the Columbia project and other projects on the Forest such as roads. Stephanie Connolly replied that there is not a direct comparison between Columbia's existing pipelines on the Forest; and that these project were done decades ago prior to the existing requirement for FS LRMPs. Jennifer Adams pointed out that regardless of what was done in the past, the current forest plan requires topsoil segregation for all proposed projects.

Kent Karriker pointed out that looking at the long-term ROW that is maintained in an herbaceous state is different from looking at the temporary ROW which is allowed to revegetate naturally. "Something may grow there but it is not the same kind of productivity that it was before. Covering it with grasses and forbs is not the same thing as woody vegetation." Outside of the maintained ROW the FS wants the productivity for growing the kind of forest that grew there before which will not happen if the topsoil has been lost or heavily compacted.

Leslie Hartz asked if it is a FS requirement that the Temporary ROW be restored or is it addressed as part of the special use permit. Jennifer responded that it is a FS requirement. Clyde Thompson added that MNF Forest Plan standard SW03 requires site restoration.

### **Action Items & Next Steps**

- FS will have an internal discussion on Jim Thompson's idea of raking off O horizon material and redistributing it on compacted areas where is too difficult to do full segregation.
- ACP will review Attachment A of the COM Plan to make sure that it reflects the actual situation in the field with information for clearing about where they intend to do stumps.
- ACP will come up with thresholds for when they can and cannot segregate topsoil on a slope.

- Jennifer Adams and Richard Gangle will coordinate to schedule follow up call in January.
  - o Next meeting will include discussion of what to do in situations where topsoil cannot be segregated.

# **Federal Agencies**

## **National Park Service**

Dominion

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060

January 20, 2017

Mary C. Krueger Energy Specialist Resource Planning & Compliance National Park Service - Northeast Region 15 State Street Boston, MA 02109

Mr. Ryan McCormick Permits Coordinator National Park Service – Blue Ridge Parkway 199 Hemphill Knob Road Asheville, NC 28803

Re: Atlantic Coast Pipeline Revised Visual Impact Assessment

Dear Ms. Krueger and Mr. Woods,

As you are aware, Atlantic Coast Pipeline, LLC (Atlantic) 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 or Project), 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 Transmission, Inc., a subsidiary of Dominion Resources, Inc., to construct and operate the ACP on behalf of Atlantic.

The proposed ACP pipeline system includes a crossing of the Appalachian National Scenic Trail (ANST) on U.S. Forest Service (USFS) lands in the George Washington National Forest (GWNF) and the Blue Ridge Parkway on National Park Service (NPS) lands on adjacent parcels near the Augusta/Nelson County line in Virginia. The ACP also includes a crossing of Seneca State Forest on state lands in West Virginia.

In support of its Project, Atlantic prepared a Visual Impact Assessment (VIA), which included an analysis and simulations of potential views from key observation points (KOPs) in the vicinity of the proposed ANST and BRP crossings. Atlantic provided the National Park Service with a copy of the draft VIA by letter transmittal on August 5, 2016. Atlantic subsequently updated its assessment to address comments on the draft VIA from the USFS and Federal Energy Regulatory Commission. Atlantic provided the National Park Service with a copy of the updated VIA by letter transmittal on September 12, 2016.

Mary Krueger and Ryan McCormick January 20, 2017

Atlantic has prepared a second update to the draft VIA (enclosed DVD). This second update addresses potential impacts to viewsheds at additional KOPs along the ANST and BRP (as recommended by the Appalachian Trail Conservancy and National Park Service) as well as at KOPs in and near Seneca State Forest (as recommended by the National Park Service).

Atlantic would appreciate any comments you or your staffs have on the update to the VIA. Please contact Richard Gangle at (804) 273-2814 or Richard.B.Gangle@dom.com if there are questions regarding this submittal.

Please direct written responses to:

Richard Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

Sincerely,

Robert M. Bisha

Rhut M. Bila

Technical Advisor, Atlantic Coast Pipeline

Enclosures

Updated Visual Impact Assessment (DVD)

# U.S. Fish and Wildlife Service



# ATLANTIC COAST PIPELINE PROJECT MEETING MINUTES

MEETING WITH (COMPANY/AGENCY):	
U.S. Fish and Wildlife Service (FWS)	
DATE:	LOCATION:
November 22, 2016	Elkins, WV FWS Field Office
ATTENDEES AND THEIR AFFILIATION: Liz Stout, FWS Spencer Trichell, Dominion Sara Throndson, ERM Maggie Voth, ERM Tracy Brunner, ERM Katie O'Connor, ERM	
PREPARED BY:	
Tracy Brunner, ERM	

Spencer provided a summary of a potential conservation site that Atlantic has identified. The site under consideration has existing populations of running buffalo clover (RBC) and potential bat caves (tri-colored bat use has been confirmed in one of the 10 caves). Dominion is considering preservation of the site to offset potential adverse effects to bats and RBC from the Project.

#### Running Buffalo Clover Mitigation

Dominion is developing avoidance and minimization measures for the RBC populations that were found in the workspace. We anticipate that approximately 2,000-3,000 stems may be impacted out of approximately 30,000 identified during field surveys. Impacts will be further refined once workspace changes are finalized. The proposed mitigation site is approximately 500 acres in size; 400 acres are forested and the remaining 100 are savannah type habitat.

Liz requested the overall population numbers for RBC so FWS can take that into account for disturbance. Liz stated that avoidance and strong BMPs are recommended to protect stems in close proximity to populations off of the right-of-way (ROW). These measures will ensure a good chance of survival for adjacent populations. Liz stated that implementing avoidance of the larger populations, implementing conservation measures, and preserving the mitigation site would satisfy concerns for RBC.

#### **Bat Mitigation**

MEETING MINUTES:

Liz stated that she is having trouble quantifying impacts to winter habitat for bats (hibernacula) since pedestrian surveys are incomplete. Maggie clarified that there were a total of 16,000 acres of hibernacula survey requested (which included the 1-km survey buffers in karst regions in WV and the 1,000-ft survey buffers in the Monongahela National Forest [MNF]) and all but approximately 3,000 acres were surveyed. The majority of the remaining survey area has denied survey permission. Liz said she will talk to FERC about how to approach that. Liz stated she is concerned that she cannot complete an effects analysis without the data and that the initiation of consultation cannot begin without an effects determination.

Spencer asked how other projects/agencies (like the highway department) deal with this access problem on their projects. Liz said that those projects have been able to get access this distance from their projects. The group discussed options for initiating consultation without complete datasets. Liz said it is her understanding that Dominion would have to assume worst case scenario, which in this case would be an impact to a P3 or P4 Indiana bat hibernacula. The implications of assumed presence include:

- Higher take estimates;
- Additional conservation measures; and,
- Additional FWS-imposed and required reasonable and prudent measures (RMPs) based on data provided.

Liz stated that she does not have consultation experience with large project such as this, but has only done formal consultation for small projects with estimated take through indirect impacts to a few mussels. These projects have donated money to propagation of species as an RMP.

Northern long-eared bats are Liz's biggest concern for this project since known hibernacula occur in the project area. The group discussed where to assume presence of bats in unsurveyed areas. Liz said to focus ongoing survey efforts within 0.25 mile of the ROW to cover northern long-eared bats.

Maggie asked about whether areas with no survey access but within the 5-mile hibernacula buffer would be treated any differently if survey could not be completed, since they already fall within occupied Indiana bat habitat. Liz stated that she hasn't had experience with that and Sumalee (Virginia Field Office) is out, so she won't have information prior to the meeting next week. The regional office hasn't provided clarification about the lack of survey for hibernacula, but Liz will talk to others within her region about their experience and approaches. Spencer asked if we should set up another meeting in December to talk to Liz once she has spoken to others. Liz said she was not sure of her timeline and that it was best to wait until she had a chance to catch up with the necessary staff.

Liz stated that the karst impact analysis will need to be completed and will need to address multiple potential impacts (e.g. pipeline explosion, operations, etc.). She will reach out to PA and KY field offices for advice. Liz will be putting the BO together for the Project.

Spencer asked if gating of hibernacula would be an appropriate conservation measure to address hibernacula impacts. Liz said that was an appropriate measure. Liz stated that funding for gates would be appropriate without Atlantic installing the gates themselves. Sara asked if there are any particular caves that would be recommended for protection with gates. Liz suggested reaching out to DNR and the Forest Service to determine preferred cave sites or potential cave sites. Landowners are typically pretty accepting of these sorts of mitigation measures. DNR holds keys to gates for survey purposes. If Dominion could conduct spring surveys at any cave sites that looked good that would be helpful. Maggie stated that the Project found four new hibernacula for northern long-eared bats.

Liz suggested that measures such as chemical girdling, bat boxes, planting, establishing watering holes, etc. are all good options that should be incorporated into the conservation measures. She stated that AllStar has a good idea of how to enhance a property for bats and that the FWS has been pleased with their work on other properties.

Sara stated that there are severed mineral rights on the proposed conservation property and asked if that was a concern to the FWS. Liz provided an example from another mitigation site, where FWS researched the rights issue, and decided what the options were for complete protection or what might or might not happen on the site. In that case, FWS decided to protect and enhance the site since overall benefit was greater than the risk of development. The group discussed the potential for minerals to be extracted from the property and. Timber and coal are the greatest industries in state. Liz is of the opinion that there is a minimal chance that someone would install a natural gas well pad on the site in the future.

Spencer asked what kind of monitoring and reporting FWS would require on the conservation site. Liz said there will need to be more discussion about monitoring requirements within the FWS. She will talk to others in her office about length of the monitoring period recommended. For summer habitat impacts, bat boxes may require more than 2 years of monitoring since the consultation is formal. Netting of the boxes to identify species using the boxes may be recommended. Liz agreed that bat boxes used by federal species would not add "bat buffers" as they are not roost trees.

Liz suggested replanting trees in the ROW as mitigation for summer habitat. Spencer stated it would be difficult to replant along the ROW. Liz stated that Dominion could help the landscape heal by planting shrubs, etc. along the temporary workspace. This would help minimize disruption to other wildlife species, too, which can affect bat use of areas. Liz mentioned that the proposed route goes through high quality habitat along the Appalachians and that planting to reduce the gap left by the ROW post-construction could be helpful.

Maggie asked about mitigation ratios and if the Project should follow WV bat conservation plan guidance for ratios. For primary roost trees, Liz recommended a 1:1 ratio for replacement of trees directly impacted by workspace; for secondary roost trees, Atlantic could get more creative with conservation measures (plantings, property acquisition, etc.) or they can adhere to the 4:1 ratio for secondary trees to artificial structures. Spencer asked if the project can expect the same requirements for Virginia. Liz stated she is going to look at the analysis for the species overall, regardless of state lines, but that while Virginia habitat is similar to West Virginia, North Carolina habitat is different. She will be looking at the same types of things for the Appalachian region and summer roosting habitat. Sumalee in the VAFWS office has a better understanding of karst impacts. Virginia has significantly less karst than West Virginia. Liz stated that this was ok that Atlantic doesn't have roost tree mapping for other states. West Virginia has collected more data on these species and their habitats, which is why they have additional requirements.

Spencer asked about survey results and how to handle those locations where we had positive acoustics in 2015 and negative mist netting results in 2016. Liz stated that is generally state dependent, but for this project, negative mist netting would supersede acoustic hits [are no longer considered occupied].

Liz asked if Virginia big-eared bat acoustic calls were manually vetted. Katie stated that the acoustic program often confuses Virginia big-eared bat calls with big brown bat calls, resulting in false positives. However, manually vetting can confirm them since they have unique calls. No Virginia big-eared bat calls were confirmed during vetting. We also manually vetted the gray bat

potential calls noted in the survey report; all were vetted to low quality little brown calls, no gray bat calls were confirmed.

Liz asked when clearing is proposed. Spencer explained that April 2018 is the proposed start of construction, but that tree clearing would start in November 2017 except in selected locations where tree clearing may begin in October. The goal would be to try to cut trees before winter weather becomes an issue. Liz was concerned with clearing outside the time-of-year (TOY) restriction in Indiana bat habitat buffers and stated that the project should adhere to the winter tree clearing. Clearing starting in October would have the potential to impact Indiana bats.

Maggie asked Liz to confirm that the northern long-eared bat 3-mile habitat buffers were no longer relevant for species impacts. Liz stated that is correct since the 4(d) rule supersedes the former guidelines 3-mile buffers.

#### Other Species and BA Discussion

Liz stated that the effect determination for clubshell in the BA should be "may affect, but not likely to adversely affect" due to access roads nearby with potential for indirect impacts from erosion and sedimentation. Many species within the project area is likely to have at least a "not likely to adversely affect" determination rather than "no effect" if they occur nearby. FWS will not have a comment table for next week's BA and MBTA Plan meeting. They are meeting Monday night internally to discuss the documents.

Spencer stated the Karst Plan was developed by GeoConcepts, who has familiarity with Madison Cave isopod conservation measures and HCP. Liz stated that the Karst Plan is lacking conservation measures and doesn't demonstrate avoidance of karst features found. The identified measures only demonstrate how to remediate impacts after construction. Liz asked for clarification on how the risk levels risk levels were determined in the Karst Plan.

Maggie clarified that all karst features identified by GeoConcepts were reviewed for potential use by bats and then surveyed for bats if they were found to have potentially suitable habitat (i.e., open throat and cave features).

Spencer stated that electrical resistivity tests are being conducted, as well. Liz asked about dye trace studies and Spencer said that is a question for engineering and is yet to be determined. Liz thought that FWS will want to see dye trace studies for Madison Cave isopod.

There was discussion regarding burning and Liz stated that it should never take place near caves. Her concern was that smoke blowing into the mouth of an occupied portal could have an adverse effect on roosting bats. Assessment of proximity of burning to caves would have to occur on a site-specific basis considering landscape variations. Liz recommend providing reasons in the BA why burning won't be an issue. Tracy clarified that in the current BA, we used a specific distance, as measuring wind, etc. in the field is logistically challenging. Other measures to consider are limiting size, duration, and distance of burns from cave features.

Liz stated that once the project commits to TOY restrictions, changes to the project or construction plans may cause delay and possibly the need to reinitiate consultation. Liz confirmed that the plant surveys results will be valid for 2 seasons, while bat and mussel survey results are valid for 5 years; surveys will be valid throughout project construction if the project

has been started within those timelines. However, this can also be dependent on whether any major events occur along the route during that time period (e.g. major flood, new information is revealed that was not previously considered, etc.). These things could trigger re-initiation of consultation even if surveys have not expired. In that case, the entire BA would not require revision, but reassessment of baseline and take statement may be required, which takes less time.

Liz stated the FWS Virginia Field Office is taking the lead on HEA modeling with the Nature Conservancy completing the work. FWS will have more information at the meeting on November 29, 2016.

ACTION ITEMS	
ACTION REQUIRED:	BY WHOM:

cc: Project Files

#### Sara Throndson

From: Smith, Kimberly <kimberly\_smith@fws.gov>
Sent: Friday, December 09, 2016 10:46 AM

**To:** Sara Throndson

Cc: Sumalee Hoskin; Troy Andersen; Spencer Trichell (spencer.trichell@dom.com); Tracy

Brunner; Laurid Broughton

**Subject:** Re: ACP - Virginia Sensitive Stream crossings and Areas where we recommend a 3rd

party monitor during the construction plase

Sara,

No federally listed species are a concern for the James River crossing, however, the James River is potential habitat for the green floater, a state listed species, I believe you are addressing the green floater in your BA. Correct?

Kim

On Fri, Dec 9, 2016 at 10:24 AM, Sara Throndson (Sara. Throndson@erm.com) wrote:

Hi Kim,

We noticed that the James River is not included in your list below. In a previous email from you dated September 2, 2016 (*see attached*) you concurred with the Projects decision not to survey and to assume presence of federally listed mussels in the James River and Nottoway River.

Could you clarify that there is potential for federally listed mussels in the James River? We want to be sure we have this correct in the BA and do not want to assume presence for a species unnecessarily.

Thank you, Sara

#### Sara Throndson

Office 612-347-7113 | Cell 612-716-7812

From: Smith, Kimberly [mailto:kimberly\_smith@fws.gov]

Sent: Wednesday, December 07, 2016 8:26 AM

To: Sara Throndson

Cc: Sumalee Hoskin; Troy Andersen

construction plase
Sara,
As discussed at the November 29, 2016 meeting.
Cowpasture River - James spinymussel
Butterwood Creek - Roanoke logperch
Nottoway River - Roanoke logperch, Dwarf wedgemussel, Atlantic pigtoe, yellow lance
Waqua Creek - Roanoke logperch
Sturgeon Creek - Roanoke logperch, Atlantic pigtoe
The areas highlighted in the attached table and Cochran's Cave No. 2 and No. 3 Madison Cave Isopod
Kimberly Smith
Fish and Wildlife Biologist

From: Nystrom, Sarah [mailto:sarah\_nystrom@fws.gov]

**Sent:** Friday, January 06, 2017 2:38 PM

To: Snead, Leo C. (VDOT); kimberly.a.baggett@usace.army.mil; James Schaberl; Carolcroy@fs.fed.us; Applegate, Jason

R CIV USARMY USAG (US); Sara Throndson; MStahl@eqt.com; Steve Roble; chris.ludwig@dcr.virginia.gov

Cc: Troy Andersen

Subject: Rusty Patched Bumble Bee Area of Influence for Project Review in Virginia

Dear Conservation Partners.

The Service proposed to list the rusty patched bumble bee (*Bombus affinis*; RPBB) as an endangered species under the Endangered Species Act on September 22, 2016. We would like to provide some certainty for planning purposes as surveys may be recommended during the summer of 2017.

We have recorded RPBB occurrences (1920s through 2014) in 19 counties and 5 cities in Virginia. We are planning to include all counties with RPBB detections in the IPaC area of influence for project review. However, we will stratify the range to include areas with historical occurrences (1920s to 1980s) and areas with more current occurrences (1990s to present).

Areas considered to represent current occurrences of RPBB include 4 counties in Virginia (Fauquier, Montgomery, Page and Rockingham). Projects in these counties will be reviewed on a case-by-case basis for impacts to RPBB and surveys will likely be recommended to determine presence or absence at the project site. Threats to RPBB include pesticide use, ground disturbance that may impact nests or overwintering queens, habitat conversion or use of herbicides. Project proponents will either conduct surveys or assume presence and implement avoidance and minimization measures. Avoidance and minimization measures could include: time-of-year restrictions to avoid impacts to foraging habitat, avoiding ground disturbance within 1 km of suitable foraging habitat, avoiding the use of pesticides and herbicides, and promoting the use of native plants.

A precipitous decline in RPBB populations began in the late 1990s. As a result, it is uncertain whether RPBB still exists in counties with historical occurrences (prior to 1990). We will recommend voluntary conservation measures for RPBB associated with projects located in the remaining 15 counties (Alleghany, Carroll, Chesterfield, Fairfax, Frederick, Giles, Grayson, Madison, Nelson, Northumberland, Prince William, Pulaski, Rappahannock, Rockbridge, and Wythe) and 5 cities (Arlington, Falls Church, Galax City, Radford City, and Winchester) within the historical range of RPBB. Conservation measures will include avoiding the use of pesticides and herbicides, in order to address the primary threats to RPBB, and improving habitat for RPBB with the use of native plants that provide suitable foraging habitat. Surveys can also be conducted at these project sites, but will not be recommended except in rare circumstances.

Rusty patched bumble bee will be added to IPaC and our online project review process will be updated to reflect our recommendations for the species by January 13. Please feel free to let me know if you have any questions or provide us with additional or alternative points of contact for your project or agency.

Thanks!

#### Sarah

Sarah Nystrom
Fish and Wildlife Biologist
Virginia Field Office - Ecological Services
6669 Short Lane
Gloucester, Virginia 23061
(804) 824-2413

#### **Maggie Voth**

From: Maggie Voth

Sent: Monday, January 09, 2017 6:54 PM

To: 'Hoskin, Sumalee'

**Cc:** Kathleen O'Connor; Sara Throndson

**Subject:** RE: Bat data discussion

#### Thank you, Sumalee.

As we discussed, we'll get the list or figure with potential sites we've identified during our research back to you soon, likely next week.

#### Maggie

#### **Maggie Voth**

#### **Environmental Resources Management (ERM)**

**T** 612.347.7869 | **M** 651.764.0445

E maggie.voth@erm.com | W www.erm.com

From: Hoskin, Sumalee [mailto:sumalee\_hoskin@fws.gov]

**Sent:** Friday, January 06, 2017 1:58 PM

To: Maggie Voth

**Cc:** Kathleen O'Connor; Sara Throndson **Subject:** Re: Bat data discussion

#### Hi Maggie,

In response to your question today. Here is the 2011 list of counties that have Indiana bat hibernaculum.

Sumalee

VA Bath Clark's

VA Bath Starr Chapel Saltpeter

VA Bland Hamilton

VA Bland Newberry -Bane
VA Craig Rufe Caldwell
VA Craig Shires Saltpeter

VA Giles Tawney's

VA Highland Hupman's Saltpeter

VA Highland Mountain Grove Saltpeter
VA Lee Cumberland Gap Saltpeter

VA Lee Grassy Springs
VA Montgomery Nellies Hole
VA Shenandoah Maddens

VA Tazewell Higgenbotham No 1

VA Wise Kelly

VA Wise Rocky Hollow

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 27, 2017

Ms. Liz Stout U.S. Fish and Wildlife Service West Virginia Ecological Services Field Office Elkins, WV 26241

Re: Atlantic Coast Pipeline and Supply Header Project Submittal of updated Draft Biological Assessment and Migratory Bird Plan

Dear Ms. Stout:

Atlantic Coast Pipeline, LLC (Atlantic) is a company formed by four major U.S. energy companies – Dominion, Duke Energy, Piedmont Natural Gas, and Southern Company Gas. The company was created to develop, own, and operate the proposed Atlantic Coast Pipeline (ACP), an approximately 600-mile-long, interstate natural gas transmission pipeline system designed to meet growing energy needs in Virginia and North Carolina. For more information about the ACP, visit the company's website at www.dom.com/acpipeline. Atlantic has contracted with Dominion Transmission, Inc. (DTI), a subsidiary of Dominion, to permit, build, and operate the ACP on behalf of Atlantic.

In addition, DTI proposes to construct and operate approximately 37.5 miles of pipeline loop and modify existing compression facilities in Pennsylvania and West Virginia. This Project is referred to as the Supply Header Project (SHP) and will enable DTI to provide firm transportation service of up to 1.5 million dekatherms per day (MMDth/d) to various customers, including Atlantic. Atlantic will be a Foundation Shipper in the SHP, and will utilize the SHP capacity to allow its shippers access to natural gas supplies from various DTI receipt points for further delivery to points along the ACP.

Atlantic and DTI are seeking authorization from the Federal Energy Regulatory Commission (FERC) under Section 7(c) of the Natural Gas Act (NGA) to construct, own, operate, and maintain the proposed facilities. As required under Section 7 of the Endangered Species Act of 1973 (as amended), projects that require Federal authorization must undergo consultation with U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration National Marine Fisheries Service.

Atlantic and DTI have prepared this draft Biological Assessment (BA) and Migratory Bird Plan at the request of the FERC as the lead federal agency. With this submittal of the BA Atlantic is requesting that FERC initiate formal consultation with the FWS and NOAA Fisheries.

We look forward to continuing to work with you on the ACP. Please contact Richard B. Gangle at (804) 273-2814 or Richard.B.Gangle@dom.com, if there are questions regarding this report. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

Sincerely,

Robert M. Bisha

Klost M. Bish

Technical Advisor, Atlantic Coast Pipeline

Cc:

Mr. Josh Shaffer, U.S. Army Corps of Engineers - Pittsburgh District

Mr. Adam Fannin, U.S. Army Corps of Engineers – Huntington District

Mr. Steve Gibson, U.S. Army Corps of Engineers - Norfolk District

Ms. Tracey Wheeler, U.S. Army Corps of Engineers - Wilmington District

Mr. Andrew Herndon, NOAA Fisheries Southeast Regional Office

Mr. Fritz Rohde, NMFS Habitat Conservation Division

#### Attachments:

Atlantic Coast Pipeline and Supply Header Project - Draft Biological Assessment and Essential Fish Habitat Assessment

Atlantic Coast Pipeline and Supply Header Project - Migratory Bird Plan

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 27, 2017

Ms. Sumalee Hoskins U.S. Fish and Wildlife Service Virginia Ecological Services Field Office Gloucester, VA 23061

Re: Atlantic Coast Pipeline and Supply Header Project Submittal of updated Draft Biological Assessment and Migratory Bird Plan

Dear Ms. Hoskins:

Atlantic Coast Pipeline, LLC (Atlantic) is a company formed by four major U.S. energy companies – Dominion, Duke Energy, Piedmont Natural Gas, and Southern Company Gas. The company was created to develop, own, and operate the proposed Atlantic Coast Pipeline (ACP), an approximately 600-mile-long, interstate natural gas transmission pipeline system designed to meet growing energy needs in Virginia and North Carolina. For more information about the ACP, visit the company's website at www.dom.com/acpipeline. Atlantic has contracted with Dominion Transmission, Inc. (DTI), a subsidiary of Dominion, to permit, build, and operate the ACP on behalf of Atlantic.

In addition, DTI proposes to construct and operate approximately 37.5 miles of pipeline loop and modify existing compression facilities in Pennsylvania and West Virginia. This Project is referred to as the Supply Header Project (SHP) and will enable DTI to provide firm transportation service of up to 1.5 million dekatherms per day (MMDth/d) to various customers, including Atlantic. Atlantic will be a Foundation Shipper in the SHP, and will utilize the SHP capacity to allow its shippers access to natural gas supplies from various DTI receipt points for further delivery to points along the ACP.

Atlantic and DTI are seeking authorization from the Federal Energy Regulatory Commission (FERC) under Section 7(c) of the Natural Gas Act (NGA) to construct, own, operate, and maintain the proposed facilities. As required under Section 7 of the Endangered Species Act of 1973 (as amended), projects that require Federal authorization must undergo consultation with U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration National Marine Fisheries Service.

Ms. Sumalee Hoskins January 27, 2016 Page 2 of 2

Atlantic and DTI have prepared this draft Biological Assessment (BA) and Migratory Bird Plan at the request of the FERC as the lead federal agency. With this submittal of the BA Atlantic is requesting that FERC initiate formal consultation with the FWS and NOAA Fisheries.

We look forward to continuing to work with you on the ACP. Please contact Richard B. Gangle at (804) 273-2814 or Richard.B.Gangle@dom.com, if there are questions regarding this report. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

Sincerely,

Robert M. Bisha

Kdowtm. Bishy

Technical Advisor, Atlantic Coast Pipeline

Cc:

Mr. Josh Shaffer, U.S. Army Corps of Engineers - Pittsburgh District

Mr. Adam Fannin, U.S. Army Corps of Engineers – Huntington District

Mr. Steve Gibson, U.S. Army Corps of Engineers - Norfolk District

Ms. Tracey Wheeler, U.S. Army Corps of Engineers – Wilmington District

Mr. Andrew Herndon, NOAA Fisheries Southeast Regional Office

Mr. Fritz Rohde, NMFS Habitat Conservation Division

#### Attachments:

Atlantic Coast Pipeline and Supply Header Project - Draft Biological Assessment and Essential Fish Habitat Assessment

Atlantic Coast Pipeline and Supply Header Project - Migratory Bird Plan

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 27, 2017

Mr. John Ellis U.S. Fish and Wildlife Service North Carolina Ecological Services Field Office P.O. Box 33726 Raleigh, NC 27636

Re: Atlantic Coast Pipeline and Supply Header Project Submittal of updated Draft Biological Assessment and Migratory Bird Plan

Dear Mr. Ellis:

Atlantic Coast Pipeline, LLC (Atlantic) is a company formed by four major U.S. energy companies – Dominion, Duke Energy, Piedmont Natural Gas, and Southern Company Gas. The company was created to develop, own, and operate the proposed Atlantic Coast Pipeline (ACP), an approximately 600-mile-long, interstate natural gas transmission pipeline system designed to meet growing energy needs in Virginia and North Carolina. For more information about the ACP, visit the company's website at www.dom.com/acpipeline. Atlantic has contracted with Dominion Transmission, Inc. (DTI), a subsidiary of Dominion, to permit, build, and operate the ACP on behalf of Atlantic.

In addition, DTI proposes to construct and operate approximately 37.5 miles of pipeline loop and modify existing compression facilities in Pennsylvania and West Virginia. This Project is referred to as the Supply Header Project (SHP) and will enable DTI to provide firm transportation service of up to 1.5 million dekatherms per day (MMDth/d) to various customers, including Atlantic. Atlantic will be a Foundation Shipper in the SHP, and will utilize the SHP capacity to allow its shippers access to natural gas supplies from various DTI receipt points for further delivery to points along the ACP.

Atlantic and DTI are seeking authorization from the Federal Energy Regulatory Commission (FERC) under Section 7(c) of the Natural Gas Act (NGA) to construct, own, operate, and maintain the proposed facilities. As required under Section 7 of the Endangered Species Act of 1973 (as amended), projects that require Federal authorization must undergo consultation with U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration National Marine Fisheries Service.

Atlantic and DTI have prepared this draft Biological Assessment (BA) and Migratory Bird Plan at the request of the FERC as the lead federal agency. With this submittal of the BA Atlantic is requesting that FERC initiate formal consultation with the FWS and NOAA Fisheries.

We look forward to continuing to work with you on the ACP. Please contact Richard B. Gangle at (804) 273-2814 or Richard.B.Gangle@dom.com, if there are questions regarding this report. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

Sincerely,

Robert M. Bisha

Robert M. Bisha

Technical Advisor, Atlantic Coast Pipeline

Cc:

Mr. Josh Shaffer, U.S. Army Corps of Engineers - Pittsburgh District

Mr. Adam Fannin, U.S. Army Corps of Engineers – Huntington District

Mr. Steve Gibson, U.S. Army Corps of Engineers - Norfolk District

Ms. Tracey Wheeler, U.S. Army Corps of Engineers - Wilmington District

Mr. Andrew Herndon, NOAA Fisheries Southeast Regional Office

Mr. Fritz Rohde, NMFS Habitat Conservation Division

#### Attachments:

Atlantic Coast Pipeline and Supply Header Project - Draft Biological Assessment and Essential Fish Habitat Assessment

Atlantic Coast Pipeline and Supply Header Project - Migratory Bird Plan

U.S. Forest Service – Monongahela and George Washington National Forests

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 26, 2017

#### BY OVERNIGHT (OR EXPRESS) MAIL

Ms. Jennifer Adams U.S. Forest Service 5162 Valleypointe Parkway Roanoke, Virginia 24019

Re: Dominion Transmission, Inc., Atlantic Coast Pipeline:

Submittal of Technical Report, Phase II Archaeological Testing at Sites 44AU0780, 44AU0781, 44AU0914, 44AU0915, 44AU0917, and 44AU0918, George Washington National Forest, Augusta County, Virginia

Dear Ms. Adams:

Dominion Transmission, Inc. (DTI) and Atlantic Coast Pipeline, LLC (Atlantic) are pleased to submit the results, presented below, of Phase II Archaeological Testing at six sites in the George Washington National Forest (GWNF) conducted by GAI Consultants, Inc. (GAI) as part of the Atlantic Coast Pipeline (ACP) Project (Project).

On September 6, 2016, DTI submitted a Revised Phase I Cultural Resources Investigation report to the GWNF. That report concluded that Phase II Archaeological Testing was warranted at six sites (44AU0780, 44AU0781, 44AU0914, 44AU0915, 44AU0917, 44AU0918). The GWNF concurred with the methods and conclusions of that report. On September 6, 2016 GAI received a Permit FS2700-32 specific to proposed Phase II excavations, in compliance with the Archaeological Resources Protection Act (ARPA) of 1979.

In September and October 2016, GAI conducted Phase II studies at all six sites. Although excavations were focused inside the proposed construction workspace, in keeping with customary practices requested by the Virginia Department of Historic Resources, some level of testing was performed within portions of the sites that extend beyond the construction workspace but still confined to the Project's defined 300-foot-wide study corridor or Area of Potential Effect. All six sites contain precontact-period lithic scatters. A few pieces of precontact-period ceramic were also recovered from Site 44AU0781. A small historic-period artifact scatter, as well as remains of a charcoal hearth related to iron furnace fuel production, were encountered at Site 44AU0917. However, these artifacts represent minor components of the site.

Sites 44AU0914 and 44AU0915 are sparse scatters and no diagnostics or cultural features were identified. Each of these sites is recommended as Not Eligible for National Register listing. Site

44AU0780 is also a sparse scatter with no diagnostics or cultural features. However, because it extends outside the Project and has not been fully delineated, this previously recorded site is recommended to remain Not Evaluated, but that the research potential within the Project has been exhausted.

Sites 44AU0781, 44AU0917, and 44AU0918 each contain extensive and dense artifact scatters. Diagnostic artifacts were recovered from each of these three sites but were present in mixed contexts. No intact precontact-period cultural features were identified. The historic-period component of Site 44AU0917 is not considered significant. Each of these three sites extends outside the Project and has not been fully delineated. Therefore, GAI recommends that Sites 44AU0781, 44AU0917, and 44AU918 each remain considered Potentially Eligible for National Register listing. However, given the amount and extent of excavations and analysis conducted on the portions of these three sites within the Project, GAI recommends that the research potential has been exhausted for the portion of each site within the Project. Based on the findings at each of the six sites subjected to Phase II investigation, the Project in this area should be allowed to proceed as currently designed without further archaeological study. If project plans change, and portions of sites outside the defined Project are impacted, additional archaeological investigations may be required.

In order to further limit impacts to Sites 44AU0781, 44AU0917, and 44AU918 during construction, temporary fencing will be erected along the edge of the construction corridor to physically separate construction activity from the remainder of the sites contained outside the construction corridor. Furthermore, as stipulated in the Project's Unanticipated Discovery Plan, if requested by the GWNF, an archaeologist (meeting the United States Secretary of the Interior's professional qualifications standards for archaeology) will be on-site during construction across the area of Sites 44AU0781, 44AU0917, and 44AU918 to monitor for exposure of unanticipated cultural features and to gather data in the unlikely event that features are encountered.

DTI and Atlantic are requesting your review and concurrence of the attached technical report presenting the Phase II Archaeological Testing studies and results in the GWNF.

We look forward to continuing to work with you on the ACP. Please contact Richard B. Gangle at (804) 273-2814 or Richard B. Gangle dom.com, if there are questions regarding this report. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060 Ms. Jennifer Adams January 26, 2017 Page 3 of 3

Sincerely,

Robert M. Bisha

Technical Advisor, Atlantic Coast Pipeline

Cc: Michael J. Madden, George Washington National Forest

Richard B. Gangle, Dominion

#### Attachment:

Technical Report, Phase II Archaeological Testing at Sites 44AU0780, 44AU0781, 44AU0914, 44AU0915, 44AU0917, and 44AU0918, George Washington National Forest, Augusta County, Virginia.



January 27, 2017

### BY OVERNIGHT (OR EXPRESS) MAIL

Clyde Thompson Forest Supervisor U.S. Forest Service Monongahela National Forest 200 Sycamore Street Elkins, WV 26241

Re: Atlantic Coast Pipeline, LLC, Atlantic Coast Pipeline, 2015 and 2016 Monongahela National Forest Wetland and Waterbody Report for the U.S. Forest Service

Dear Mr. Thompson:

Atlantic Coast Pipeline, LLC (Atlantic) is a company formed by four major U.S. energy companies – Dominion, Duke Energy, Piedmont Natural Gas, and Southern Company Gas. The company was created to develop, own, and operate the proposed Atlantic Coast Pipeline (ACP), an approximately 604.4-mile-long, interstate natural gas transmission pipeline system designed to meet growing energy needs in Virginia and North Carolina. For more information about the ACP, visit the company's website at <a href="www.dom.com/acpipeline">www.dom.com/acpipeline</a>. Atlantic has contracted with Dominion Transmission, Inc. (DTI), a subsidiary of Dominion, to seek authorization from the Federal Energy Regulatory Commission under Section 7(c) of the Natural Gas Act to construct, own, operate, and maintain the ACP on behalf of Atlantic. Approximately 21.1 miles (5.2 miles within the Monongahela National Forest) of ACP will be located on U.S. Forest Service (USFS) land.

The enclosed 2015 and 2016 Monongahela National Forest wetland and waterbody delineation report is being submitted in support of Atlantic's application for a right-of-way and special use permit for the ACP.

Please contact Mr. Richard Gangle at (804) 273-2814 or richard.b.gangle@dom.com if you have questions regarding the enclosed report. Please direct written responses to:

Richard Gangle
Energy Infrastructure Environmental Services
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, Virginia 23060

U.S. Forest Service Atlantic Coast Pipeline January 27, 2017 Page 2 of 2

Sincerely,

Robert M. Bisha

Robert M. Bisha

Technical Advisor, Atlantic Coast Pipeline

cc:

Jennifer Adams, USFS

Richard Gangle, Dominion Spencer Trichell. Dominion

Attachments: 2015 and 2016 Monongahela National Forest Survey Report

**Dominion** 

**Dominion Resources Services, Inc.** 5000 Dominion Boulevard, Glen Allen, VA 23060

January 27, 2017

Clyde Thompson Forest Supervisor U.S. Forest Service Monongahela National Forest 200 Sycamore Street Elkins, WV 26241

Mr. Joby Timm
Forest Supervisor
U.S. Forest Service
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

Re: Atlantic Coast Pipeline, LLC, Atlantic Coast Pipeline Project Construction, Operation, and Maintenance Plan – Second Draft

Dear Mr. Thompson and Mr. Timm,

Enclosed is a second draft of the Construction, Operation, and Maintenance (COM) Plan prepared in support of Atlantic Coast Pipeline, LLC's (Atlantic's) proposed Atlantic Coast Pipeline (ACP) Project. This second draft is submitted pursuant to Atlantic's amended Application for Transportation and Utility Systems and Facilities on Federal Lands dated July 29, 2016. Atlantic seeks a special use permit to construct and operate an underground natural gas pipeline on U.S. Forest Service (USFS) lands in the Monongahela National Forest (MNF) and George Washington National Forests (GWNF) in connection with the ACP. Attachments to the enclosed COM Plan are being provided separately on a DVD.

The second draft of the COM Plan addresses issues specific to proposed pipeline crossings of U.S. Forest Service lands in the MNF and GWNF, including issues identified by USFS staff in scoping comments on the ACP; in comments on draft Resource Reports previously submitted by Atlantic to the Federal Energy Regulatory Commission; in correspondence and meetings with Atlantic; and in comments on the preliminary draft of the COM Plan. The second draft of the COM Plan additionally incorporates the results of biological and cultural resource surveys and other studies completed on USFS lands subsequent to the submittal of the preliminary draft.

Also enclosed with this letter is an annotated matrix which lists the comments of the USFS received via letter sent November 16, 2016 on the preliminary draft of the COM Plan and describes how and where Atlantic has addressed each comment in the second draft. In some

Clyde Thompson and Jody Timm January 20, 2017

cases, resolution of comments is pending additional fieldwork to be completed in the spring of 2017or consultation with USFS staff. Atlantic looks forward to continued opportunities to work with USFS staff as we proceed to refine and finalize the COM Plan for the ACP.

Please contact Mr. Richard Gangle at (804) 273-2814 or richard.b.gangle@dom.com if you have questions regarding the second draft of the COM Plan. Please direct written responses to:

Richard Gangle
Energy Infrastructure Environmental Services
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Sincerely,

Robert M. Bisha

Klootm. Bisha

Technical Advisor, Atlantic Coast Pipeline

Cc (w/enclosures):

Kent Karriker, Ecosystems Group Leader, Monongahela National Forest Todd Hess, Realty Specialist/Special Use Manager, Monongahela National Forest Alex Faught, Lands Program Manager, George Washington National Forest Jennifer Adams, Special Projects Coordinator, U.S. Forest Service Richard Gangle, Dominion

#### Attachments:

Second Draft COM Plan Comment Matrix



January 27, 2017

### BY OVERNIGHT (OR EXPRESS) MAIL

Mr. Joby Timm
Forest Supervisor
U.S. Forest Service
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

Re: Dominion Transmission, Inc., Atlantic Coast Pipeline, 2015 and 2016 George Washington National Forest Wetland and Waterbody Report for the U.S. Forest Service

Dear Mr. Timm:

Atlantic Coast Pipeline, LLC (Atlantic) is a company formed by four major U.S. energy companies – Dominion, Duke Energy, Piedmont Natural Gas, and Southern Company Gas. The company was created to develop, own, and operate the proposed Atlantic Coast Pipeline (ACP), an approximately 600-mile-long, interstate natural gas transmission pipeline system designed to meet growing energy needs in Virginia and North Carolina. For more information about the ACP, visit the company's website at <a href="www.dom.com/acpipeline">www.dom.com/acpipeline</a>. Atlantic has contracted with Dominion Transmission, Inc. (DTI), a subsidiary of Dominion, to seek authorization from the Federal Energy Regulatory Commission under Section 7(c) of the Natural Gas Act to construct, own, operate, and maintain the ACP on behalf of Atlantic. Approximately 21.1 miles (15.9 miles within the George Washington National Forest) of ACP will be located on U.S. Forest Service (USFS) land.

The enclosed 2015 and 2016 George Washington National Forest wetland and waterbody delineation report is being submitted in support of Atlantic's application for a right-of-way and special use permit for the ACP.

Please contact Mr. Richard Gangle at (804) 273-2814 or richard.b.gangle@dom.com if you have questions regarding the enclosed report. Please direct written responses to:

Richard Gangle Energy Infrastructure Environmental Services Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060 U.S. Forest Service Atlantic Coast Pipeline January 27, 2017 Page 2 of 2

Sincerely,

Robert M. Bisha

Robert M. Bish

Technical Advisor, Atlantic Coast Pipeline

cc: Jennifer Adams, USFS

Richard Gangle, Dominion Spencer Trichell. Dominion

Attachments: 2015 and 2016 George Washington National Forest Survey Report

### **State/Commonwealth Agencies**

# West Virginia Agencies

# **West Virginia Department of Environmental Protection**

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 24, 2017

#### BY ELECTRONIC MAIL

Mr. Jon Michael Bosley Program Manager – Construction Stormwater West Virginia Department of Environmental Protection 601 57<sup>th</sup> Street SE Charleston, WV 25304

Re: Atlantic Coast Pipeline - Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

Dear Mr. Bosley:

On behalf of Atlantic Coast Pipeline, LLC (Atlantic) and Dominion Transmission, Inc. (DTI), attached for your review please see the revised *Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan* (Plan) prepared by GeoConcepts Engineering, Inc. for the proposed Atlantic Coast Pipeline (ACP) project. Atlantic and DTI have previously filed this Plan with the Federal Energy Regulatory Commission as part of our request for approval of the ACP.

Atlantic and DTI, through continued coordination with West Virginia DEP and DNR and other agencies, prepared and revised the Plan to address concerns associated with installation of the ACP through karst terrain. The ACP crosses through two counties in West Virginia with potential for karst terrain: Pocahontas and Randolph Counties. The attached Plan addresses comments received and outlines how ACP and DTI will construct ACP in karst terrain with measures to identify, monitor, and mitigate identified concerns.

Thank you for your careful review and evaluation of the ACP karst Plan. Atlantic and DTI respectfully request your review and written concurrence of the attached Plan. We appreciate a response within 30 days of receipt of this letter with any feedback you may have regarding the Plan.

Please feel free to contact me at (804) 273-3010 or robert.m.bisha@dom.com, if there are questions about the Plan. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

West Virginia Department of Environmental Protection Atlantic Coast Pipeline - Review of Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan January 24, 2017 Page 2 of 2

Sincerely,

Robert M. Biston

Robert M. Bisha Technical Advisor, Atlantic Coast Pipeline

Attachment: Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

cc: Richard Gangle

# West Virginia Department of Forestry



January 19, 2017

Travis Miller State Lands Manager WV Department of Forestry 61 Fifth St. Bldg. 1, Suite 101 Buchannon, WV 26201

RE: Atlantic Coast Pipeline, LLC, Atlantic Coast Pipeline Project
Transmittal - Order 1 Soil Survey Report for the Seneca State Forest ACP ROW

Dear Mr. Miller:

Atlantic Coast Pipeline, LLC (Atlantic) provides the requested Order 1 Soil Survey report and associated GIS data in the enclosure. Please contact me if you have any questions, 304.203.9011, colin.p.olness@dom.com.

Sincerely,

Colin Olness, P.E.

Atlantic Coast Pipeline

West Virginia Division of Culture and History

**Dominion Resources Services, Inc.** 5000 Dominion Boulevard, Glen Allen, VA 23060



January 26, 2017

Ms. Susan M. Pierce Deputy State Historic Preservation Officer West Virginia Division of Culture and History 1900 Kanawha Boulevard, East Charleston, West Virginia 25305-0300

Subject: Section 106 Review – Phase II Investigations at 46PH775 Report

Atlantic Coast Pipeline, LLC, Atlantic Coast Pipeline Project

FR#: 14-928-Multi

Dear Ms. Pierce:

Atlantic Coast Pipeline, LLC (Atlantic) is requesting review and comment on the enclosed report on Phase II investigations at 46PH775 in Pocahontas County. The Federal Energy Regulatory Commission (FERC) is the lead Federal agency for this Project. Atlantic's consultant, ERM, conducted the survey and prepared the enclosed report pursuant to the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended.

Atlantic would appreciate your comments on the report, and we look forward to continuing to work with you on this Project. If you have any questions regarding the enclosed report, please contact Richard B. Gangle at (804) 273-2814 or Richard.B.Gangle@dom.com, or by letter at:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

Respectfully submitted,

Lowton Biston

Robert M. Bisha

Technical Advisor, Atlantic Coast Pipeline

cc:

Richard Gangle (Dominion)

Enclosure:

Phase II Investigations at 46PH775 Report

### West Virginia Division of Natural Resources

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 24, 2017

#### BY ELECTRONIC MAIL

Mr. Clifford L. Brown Wildlife Resources Section West Virginia Division of Natural Resources P.O. Box 67 Elkins, WV 26241

Re: Atlantic Coast Pipeline - Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

Dear Mr. Brown:

On behalf of Atlantic Coast Pipeline, LLC (Atlantic) and Dominion Transmission, Inc. (DTI), attached for your review please see the revised *Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan* (Plan) prepared by GeoConcepts Engineering, Inc. for the proposed Atlantic Coast Pipeline (ACP) project. Atlantic and DTI have previously filed this Plan with the Federal Energy Regulatory Commission as part of our request for approval of the ACP.

Atlantic and DTI, through continued coordination with West Virginia DNR and other agencies, prepared and revised the Plan to address concerns associated with installation of the ACP through karst terrain. The ACP crosses through two counties in West Virginia with potential for karst terrain: Pocahontas and Randolph Counties. The attached Plan addresses comments received and outlines how ACP and DTI will construct ACP in karst terrain with measures to identify, monitor, and mitigate identified concerns.

Thank you for your careful review and evaluation of the ACP karst Plan. Atlantic and DTI respectfully request your review and written concurrence of the attached Plan. We appreciate a response within 30 days of receipt of this letter with any feedback you may have regarding the Plan.

Please feel free to contact me at (804) 273-3010 or robert.m.bisha@dom.com, if there are questions about the Plan. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060 West Virginia Division of Natural Resources Atlantic Coast Pipeline – Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan January 24, 2017 Page 2 of 2

Sincerely,

Robert M. Bisha

Robert M. Bicher

Technical Advisor, Atlantic Coast Pipeline

Attachment: Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

cc: Richard Gangle

# Virginia Agencies

# **Virginia Department of Conservation and Recreation**

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 24, 2017

#### BY ELECTRONIC MAIL

Mr. Jason Bulluck Natural Heritage Director Department of Conservation and Recreation Division of Natural Heritage 600 East Main Street, 24<sup>th</sup> Floor Richmond, VA 23219

Ms. S. Rene' Hypes Project Review Coordinator Department of Conservation and Recreation Division of Natural Heritage 600 East Main Street, 24<sup>th</sup> Floor Richmond, VA 23219

Re: Atlantic Coast Pipeline - Cochran's Cave Conservation Area Report

Dear Mr. Bulluck and Ms. Hypes:

On behalf of Atlantic Coast Pipeline, LLC (Atlantic) and Dominion Transmission, Inc. (DTI), attached for your review please see the *Cochran's Cave Conservation Area (CCCA) and Moffett Lake Investigation Update* prepared by GeoConcepts Engineering, Inc. for the proposed Atlantic Coast Pipeline (ACP) project.

The report provides a discussion and the results of the subsurface investigation conducted by GeoConcepts to assess the potential for impacts resulting from construction of the ACP. The investigation was conducted in consultation with DCR and included Electrical Resistivity Imaging, Air Track Drilling, and hydrological and dye trace investigations.

Atlantic requests your review and comment on the attached report, including DCR's comments on the viability of the proposed route alignment. Please note that Atlantic is also submitting to DCR under separate cover letter a revised *Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan* (Plan) prepared for the proposed Atlantic Coast Pipeline (ACP) project. This Plan thoroughly addresses the assessment, monitoring and mitigation activities being implemented through areas of karst terrain, including Cochran's Cave Conservation Area.

Virginia Department of Conservation and Recreation Atlantic Coast Pipeline – Review of Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan June 24, 2016 Page 2 of 2

Thank you for your careful review and evaluation of this report. Atlantic and DTI would appreciate a response within 30 days of receipt of this letter. We are also available to meet with you concerning this matter at your convenience.

Please feel free to contact me at (804) 273-3010 or robert.m.bisha@dom.com, if you have questions or to arrange a meeting. Please direct written responses to richard.b.gangle@dom.com or:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

Sincerely,

Robert M. Bisha

Technical Advisor, Atlantic Coast Pipeline

Attachment: Cochran's Cave Conservation Area (CCCA) and Moffett Lake Investigation Update

cc: Wil Orndorff – DCR Richard Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 24, 2017

#### BY ELECTRONIC MAIL

Mr. Jason Bulluck Natural Heritage Director Virginia Department of Conservation and Recreation Division of Natural Heritage 600 East Main Street, 24<sup>th</sup> Floor Richmond, VA 23219

Ms. S. Rene' Hypes Project Review Coordinator Virginia Department of Conservation and Recreation Division of Natural Heritage 600 East Main Street, 24<sup>th</sup> Floor Richmond, VA 23219

Re: Atlantic Coast Pipeline - Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

Dear Mr. Bulluck and Ms. Hypes:

On behalf of Atlantic Coast Pipeline, LLC (Atlantic) and Dominion Transmission, Inc. (DTI), attached for your review please see the revised *Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan* (Plan) prepared by GeoConcepts Engineering, Inc. for the proposed Atlantic Coast Pipeline (ACP) project. Atlantic and DTI have previously filed this Plan with the Federal Energy Regulatory Commission as part of our request for approval of the ACP.

Atlantic and DTI, through continued coordination with Virginia DCR, prepared and revised the Plan to address concerns associated with installation of the ACP through karst terrain. The attached Plan addresses comments received from DCR and outlines how ACP and DTI will construct ACP in karst terrain with measures to identify, monitor, and mitigate identified concerns.

Thank you for your careful review and evaluation of the ACP Plan. Atlantic and DTI respectfully request your review and written concurrence of the attached Plan. We appreciate a response within 30 days of receipt of this letter with any feedback you may have regarding the Plan.

Virginia Department of Conservation and Recreation Atlantic Coast Pipeline - Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan January 24, 2017 Page 2 of 2

Please feel free to contact me at (804) 273-3010 or robert.m.bisha@dom.com, if there are questions about the Plan. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060

Sincerely,

Robert M. Bisha

Rosedom Bish

Technical Advisor, Atlantic Coast Pipeline

Attachment: Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

cc: Wil Orndorff Richard Gangle Virginia Department of Game and Inland Fisheries

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060



January 24, 2017

#### BY ELECTRONIC MAIL

Mr. Raymond T. Fernald, Manager Environmental Programs Virginia Department of Game and Inland Fisheries 7870 Villa Park Drive Henrico, VA 23228-9147

Re: Atlantic Coast Pipeline - Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

Dear Mr. Fernald:

On behalf of Atlantic Coast Pipeline, LLC (Atlantic) and Dominion Transmission, Inc. (DTI), attached for your review please see the revised *Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan* (Plan) prepared by GeoConcepts Engineering, Inc. for the proposed Atlantic Coast Pipeline (ACP) project. Atlantic and DTI have previously filed this Plan with the Federal Energy Regulatory Commission as part of our request for approval of the ACP.

Atlantic and DTI, through continued coordination with Virginia DGIF and DCR, prepared and revised the Plan to address concerns associated with installation of the ACP through karst terrain. The attached Plan addresses comments received and outlines how ACP and DTI will construct ACP in karst terrain with measures to identify, monitor, and mitigate identified concerns.

Thank you for your careful review and evaluation of the ACP Plan. Atlantic and DTI respectfully request your review and written concurrence of the attached Plan. We appreciate a response within 30 days of receipt of this letter with any feedback you may have regarding the Plan.

Please feel free to contact me at (804) 273-3010 or robert.m.bisha@dom.com, if there are questions about the Plan. Please direct written responses to:

Richard B. Gangle Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, Virginia 23060 Virginia Department of Game and Inland Fisheries Atlantic Coast Pipeline – Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan January 24, 2017 Page 2 of 2

Sincerely,

Robert M. Bisha

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Technical Advisor, Atlantic Coast Pipeline

Attachment: Karst Terrain Assessment, Construction, Monitoring and Mitigation Plan - January 20, 2017

cc: Amy Ewing - DGIF Richard Gangle

# **North Carolina Agencies**

# North Carolina Department of Natural and Cultural Resources



### North Carolina Department of Natural and Cultural Resources

#### **State Historic Preservation Office**

Ramona M. Bartos, Administrator

Governor Pat McCrory Secretary Susan Kluttz Office of Archives and History Deputy Secretary Kevin Cherry

May 2, 2016

William A. Scarpinato
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, VA 23060
William.A.Scarpinato@dom.com

Re: Phase I Archaeological Survey for the Atlantic Coast Pipeline Project, North Carolina Addendum Report 1; Multi County (Cumberland, Nash, Northampton and Wilson), ER 14-1475

Dear Mr. Scarpinato:

We have received Robert M. Bisha's letter of March 16, 2016, forwarding copies of the above-referenced report by Natural Resource Group and would like to comment.

During the course of the survey, eight sites were located within the project area. They are: 31CD2044, 31CD2062, 31NS182, 31NP385, 31NP386/44GV0393, 31NP387, 31NP388, and 31WL369.

The following properties are determined not eligible for listing in the National Register of Historic Places:

31CD2044, 31NS182, 31NP385, 31NP387, and 31WL369, lack of intact deposits

Mr. William Stanyard of Natural Resource Group has recommended that no further archaeological investigation be conducted in connection with these sites, allowing work to proceed at their locations. We concur with this recommendation.

An additional site, 31NP388, is considered not eligible for listing in the National Register of Historic Places. However, because it is a cemetery, it will be avoided by all construction-related activities.

Sites 31CD2062 and 31NP386/44GV0393 (it extends into Virginia) include Early-to-Late Woodland Period ceramics and have the possibility of intact features. Because of this, Stanyard recommends their avoidance or Phase II testing to evaluate them for their significance. We concur with this recommendation.

Location: 109 East Jones Street, Raleigh NC 27601 Mailing Address: 4617 Mail Service Center, Raleigh NC 27699-4617 Telephone/Fax: (919) 807-6570/807-6599

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or <a href="mailto:environmental.review@ncdcr.gov">environmental.review@ncdcr.gov</a>. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Ramona M. Bartos

Rence Bledhill-Earley

cc: Bill Stanyard, Natural Resource Group, bill.stanyard@nrg-llc.com

enclosure

### **Editorial comments:**

- ◆ Throughout the report, when referring to the maps within the Appendix, please call them 'sheets' rather than 'pages'
- ♦ Please describe isolated finds in the same manner as any other site, providing both a table presenting their information and a sketch map (e.g., give 31NP385 the same treatment received by 31WL369)

Please follow these suggestions going forward in future reports.