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September 7, 2016

Supervisor Clyde Thompson
Monongahela National Forest
200 Sycamore Street
Elkins, WV 26241

Supervisor Joby Timm
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

FERC Docket 15-554

Dear Supervisors Thompson and Timm:

I am submitting these comments on Atlantic's Draft Construction, Operations and Maintenance Plan (August 2016) (COM Plan) for the section of the Atlantic Coast Pipeline (ACP) which crosses the Monongahela and George Washington National Forests which was submitted on August 24, 2016 for your consideration. The content of this document is critical to understanding the impacts to the Forests of the ACP, as it is intended to contain the terms and conditions applicable to the right-of-way grant which Atlantic is seeking from the US Forest Service.

Construction on Steep Slopes with High Risk of Slippage and Slope Failure. The document fails to address the key question which we all have about the construction and operation of the pipeline:

How does Atlantic propose to construct and then operate a pipeline of this size through steep mountains, with high potential for landslides and slippage that will result in damage to water resources and a threat to the environmental integrity of the Forests?

Missing Details re Route Construction through the Forests. The COM contains only general information and references to other general information, including regulatory standards, about the pipeline construction. What is needed and lacking is detailed analysis, mile by mile, of how Atlantic would approach construction in light of the environmental concerns, findings and agreed upon approaches and mitigation if the special use permit is awarded.

Information Deficiencies. The draft COM has been submitted without complete information. For example, on page 141 Atlantic acknowledges that the order 1 soil surveys are incomplete. It is not reasonable for the FS to evaluate this draft plan until it reflects complete data and how to construct the pipeline in light of this data. Similarly, the geotechnical analysis of hazards, including steep slopes, has not yet been completed.

Location and Identification of Steep Terrain. In the COM, steep slopes are defined in Section 2.1.9.5 Steep Terrain as slopes greater than 30 percent. This document does not indicate how many miles of pipeline meet this definition. In Table 6.1-2 of Resource Report 6 submitted in an August 23 filing identifying slope class crossing length, the data are presented in categories which include slopes of 20-35% in a single category.

However, in Table 6.1-2 Atlantic acknowledges that the proposed pipeline route through the Forests includes 11.7 miles of slopes greater than 20%. And in Table 6.4.2-1 Atlantic reports that there are 4.4 miles (85% of the route) of "High Landslide Incidence and High Susceptibility" on the route through the MNF and 9.3 miles of "High Landslide Incidence and High Susceptibility" and 6.6 miles of "Moderate Incidence and High Susceptibility" (99% of the route).

Atlantic has not provided maps identifying the steep terrain areas greater than 30%. Assuming they know exactly where these slopes occur, the results of the Order 1 soil studies should provide data about these specific locations to identify the risks and proactively determine what steps are recommended to protect the land and watersheds. This should be done now, in consultation with the Forest Service, prior to consideration of Atlantic's special use permit application or consideration of changes to the LRMP. It is regrettable that this approach was not used in the route selection stage to identify a pipeline route with significantly less landslide/slippage risk.

Process for Evaluating Construction in Steep Terrain. In its COM, after detailing the standard steps for construction in "ordinary" terrain, Section 2.1.9.5 states that special procedures for Steep Terrain will "affect the routing, design, construction and operation or the integrity of the project." (emphasis added). Atlantic then describes a process, the BIC Program, to address what to do in steep terrain. Following this program, they will "pull together" a "team" of internal Dominion stakeholders and outside experts to assess the steep slopes and recommend what to do. Section 8.4.1 makes more promises about special construction procedures and erosion and sediment control procedures in steep terrain, including conformance with the Slip Avoidance, Identification, Prevention, and Remediation – Policy and Procedure (SAIPR) which

Dominion developed and adopted in 2015 following a WV DNR consent order related to a significant pipeline slope failure in WV.

BIC Process Questions. The COM provides little detail about the BIC Process. When will the BIC team get together? Does Atlantic have an obligation to follow the recommendations of the “team”? Will the Forest Service participate in or review the results of this process? Will there be an opportunity for the public to comment on the environmental impacts of their proposals? How does this process fit into Atlantic’s ambitious timeline?

SAIPR Questions and Issues. (1) The SAIPR defines steep slopes as slopes greater than 30 degrees (58%). The COM specifically defines steep slopes as 30%. How do these two different definitions impact the applicability of the SAIPR to the BIC process? (2) The SAIPR contains a method of quantifying the risk and a list of construction approaches and steps that can be taken to address potential slippage. The most extreme of these steps include terracing, changing the slope geometry, and installing permanent physical structures. Would these options (which Atlantic would select as part of the construction process) comply with the applicable land and resource management plans and Forest Service policies?

Timing of Decisions about Construction in Steep Terrain. It appears that Atlantic proposes to decide how to deal with potential landslides and soil slippage after construction is underway. This is totally unacceptable and is an approach that the Forest Service and FERC should reject.

It is not possible to develop a draft EIS unless Dominion has developed and submitted a site specific plan for construction in all areas of steep terrain. To defer these decisions until construction is underway, as Atlantic proposes in this document, is not consistent with NEPA requirements and will not allow the Forest Service to determine if the proposal conforms to the LRMPs for the Forests.

FS Consultation. In Section 8.7.2.1, also called “Steep Terrain”, it notes that the Geohazards Analysis Program will report their results, including identification of steep slope hazards and mitigation recommendations in the third quarter 2016. Then the BIP team will further evaluate and select construction techniques and incorporate them into E&SC plans. Nothing is said about the FS role in these decisions. Section 2.1.9.6 Karst Areas states that when karst features are encountered they will consult with their geotechnical contractor and their environmental team. Shouldn’t the Forest Service be informed and consulted about all hazards and related construction decisions?

Bedrock. The challenge of steep slopes is increased by the presence of bedrock along the route. Section 6.0 Blasting Plan states that at least 3.6 miles in the MNF and 7.9 miles in the GWNF have hard bedrock that will require blasting. There is no information about the extent to

which the areas of hard bedrock and steep slopes overlap, although it is logical that the overlap would be significant. How would the blasting activity and the steep slope mitigation strategies work together? Would blasting also be used for access road construction?

Trench Width. In Section 8.3.1 Pipeline Right-of-Way, Atlantic states that the top width of the excavated pipe trench typically ranges from 10 to 15 feet, but would be expanded to 30 feet in areas of steep terrain, since the pipe welding must occur in the trench in these areas. This once-stated fact would appear to have a significant impact on the steep slope construction – more blasting, more storage of soil and rocks, and possibly a wider temporary workspace, although this is not made clear.

Waivers and Variances (for example, time restrictions, right-of-way width variances, setback requests). FERC and pipeline companies rely heavily on requesting and approving waivers to modify the permitted plan during the construction process. This process results in environmental impacts which have not been subject to the scrutiny of an EIS or commented on by the public or affected landowners. In the COM, Atlantic proposes to institutionalize this process with the Forest Service. Does the Forest Service have an existing process for variances? Is this section of the draft COM consistent with this process? Atlantic states in Section 8.14 that they will request a State variance to the 500 foot open trench standard in Virginia. Would this variance apply to federal lands? Will the Forest Service grant variances for time of year restrictions for brook trout habitat, endangered bats or other species? If not, I ask the Forest Service to clarify that these variances and waivers are not appropriate and that the construction schedule must accommodate these requirements, not vice-versa.

Use of Contractor Services for Compliance Inspections and Enforcement. In Section 3.4 Atlantic suggests that the Forest Service might contract for third party compliance oversight services using FERC's process for bidding and review of three Atlantic-selected contractors. Would the Forest Service use its own personnel or contracting process to secure assistance?

Partial Notice to Proceed (NTPs). Section 3.5 states that Atlantic will request that FERC and the Forest Service allow construction in one section while there are still outstanding issues involving other sections. This approach ignores the possibility that the conditions to proceed could involve significant issues, such as a State water quality permit or even the Forest Service special use permit. Given that the route through the Forests is short, but critical to Atlantic's overall route selection, I ask you to define clearly the circumstances that would warrant a partial NTP from the Forest Service or FERC. For example, the Forest Service may consider a partial NTP limited to the horizontal direction drill (HDD) under the Blue Ridge Parkway to ensure successful completion of this critical step, prior to allowing any other clearing or construction.

Dominion's Acknowledgement of Risks. In the SAIPR, Dominion states: "The Region has some of the highest slip or landslide susceptibility in the United States" and "The geology of West Virginia is a primary contributor to the high incidence of slips." Natural factors, such as weather events, water, weathering and earthquakes contribute to slippage. This was recently demonstrated by the devastating impacts of the recent flood in Pocahontas County. This extreme rain event and numerous landslides occurred in the proposed pipeline path. The impacts should be carefully studied and documented as examples of the regional risks of extreme weather and landslides. Dominion also acknowledges that human factors contribute to slips. The human factors include (1) "Removal of shallow bedrock on steep slopes...", (2) "Removal of vegetation and trees", (3) "Changes in slope configuration, such as additional load placed on the top of the soil mass, or removal of material near the bottom of the soil mass (such as trenching for pipeline construction)", and (4) "Changes to the surface or groundwater regime...". Constructing a pipeline in this steep terrain involves all four factors. Dominion is creating the perfect storm of natural and manmade factors in the most susceptible area of the United States, including our National Forests, which may eventually have catastrophic results.

In summary, the COM inadequately characterizes what will be done to construct the pipeline through the rugged terrain of the National Forests. And Atlantic is not denying that there are significant risks. The COM includes no solutions to these problems and no demonstration of expertise that gives me confidence that Atlantic's project can be implemented without significant and unacceptable risk, and significant environmental impacts.

As you review the draft COM and the Special Use Application, please consider these concerns and hold Atlantic to the high standards of land stewardship that the Forest Service represents.

Sincerely,



Peggy Quarles

cc: Jennifer Adams, US Forest Service
Kevin Bowman, FERC
Under Secretary Robert Bonnie, USDA
Senator Tim Kaine
Senator Mark Warner