June 14, 2018

Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, VA. 23218

NWP12InfoOnACP@deq.virginia.gov

Dear sir or madam:

Please accept the following comments by the County of Nelson in response to the Virginia State Water Control Board Request for Technical Information on Specific Wetland and/or Stream Crossings of the proposed Atlantic Coast Pipeline (ACP) in Nelson County. We specifically note the inability of the Army Corps of Engineers Nation-Wide Permit 12 (NW 12) to generate detailed Erosion and Sediment Control Plans and Anti-Degradation analysis that guarantee that Virginia Water Quality Standards will not be violated in Nelson County.

Atlantic Coast Pipeline LLC has proposed to construct and operate a 42", 14,400 psi natural gas pipeline that would stretch for 26 miles across the heart of Nelson County. Numerous access roads and landing/construction areas are also proposed, each and all of would have specific impacts on water quality in our county.

Nation-Wide water quality permits are appropriate only for certain routine projects that have minimal effects on water quality. The Atlantic Coast Pipeline is not an appropriate candidate for coverage under NW 12 because of the fact that the Atlantic Coast Pipeline is a major construction project that will cross many waterbodies and wetlands in Nelson County, over some of the most challenging terrain imaginable.

*TABLE B-1 Revised, Impact Table of Waters of the U.S. for the Atlantic Coast Pipeline within the U.S. Army Corps of Engineers – Norfolk District* shows that within Nelson County there would be 81 locations where there could be potential impacts to water quality due to waterbody, stream, river or wetland crossings. (See attached.)

These 81 locations include

- 17 different wetland crossings
- 8 crossings that would directly impact the South Fork of the Rockfish River in the western part of the county
- 9 crossings what would directly impact Spruce Creek and the South Fork of the Rockfish River in the western portion of the county.
- 18 crossings that would directly impact the Rockfish River in the west and central part of the county
- 2 crossings that would directly impact Davis Creek in the central part of the county
- 1 crossing that would directly impact Muddy Creek in the central part of the county
- 2 crossings that would directly impact Craig Creek in the central part of the county
- 6 crossings that would directly impact Dutch Creek in the eastern part of the county
- 3 crossings that would directly impact Falls Run in the eastern part of the county
- 4 crossings that would directly impact Buffalo Creek in the eastern part of the county
- 9 crossings that would directly impact Mayo Creek in the southern part of the county

FEMA Designated Floodplain Crossings

The Atlantic Coast Pipeline proposes to cross, more floodplains in Nelson County than any community along its 600-mile route. Zoning ordinances in the county require that variances be approved for any floodplain crossings or construction. Atlantic Coast Pipeline LLC submitted floodplain variance requests to Nelson County in October of 2017 for 11 floodplain crossings: VA AP-110237; VA AP-19037; VA AP-19045 – 9048; VA AP-19051 – 9053; VA AP-10248; VA AP-19055; VA AP-19057; VA AP-10259; VA AP-10264; VA AP-10265; and VA AP-10279.

In September 2017, the Nelson County Board of Supervisors passed an enhanced floodplain ordinance that allows our County to participate in Federal Emergency Management Agency
(FEMA) National Flood Insurance Program. In order to remain eligible for these benefits, the county must adhere to restrictions on development in these areas, including critical infrastructure. This is important information that is omitted in information provided by the DEQ. Furthermore, NW 12 does not require detailed analysis that would meet these FEMA standards for wetlands crossings and, therefore, is insufficient to meet FEMA requirements.

Impacts to the Rockfish Valley

Nelson County is dependent upon agri-tourism for its livelihood and support of related recreation, lodging, winery, brewery, and cidery industries. Tourists come from all over the world to enjoy our recreational, scenic and environmental features. The heart of this economic activity lies within the Rockfish Valley watershed. The Rockfish River is a designated Virginia Scenic River and Nelson County's quality waters provide the vital foundation for our residents, our visitors and our economy.

The cumulative effect of so many waterbody/wetland locations exceeding NW 12 standards within the limited confines of the South Rockfish Valley present an excessive and unacceptable risk to the rivers, streams, wetlands, flood plains and ground waters of exposure to pollution, sedimentation, alteration of surface and ground water flows that would directly affect agricultural, brewery, cidery, resort and recreational uses.

Undocumented Waterbodies, Wetlands and Impacts in the Rockfish Valley

Dominion, FERC, the Army Corps and the DEQ have failed to do a thorough documentation of *all* waterbody crossings in Nelson County. Nelson County residents have documented numerous waterbodies and wetlands and impacts that are not included in Table B-1 and therefore unanalyzed and others that are included but contain incorrect information. These include, but are not limited to:

- Waterbodies and wetlands located at Milepost 158.6 (08-001-B004AR1) and Milepost 160.5, (08-001-B013-AR1) that are not included in Table B-1, that would contain pipeline construction, access roads and work areas.
- Waterbodies, wetlands, and temporary workspaces at Milepost 158.7 (VA AP-1, 0237, snea022) and three workspaces at Milepost 158.9 (VA AP-1, 0237, MP 158.9, snea021) that are undocumented therefore unanalyzed. VA AP-10237 is located just outside the entrance and exit of Wintergreen, located adjacent to Beech Grove Road in Nelson County. The ACP centerline crosses the pristine headwaters of the South Fork of the Rockfish River at mileposts 158.7, 158.8 and 158.9 and a wetland area at MP 158.9. These areas are all located in steep mountainous terrain with unstable unconsolidated colluvial deposits and geologic rock layers that make these crossings highly unstable. In addition to its location at the entrance and exit of the Wintergreen Community, this section of the Rockfish River flows through the community of Beech Grove. The Virginia Department of Game and Inland Fisheries stocks this area with trout throughout the year. The South Fork of the Rockfish serves the community both as recreational resource and as a source of food for those that fish this river.
- Waterbodies and wetlands located at Milepost 160.5 (08-001-B013-AR1), and Mile Post 161.2, Access Road (08-001-B023-AR-1) including wetland areas (snex_004), (snex_004_a), (snex_004_b), and (snex_005), that are not noted in Table B-1 and therefore unanalyzed.
- A waterway and wetland 29 feet downhill of the surveyed centerline path of the Atlantic Coast Pipeline at AP-1, Milepost 162.2, that lies within the Commonwealth's Spruce Creek Tributary Conservation Site. According to the USDA Natural Resources Conservation Service, Soil Survey Geographic Database, the terrain at this location is classified as "step terrain" as slopes above the wetland seep are greater than 35%.

Pipeline construction at this location will undoubtedly alter and degrade this wetland and waters downstream.

- Wetlands at Mile Post 163.0 (VA AP-1, 9042, snea408) and Mile Post 163.4VA (AP-1, 9045, wnex003f) that Table B-1 incorrectly states would not be crossed.
- Floodplain and wetlands crossings at, Mile Post 163.7 (VA –AP-1, 9047wnea406e), exceed NWP 12 standards for area impacted (1.81 acres) and area required for water impoundments (1.63 acres).
- Stream and wetlands crossings at Milepost 163.9 (VA AP-1, 9048, snea410) underestimate stream and wetland impacts which exceed NWP 12 standards for wetlands impacted.
- Stream crossing at Milepost 166.7 (VA AP-1, 0249, Snea052) that includes two access roads uphill, a culverted crossing 60 feet downstream where one access road parallels the edge of the stream and two uphill construction landings.
- Crossings of Falls Run and Dutch Creek do not include water quality specifications, including crossings of both the main creeks and upstream tributaries Mile Post 172.8 (VA AP-1 0262, Sney001), Mile Post 172.9 (VA AP-1 0262, Sney002), Mile Post 173.2 (VA AP-1 9062, Snea414), Mile Post 173.2 (VA AP-1 9063, Snea413), Mile Post 173.2 (VA AP-1 9064, , Snea415), Mile Post 175.1 (VA AP-1 0264, Snec057), Mile Post 175.6 (VA AP-1 0265, Snec056), Mile Post 175.9 (VA AP-1 0266, Snee201), and Mile Post 176.2 (VA AP-1 0267, Snee200). It is important to note that Dutch Creek and Falls Run are located within the Sugarloaf Forest Block, identified by Virginia Department of Conservation and Recreation as the largest unfragmented forest in the Piedmont.

Because these waterbodies, wetlands and impacts are not noted or underreported in DEQ's Table B-1, DQ's 401 Certificate ignores these locations. Construction Plans, Erosion and Sediment Control analysis and Antidegradation Plans for them do not exist. Most importantly, the Army Corps Nationwide Permit 12 does not apply to these unreported crossings. Furthermore, those wetland crossings and water impoundment areas noted above exceed NWP standards and, therefore, NWP 12 cannot be applied.

Rockfish River Cumulative Impacts

Table B-1 notes that 35 waterbody crossings and 17 wetland crossings would impact the Rockfish River within Nelson County. The impacts of these crossings, when added to those previously mentioned above, create a body of cumulative impacts to the Rockfish River that NWP 12 fails to consider.

James River Cumulative Impacts

Table B-1 notes that he 9 waterbody crossings that would impact May Creek and one wetlands crossing lie in Nelson County within the James River watershed and therefore impact the James River. Because all of Nelson County lies within the James River Basin, all of these direct, indirect and cumulative impacts to Nelson County waters also combine to directly impact the James River.

Davis Creek and Hurricane Camille

The stream and floodplain crossing of Davis Creek at Milepost 168.8 (AP1 9055) lies in an area the heart of an area that is according to the Virginia Department of Mines, Minerals and Energy is especially prone to landslides and debris flows "because of the presence of steep slopes and highly fractured bedrock over shallow soils." On Aug. 19, 1969, heavy rains from Hurricane Camille stripped bare many of these steep slopes, and flooding and landslides killed 53 people in the Davis Creek area.

While the Environmental Impact Statement for the Atlantic Coast Pipeline (ACP) claims that "…to minimize impacts on potentially unstable soil and debris flows resulting from Hurricane Camille, Atlantic incorporated an alternative route to avoid the debris flows and other features identified by the USGS (Morgan et al, 1999)", the route of the ACP totally fails to avoid this area and the resulting route bisects the area most affected by these events.

Furthermore, the Nelson County Study by nationally-recognized geotechnical consulting firm, Blackburn Consulting Services, LLC. that was completed in 2017, includes the summary statement, "Our conclusion from this work is that the potential for debris flows in the very steep mountainous portions of Nelson County are underestimated by the reports submitted to FERC by Dominion", and goes on to state that, "Dominion has not adequately identified those

soils and landforms that are prone to debris flows/landslides, nor have they adequately addressed how they plan to mitigate those *site-specific hazards that can put people, property and water quality at extreme risk.*"

Perhaps one of the most significant deficiencies of the U.S. Army Corps of Engineers nationwide permit (NWP-12) in providing adequate assurance that Virginia's waters will be protected is that it considers each crossing in isolation, i.e. "separate and distant" (i.e. as a stand-alone project) rather than taking into consideration both the related circumstances and conditions that may exist upstream and downstream, including the effects of the existence of multiple proposed crossings, unique upland conditions and cumulative impacts. This failure to take such related information into account in its analysis is, in fact, the reason that the NWP 12 is insufficient to address so many stream crossings in general, and the Davis Creek crossing in particular.

Virginia Water Quality Standards

The parts of Virginia's Water Quality Standards that are of the utmost importance at waterbody and wetland crossings are 1) designated uses and 2) antidegradation requirements.

Sediments that will be released during crossing construction activities and after will affect the appearance and viability of using the stream. The Corps permit assumes that as long as the sediment in the waters only persists for a short time in the area directly in and around the construction site and that any discharges are minimized, this pollution need not be counted as an impairment of uses. This directly conflicts with Virginia Water Quality Standards, which require that uses be protected *at all times.*

Sediment deposition on stream bottoms, in some cases, will stay in place for extended periods before they are swept away by high flow events. These occurrences will interfere with the aesthetic value of the streams, with the habitat that supports fish, amphibian, insect and macroinvertebrate populations.

Sediments will also flow and accumulate further downstream both during and after construction. Sediment input to such waters are one of the major sources of impairments and may also carry other pollutants into the reservoirs, such as nutrients which contribute to algae blooms.

Elimination of streamside trees, which will drastically change the appearance of the stream and its surroundings and allow more light to reach the stream when leaves are off and the temperatures are highest. This increase in temperature will reduce the level dissolved oxygen in the waters, further compromising the habitat for fish, amphibians, insects and macroinvertebrates.
This also eliminates habitat for wildlife that lives near but not in the waterbody.

In the disturbed area, invasive species are sure to proliferate and migrate downstream with the increased sediment flow, impacting waters and streamsides significantly.

Changes to the banks and the bed of the stream will change the appearance of these waters and affect uses. Elimination of vegetation from banks will increase the likelihood of erosion in those areas. Replacement of that vegetation by rip-rap, which the Army Corps of Engineers discourages but will allow in some circumstances, eliminates the biological values provided by native plants, such as hiding places for fish and habitat that is necessary for other organisms.

After having reviewed all of Dominion's submissions to Docket 15-554-00 on Preconstruction Notification, Implementation Plans, Construction Plans, Blasting Plans, Mitigation Plans, resource impact reports, Geotech Investigation Reports, geohazard reports, Karst Reports, Align Sheets, Slope Construction and restoration, Steep Slope Narrative, Erosion and Sediment Control Plans, environmental compliance and monitoring, restoration and rehabilitation, it is clear that potential impacts will exceed any threshold of what could be called "minimal".

In addition, uphill pipeline construction and the building, use and maintenance of landings and access roads create ground disturbances with significant cumulative impacts especially during significant rain events that are common to our area.

Section 404 and Nation-Wide Permit 12

Under Section 404(e) of the Clean Water Act, the U.S. Army Corps of Engineers (Corps) can issue general permits to authorize activities that have minimal individual and cumulative adverse environmental effects. In Virginia, construction of the proposed Atlantic Coast Pipeline would result in 889 permanent separate stream crossings, cross 2,077 linear feet of streams, additional hundreds of intermittent and ephemeral streams, hundreds of acres of karst geologic formations, 80.76 acres of wetlands and over 180 miles of steep and often unstable slopes. Construction would, in addition, temporarily impact 111,835 linear feet of streams, 216.65 acres of wetlands and .81 miles of open water. It would cause extremely significant and cumulative impacts to the waters of Virginia. Therefore, it is an inappropriate and irresponsible action to abdicate the role of the Virginia Water Control Board and the Virginia Department of Environmental Quality to the Corps and to a lesser standard. NW 12 analysis and standards cannot be applied to terrain and waters that are highly susceptible and sensitive to erosion, sediment discharge, slope and soil failure and other significant impacts to water quality.

Furthermore, the NW 12 permit requires that the ditch through the stream be filled after construction so that the "original contours" are restored. However, if the ditch is refilled with loose materials, as allowed by NW 12, that soil and rock mixture may wash away in storms, resulting in a depression and even exposing the pipeline. Where construction requires ripping or blasting through solid rock stream bottoms, the materials put in to replace that bottom may be much less durable that the bedrock and may degrade. In some cases, the companies propose to fill bedrock cuts with concrete, which NW 12 would also allow. All of these would be considered violations of Virginia Water Quality Standards as inappropriate to maintain water quality.

Recreational Impacts

The Corps does not place adequate requirements on the physical changes to the stream and banks in light of ecological and recreational uses and will not prevent impairment of the current uses mentioned above. Activities authorized by NW 12 are extremely likely to negatively impact swimming, hiking, birding, canoeing, rafting, fishing and scenic photography.

Antidegradation

Any activity that lowers water quality in state waters may violate antidegradation requirements in state law. The Corps has made no specific analyses that address antidegradation in covering these projects under Nation Wide Permit 12. The Corps expresses the vague requirement that water quality impacts be minimized, which cannot ensure that antidegradation conditions are met.

For all state waters, the antidegradation policy requires that all "existing uses" be fully supported. Under both state and federal law, "existing uses" are "those uses actually attained in the waterbody on or after November 28, 1975, whether or not they are included in the water quality standards."

9VAC25-260-30, Antidegradation Policy, states that:

*A. All surface waters of the Commonwealth shall be provided one of the following three levels, or tiers, of antidegradation protection. This antidegradation policy shall be applied whenever any activity is proposed that has the potential to affect existing surface water quality.*
*1. As a minimum, existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.*

To date, neither the Corps nor DEQ has conducted any antidegradation analyses for any of the Nelson County waterbodies that would be affected by these pipelines. Antidegradation requirements contain even greater protections for high quality waters (Tier 2 waters), where conditions are better than the minimums otherwise provided in Virginia Water Quality Standards. In those cases, water quality may not be lessened unless "allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located." Since the supposed economic or social benefits the projects would generate will not occur "in the area[s] in which the waters are located," any lowering of water quality cannot be allowed.

Requirements applicable to the Corps permit will not uphold our Water Quality Standards (WQS) in specific places. Therefore, Virginia's Clean Water Act (CWA) section 401 Water Quality Certification (WQC) for these particular crossings are not legally valid. The State of Virginia must "ensure" that state Water Quality Standards (WQS) will not be violated by the activities covered.

Given the evidence provided by DEQ and given the numerous errors and omissions documented herein, we conclude that the DEQ has failed to demonstrate that Virginia State Water Quality Standards can be met in Nelson County and that requirements for Section 401 permit authorization have not been met. We further conclude that the Army Corps NMP 12 Permit is insufficient to protect wetland and/or stream crossings and preserve the water quality for Nelson County.

The State Water Control Board and the Virginia Department of Environmental Quality has the responsibility and duty to deny any water quality certification of the Atlantic Coast Pipeline since it cannot be determined that activities that are part of construction, operation and maintenance will be consistent with State Water Quality Standards. Likewise, it cannot authorize the application of NWP 12 as it similarly fails in this regard.

Violations of Water Quality Standards may not be permitted by Virginia just because the Corps or the company cannot identify a "practicable" alternative. If there is no method of building the pipeline through a waterbody to meet Water Quality Standards, then that activity cannot be allowed.

In conclusion, we urge the members of the State Water Control Board to direct the Department of Environmental Quality to conduct stream-by-stream analyses of all stream, waterbody and wetland crossings and to impose the necessary standards to ensure full protection of Nelson County's water resources and those of the Commonwealth. We respectfully request that you put a hold on all ACP development until all legal and regulatory challenges are resolved.

Thank you for your consideration and for the opportunity to comment on this important issue.

Sincerely,

Ernest q Reed j

Ernest Reed, Central District Supervisor
Nelson County Board of Supervisors

Attachments: Table I

cc: Kimberly D. Bose, Secretary, FERC
Ms. Molly Plautz, Dominion Energy
Mr. Richard B. Gagle, Environmental Manager, ACP Dominion Energy
The Honorable Tim Kaine
The Honorable Mark Warner
The Honorable Tom Garrett

TABLE B-1 REVISED
November 30, 2017
Impact Table of Waters of the U.S. for the Atlantic Coast Pipeline within the
U.S. Army Corps of Engineers – Norfolk District

| Project ID | Mile Post | Water Body | Project ID | Mile Post | Water Body |
|---|---|---|---|---|---|
| VA AP-1 0237 | 158.7 | South Fork Rockfish River | VA AP-1 9057 | 169.3 | Muddy Creek |
| VA AP-1 0237 | 158.8 | South Fork Rockfish River | VA AP-1 9058 | 169.7 | Craig Creek |
| VA AP-1 0237 | 158.9 | Wetland | VA AP-1 9059 | 170 | Craig Creek |
| VA AP-1 0237 | 158.9 | South Fork Rockfish River | VA AP-1 0256 | 170.3 | Rockfish River |
| VA AP-1 0238 | 161.4 | South Fork Rockfish River | VA AP-1 0256 | 170.3 | Wetland |
| VA AP-1 9037 | 162.4 | Wetland | VA AP-1 0257 | 170.7 | Rockfish River |
| VA AP-1 9037 | 162.4 | Spruce Creek | VA AP-1 0258 | 171 | Wetland |
| VA AP-1 9038 | 162.4 | Spruce Creek | VA AP-1 0258 | 171 | Rockfish River |
| VA AP-1 9038 | 162.5 | Spruce Creek | VA AP-1 0258 | 171 | Rockfish River |
| VA AP-1 9039 | 162.5 | Wetland | VA AP-1 0259 | 171.3 | Rockfish River |
| VA AP-1 9040 | 162.6 | Spruce Creek | VA AP-1 0259 | 171.3 | Rockfish River |
| VA AP-1 9041 | 162.8 | Spruce Creek | VA AP-1 0259 | 171.6 | Rockfish River |
| VA AP-1 9042 | 163 | Spruce Creek | VA AP-1 0259 | 171.8 | Wetland |
| VA AP-1 9043 | 163.1 | Spruce Creek | VA AP-1 9060 | 172.4 | Rockfish River |
| VA AP-1 9043 | 163.1 | Spruce Creek | VA AP-1 9061 | 172.6 | Wetland |
| VA AP-1 9044 | 163.1 | Wetland | VA AP-1 0262 | 172.8 | Dutch Creek |
| VA AP-1 9044 | 163.1 | Spruce Creek | VA AP-1 0262 | 172.9 | Dutch Creek |
| VA AP-1 9045 | 163.4 | Wetland | VA AP-1 9062 | 173.2 | Falls Run |
| VA AP-1 9046 | 163.7 | South Fork Rockfish River | VA AP-1 9063 | 173.2 | Falls Run |
| VA AP-1 9047 | 163.7 | Wetland | VA AP-1 9064 | 173.2 | Falls Run |
| VA AP-1 9048 | 163.9 | South Fork Rockfish River | VA AP-1 0264 | 175.1 | Dutch Creek |
| VA AP-1 9049 | 164.2 | South Fork Rockfish River | VA AP-1 0265 | 175.6 | Dutch Creek |
| VA AP-1 9050 | 164.4 | South Fork Rockfish River | VA AP-1 0266 | 175.9 | Dutch Creek |
| VA AP-1 9050 | 164.4 | Wetland | VA AP-1 0267 | 176.2 | Dutch Creek |
| VA AP-1 0245 | 165.4 | Rockfish River | VA AP-1 9066 | 179 | Buffalo Creek |
| VA AP-1 0246 | 165.5 | Wetland | VA AP-1 0270 | 180.2 | Buffalo Creek |
| VA AP-1 0246 | 165.5 | Rockfish River | VA AP-1 0271 | 180.5 | Buffalo Creek |
| VA AP-1 0246 | 165.5 | Rockfish River | VA AP-1 0272 | 180.9 | Buffalo Creek |

TABLE B-1 REVISED
November 30, 2017
Impact Table of Waters of the U.S. for the Atlantic Coast Pipeline within the U.S. Army Corps of Engineers – Norfolk District

| | | | | | |
|---|---|---|---|---|---|
| VA AP-1 9051 | 165.9 | Wetland | VA AP-1 0273 | 181.5 | Mayo Creek |
| VA AP-1 9051 | 165.9 | Rockfish River | VA AP-1 0274 | 181.9 | Mayo Creek |
| VA AP-1 9052 | 165.9 | Rockfish River | VA AP-1 0275 | 182.6 | Mayo Creek |
| VA AP-1 9053 | 165.9 | Rockfish River | VA AP-1 0276 | 182.9 | Mayo Creek |
| VA AP-1 9053 | 166 | Wetland | VA AP-1 0276 | 182.9 | Wetland |
| VA AP-1 0248 | 166.2 | Wetland | VA AP-1 0276 | 182.9 | Mayo Creek |
| VA AP-1 0248 | 166.2 | Rockfish River | VA AP-1 0276 | 182.9 | Mayo Creek |
| VA AP-1 0248 | 166.3 | Rockfish River | VA AP-1 0277 | 183.3 | Mayo Creek |
| VA AP-1 0249 | 166.7 | Rockfish River | VA AP-1 0278 | 183.4 | Mayo Creek |
| VA AP-1 0250 | 167.8 | Rockfish River | VA AP-1 0279 | 183.7 | Mayo Creek |
| VA AP-1 9055 | 168.8 | Wetland | | | |
| VA AP-1 9055 | 166.8 | Davis Creek | | | |
| VA AP-1 9056 | 168.9 | Davis Creek | | | |