FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:
OEP/DG2E/Gas 4
Dominion Transmission Inc.
Supply Header Project
Atlantic Coast Pipeline, LLC
Atlantic Coast Pipeline Project
Docket Nos. PF15-5-000
PF15-6-000

July 14, 2015

Matthew Bley
701 E. Carey Street,
Director, Gas Transmission Certificates
Richmond, VA 23219

Re: Staff's Comments on Draft Resource Reports 1 through 10

Dear Mr. Bley:

The enclosure contains our comments on Atlantic Coast Pipeline, LLC's (Atlantic) and Dominion Transmission Inc.'s (DTI) draft Resource Reports 1 through 10 for the planned Supply Header Project (SHP) and Atlantic Coast Pipeline Project (ACP Project) submitted in May 2015. Unless otherwise indicated, our comments should be addressed in the final Resource Reports to be filed by Atlantic and DTI. To increase the efficiency of our review, the final resource reports should include a matrix indicating where these comments are addressed and a schedule for submittal of any requested information that is not included in the final resource reports. Additionally, please ensure that your Resource Reports discuss and address all substantive issues raised by commentors. **Failure to adequately address the comments received may result in additional information requests by Commission staff.**

When filing documents and maps, prepare separate volumes as outlined on the Commission's website at http://www.ferc.gov/resources/guides/filing-guide/file-ceii.asp. Any plot plans showing equipment or piping details or other Critical Energy Infrastructure Information should be filed as non-public and labeled **"Contains Critical Energy Infrastructure Information – Do Not Release"** (18 Code of Federal Regulations 388.112). Cultural resources material containing location, character, or ownership information should be marked **"Contains Privileged Information – Do Not**

Release" and should be filed separately from the remaining information which should be marked **"Public."**

Thank you for your cooperation. If you have any questions, please contact me at 202-502-6287.

Sincerely,

Kevin Bowman
Environmental Project Manager
Office of Energy Projects

Enclosure

cc: Public File, Docket Nos. PF15-5-000 and PF15-6-000

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ENCLOSURE

Federal Energy Regulatory Commission
Comments on Draft Resource Reports 1 through 10

Supply Header Project - Docket No. PF15-5-000
Atlantic Coast Pipeline Project - Docket No. PF15-6-000

General Comments

1. **Within 45 days of the issuance of these comments (or at least 45 days prior to filing an application)**, file with the Secretary of the Commission draft versions of the Karst Monitoring and Mitigation Plan; Spill Prevention, Control, and Countermeasures Plan; Winter Construction Plan; Invasive Plant Species Management Plan; and Blasting Plan.

2. For future affected landowner list filings, include and correlate the landowner property identification number that is provided on the construction alignment sheets with each affected landowner identified in landowner list.

3. Identify the location of all aboveground facilities, access roads, contractor yards, and additional temporary workspace in the final resource reports (RRs).

4. Regarding access roads:

    a. identify the entire length and location of all access roads on the construction alignment sheets or topographic maps;

    b. label access roads on the construction alignment sheets and/or topographic maps. Labels must correspond to the access road identification number used in appendix 8D; and

    c. identify all affected landowners via an identification number that correlates to an affected landowner list for all access roads.

5. Ensure that references are provided for and correspond with all citations within the resource reports. Examples of inconsistencies include:

    a. In table 2.1.1-1, a reference is not provided for citation USGS, 1996.

    b. In section 2.1.3.1, a reference is not provided for citation NCDENR-DWR, 2014.

    c. In section 2.1.3.3, a reference is not provided for citation NCDENR-DWR, 2015.

d. In section 6.7, a reference is not provided for Phillips, J.D., 2002.

Draft Resource Report 1 – General Project Description

6. Section 1.2. Provide to the extent known the possible uses of ACP's end-users/customers for the gas capacity created. If possible, break down (by delivery point) the current known use (e.g., electric generation, residential use/consumption, local distribution, industrial/manufacturing, manufacturing precursors).

7. Section 1.2. Clarify why natural gas would be received from and delivered to the Transco system at the planned Woods Corner metering and regulating station.

8. Section 1.3.2.2. Provide figures in the final resource reports that depict the temporary construction workspace and operational areas, including impact acreage, for all compressor station and meter station facilities, including suction/ discharge lines and access roads.

9. Section 1.3.2.2, Appendix 1C. Identify the need for the planned bi-directional flow facilities at the JB Tonkin Compressor Station and Burch Ridge Compressor Station.

10. Section 1.4.1.1. Either provide justification for maintaining a 60-foot-wide permanent right-of-way along planned the AP-1 pipeline in areas not classified as steep terrain, or commit to utilizing a 60-foot-wide permanent right-of-way.

11. Section 1.5. Clarify if weed-free straw bales would be used during construction and restoration activities and update any plan accordingly.

12. Section 1.5.2.1. Provide a schedule for completing geotechnical soil borings and horizontal directional drill (HDD) feasibility assessments for all proposed HDDs.

13. Section 1.5.2.1. Should geotechnical soil boring analysis determine a HDD is not feasible, describe and analyze the feasibility of completing the crossing using the direct pipe installation method.

14. Section 1.5.2.2. Appendix 1D. Regarding the typical construction right-of-way in wetlands drawing for the AP-1 pipeline:

    a. correct the width of the working side construction right-of-way (note: it appears the temporary construction right-of-way should be 15 feet wide instead of 25 feet); and

    b. describe the rationale or need to shift the 75-foot-wide permanent right-of-way 15 feet from the 75-foot-wide construction right-of-way.

15. Section 1.5.2.9. Clarify whether excessive snow that is blown off the construction right-of-way would be directed towards existing roads or driveways, parking areas, residences, or other landowner structures.

16. Section 1.5.2.10. Ensure that the final Fire Prevention and Suppression Plan will outline measures to prevent fires, such as installing spark arresters on equipment, limiting smoking to designated areas, or prohibiting highway flare use.

17. Section 1.5.2.11. Provide a schedule for filing the Plan of Development or Construction, Operations, and Maintenance Plan with the Bureau of Land Management.

18. Section 1.6. Identify how long a typical property would be disturbed by construction and restoration activities.

19. Section 1.6 and table 1.6-1. Describe what types of activities are involved with initial site activities and construction of pipeline spreads. Clarify whether initial site activities include ground disturbing activities.

20. Section 1.6. Describe how Atlantic Coast Pipeline, LLC (Atlantic) and Dominion Transmission Inc. (DTI) would monitor nighttime noise and lighting during construction and what measures could be implemented to minimize emissions from these activities.

21. Section 1.7. Identify the number of temporary and permanent workers that would be required to construct and operate the Supply Header Project (SHP) and Atlantic Coast Pipeline Project (ACP Project) facilities, or identify the criteria that was used to calculate full time equivalent workers.

22. Section 1.7. Confirm whether worker camps would be utilized for the project. If anticipated, identify the locations and size of the camps, and analyze the potential effects the camps would have on soils, wetlands, waterbodies, wildlife, vegetation, cultural resources, land uses, traffic, and public services.

23. Section 1.9. Provide further detail regarding the foot and air surveys that would be conducted along the pipeline rights-of-way during operations and maintenance.

24. Section 1.10. Describe the facility modifications and quantify the environmental resource impacts that would be required to increase pipeline capacity by 500,000 dekatherms per day.

25. Section 1.11. Identify the location and quantify resource impacts where the planned SHP and ACP Project would overlap with or would have common indirect impacts with non-jurisdictional facilities. Quantification of impacts should include the amount of impact (e.g., acreage, water volumes, sound

decibels), the duration of impact (e.g., days, weeks, years, short-term, long-term, permanent), and the degree of impacts (e.g., negligible, minor, major, significant).

26. Table 1.12-1. Clarify which county and local permits are applicable to the planned projects and remove those that are not.

27. Section 1.14. Identify the libraries where copies of the FERC application would be placed.

28. Section 1.5.2.4. Include a discussion of the details of typical methods and requirements of backfill on slopes exceeding 35 percent such as fill lift thickness, methods of compaction and testing of horizontal fill layers, and subsurface drainage installation in seepage areas.

29. Appendix 1L. Identify and quantify resource impacts where the planned SHP and ACP Project would overlap with or have common indirect impacts with recently constructed or reasonably foreseeable projects. Quantification of impacts should include the amount of impact (e.g., acreage, water volumes, sound decibels) and the level of impacts (e.g., negligible, minor, major, significant).

30. Appendix 1L. Include the following projects in the cumulative impacts assessment:

    a. Upper Greenbrier North project proposed by the Monongahela National Forest.

    b. West Fork Greenbrier Rail with Trail project proposed by the West Virginia State Rail Authority (WVSRA).

    c. Dooms-Lexington Transmission Line Rebuild Project proposed by Dominion.

    d. Buckhannon-Glen Falls 138kV Transmission Project proposed by Trans-Allegheny Interstate Line Company.

    e. Oak Mound-Waldo Run Transmission Line project proposed by Trans-Allegheny Interstate Line Company.

31. Appendix 1L. Confirm the closest distance and direction for the Pine Grove Sewage Collector Project listed in table A-1 in relation to the SHP.

32. Appendix 1L. Identify the location of and quantify resource impacts where the planned SHP and ACP Project would overlap with or would have common indirect impacts with recently constructed or reasonably foreseeable projects. Quantification of impacts should include the amount of impact (e.g., acreage, water volumes, sound decibels), the duration of impact (e.g., days, weeks, years,

short-term, long-term, permanent), and the degree of impacts (e.g., negligible, minor, major, significant). In addition:

a. Where cumulative impacts on soils may occur, quantify impacts on erodible soils and prime farmland.

b. Where cumulative impacts on waterbodies and groundwater may occur, quantify impacts from sedimentation, turbidity, and water uses.

c. Where cumulative impacts on forested areas may occur, quantify the acreage of forest land that would be impacted, the acreage of forest land that would be restored, and the acreage of forestland that would be permanently removed.

d. Where cumulative impacts on viewsheds would occur on public lands, evaluate visual impacts using parameters and methodologies developed in conjunction with the applicable land managing agency.

e. Where cumulative impacts on air quality may occur, identify each facility that would contribute to the cumulative impact, including the estimated type and amount of pollutant and the airshed(s) that would be affected.

f. Where cumulative impacts from noise may occur, identify each activity or facility that would contribute to the cumulative impact.

33. Appendix 1L, section 3.1, page 1L-7. Provide information supporting the conclusion that because construction of the Texas Eastern Appalachia to Market 2014, Natrium to Market, Virginia Southside Expansion, and Rover Pipeline Projects is already completed or soon to be completed, potential cumulative impacts on geology and soils from these projects are significantly reduced and not significant.

34. Appendix 1L, section 3.5. Provide the locations (e.g., city, county, state) where socioeconomic cumulative effects are expected to be positive (i.e., where do the cumulative benefits of the multiple projects occur).

35. Appendix 1L, section 3.5, page 1L-16. Clarify how the SHP and ACP Project contribute to the cumulative impact on housing characterized as "slightly more difficult to find and/or more expensive to secure."

36. Appendix 1L, table A-1. Include the following jurisdictional projects:

a. Leidy South Project (FERC Docket No. CP15-492); and
b. Leidy Southeast Expansion Project (FERC Docket No. CP13-551).

37. Appendix 1M. Ensure that the alignment sheets provided with the final resource reports contain aerial based imagery that complies with Title 18 Code of Federal Regulations Part 380.12(c)(3).

Draft Resource Report 2 – Water Use

38. Numerous sections and tables have placeholders (TBD) for data. Include final data in the final resource reports, or provide a schedule that identifies when the data would be filed with the Commission.

39. Section 2.1.1. Discuss the significance of minor surficial aquifers along the route, and the level to which water supply wells, particularly private wells, rely on them.

40. Section 2.1.1.3, page 2-7. Provide the ages for:

    a. the crystalline and carbonate rocks of the Piedmont and Blue Ridge Crystalline-Rock Aquifers; and

    b. the units comprising the North Atlantic Coastal Plain Aquifer System.

41. Section 2.1.3 indicates well data may be provided in proximity to facilities or to construction workspaces. Per FERC guidelines, identify all wells and springs within 150 feet of the construction areas and update the section accordingly. Additionally, where karst features are identified, identify all wells and springs within 500 feet of the centerline. Expand this distance as appropriate where significant or unique karst features are identified.

42. Section 2.1.3.1. Identify any public or private groundwater wells within 0.25 mile of HDD activities.

43. Section 2.1.3.2 and 2.1.4. Identify how much (in miles) of the project area remains to be surveyed for private wells and springs.

44. Section 2.1.3.3, page 2-11. Remove any reference in this discussion to wellhead protection areas being defined by a radius unless there are specific instances where radii have actually been used.

45. Table 2.1.3-3, page 2-11. Provide the state or commonwealth in which the wellhead protection areas are located.

46. Section 2.1.3.3. Confirm whether the planned AP-1 pipeline would cross the Staunton Gardner Source Water Protection Area in Augusta County, Virginia and revise section 2.1.3.3 as necessary. Provide any updated correspondence regarding the crossing of source water protection areas.

47. Regarding comments received from the Augusta County Service Authority:

a. Describe how Atlantic and DTI propose to comply with the Augusta County Source Water Protection Ordinance regarding the crossing of the source water protection areas.

b. Describe how impacts on source water protection areas or wells would be avoided or mitigated.

c. Provide documentation of any consultation with the Service Authority as necessary to complete a. and b. above.

48. Section 2.1.4, page 2-12. For each spring identified within 150 feet of the planned workspaces, indicate the gradient and spatial relationship of its recharge area to the pipeline corridor.

49. Section 2.1.4. An individual commented that the planned pipeline route in Highland County, Virginia crosses the recharge area for the Cowpasture River sinking points, which feed Meadow Spring and the Coursey Springs State Fish Hatchery. Confirm whether the planned facilities cross these areas, and if crossed, describe the measures that would be implemented to avoid or minimize impacts on these features.

50. Table 2.1.5-1. Because the drainage direction from the project is based on U.S. Geological Survey (USGS) topographic maps, indicate that it is surface drainage direction from the project to eliminate any potential confusion with groundwater gradient direction.

51. Regarding section 2.1.5:

a. Ensure that the contaminated or landfill sites discussed in section 2.1.5 and identified in table 2.1.5-1 are consistent.

b. Indicate what type of research would be conducted to complete assessment of the contaminated sites identified in table 2.1.5-1.

c. Upon completing additional research, identify which sites could be affected by the project and the measures that would be implemented to avoid, minimize, or mitigate impacts on the site(s).

52. Section 2.1.6. List specific measures that would be implemented to mitigate shallow groundwater impacts.

53. Section 2.1.6, page 2-16. Ensure the Contaminated Media Plan identifies specific procedures for detecting, excavating, stockpiling, characterizing, and determining the disposition of potentially contaminated soils. Similarly, the plan must identify specific procedures for dealing with potentially contaminated groundwater.

54. Section 2.1.6. Describe the preconstruction and post-construction well tests that would be conducted, the specific measures that would be implemented to mitigate impacts on wells that may be temporarily affected (e.g., turbidity) by construction activities, and the specific measures that would be implemented to repair or mitigate wells damaged or permanently affected by construction-related activities.

55. Section 2.1.6. During scoping, several commentors stated that their private water sources were provided by local springs. Describe whether preconstruction and post-construction water quality tests would be completed for water-source springs that could be impacted by construction activities, along with the specific measures that would be implemented to mitigate water-source springs that are temporarily affected or damaged by construction-related activities.

56. Section 2.1.6. The Augusta County Service Authority commented that blasting near the Augusta Regional Landfill property could damage its monitoring wells and cause off-site migration of gas or leachate that would put the landfill in regulatory non-compliance with federal and state laws. Identify whether blasting would be necessary near these wells. If blasting may be required, consult with the Augusta County Service Authority to develop appropriate blasting and monitoring procedures for these wells. File the results of these consultations with the Commission.

57. Section 2.1.7. Address the potential for natural gas liquids to occur or accumulate in the planned pipelines. If natural gas liquids could leak during a pipeline failure, describe the impacts that could result and measures that would be implemented to clean-up and mitigate the release.

58. Section 2.2. Identify waterbody crossings where blasting may be required and the measures that would be implemented to minimize blasting impacts on surface waters.

59. Table 2.2.2-1 identifies 15 major waterbody crossings; however, 14 are listed in table 2.2.2-2. Resolve this discrepancy.

60. Section 2.2.7. Regarding hydrostatic test water and dust control withdrawals and discharges, provide the following in the final resource reports:

    a. the source and volume of water to be withdrawn from each of these activities by water source;

    b. the seasonal withdrawal timeframe for each withdrawal;

    c. a description of the intake structure’s position within water sources, including any screening that may be used during the withdrawals;

d. the anticipated withdrawal rates and its relation to the source water's anticipated discharge volume (e.g., the percent of water that would be withdrawn from a waterbody or impoundment);

e. the anticipated discharge location, volume, and rate for each hydrostatic test water discharge;

f. a description of any source waters that are known to contain contaminates, impairments, or nuisance aquatic species. If present:

i) identify and describe the locations where hydrostatic test water or dust control discharges would occur outside the source watershed;

ii) describe the impacts that could result from withdrawal and discharge of these threats;

iii) identify the measures that would be implemented to avoid or mitigate impacts from withdrawals and discharges.

61. Section 2.3. Describe the jurisdictional boundary of each U.S. Army Corps of Engineers (COE) District that has jurisdiction over the project.

62. For all waterbodies greater than 100 feet wide at the planned crossing location, provide the width of the waterbody and the planned construction methods. Provide detailed, site-specific construction mitigation and restoration plans for each crossing.

63. Discuss the latest U.S. Environmental Protection Agency/COE rule (Docket ID: EPA-HQ-OW-2011-0880) regarding the definition of "Waters of the United States" and how it would apply to wetland and waterbody identification, permitting, and mitigation for the project.

64. Section 2.3.2. Provide a schedule for completing and filing wetland and waterbody survey reports. Discuss how parcels without survey access will be handled with respect to impact analysis and permitting and if methods other than reviewing publicly available desktop data would be used.

65. Section 2.3.2. Identify how much (in miles) of the project area remains to be surveyed for wetlands and waterbodies.

66. In tabular format in the final resource reports, identify all locations where the construction workspace would not be reduced to 75 feet within a wetland and where additional temporary workspace would be located within 50 feet of wetland boundaries.

67. Section 2.3.4.2. In the final resource reports, quantify temporary and permanent wetland impacts at all aboveground facility sites.

68. Section 2.3.4.3. In tabular format in the final resource reports, quantify and describe the temporary and permanent wetland impacts that would occur along each access road (e.g., temporary or permanent blading, widening, improving, or bridging).

69. Section 2.3.4.3. The total wetland crossing length of access roads described in section 2.3.4.3 is not consistent with the data presented in table 2.3.4-3. Resolve this discrepancy.

70. Section 2.3.4.4. In the final resource reports, quantify the temporary and permanent wetland impacts that could occur at pipe storage and contractor yards, and justify why wetlands could not be avoided, if applicable.

71. Tables 2.3.4-1 and 2.3.4-2. Footnote b states that wetland impacts were based on a 75-foot-wide construction right-of-way. The notes at the bottom of the tables state wetland impacts were calculated based on agricultural status. Clarify the right-of-way width that was used to calculate wetland impacts in agricultural areas.

72. Table 2.3.4-2. The crossing length subtotal appears incorrect. Resolve this discrepancy.

73. Table 2.3.4-3. Identify the parameters (e.g., access road widths) that were used to determine temporary and operational wetland impacts.

74. Section 2.3.7. Provide any known information regarding compensatory mitigation that may be required for temporary and/or permanent wetland impacts, including a schedule for filing the Compensatory Mitigation Plan with the COE and Commission.

75. Identify all possible reroutes that would avoid wetlands and multiple crossings of wetlands and waterbodies. Also, identify all possible reroutes that would avoid isolated woodlands.

Draft Resource Report 3 – Fish, Wildlife, and Vegetation

76. Section 3.1.2. Provide further detail and consultation summaries regarding in-stream timing restrictions. Provide copies of all consultations that determined timing restrictions are <u>not</u> required.

77. Section 3.1.2. Identify whether any surface waters that may be used as hydrostatic test water sources contain invasive aquatic or invasive plant species. For any such withdrawal where invasive species are present, identify the discharge location and

describe how Atlantic and DTI would avoid the transfer of invasive species between watersheds.

78. Section 3.1.4.1. Identify waterbodies that may contain sensitive species and where blasting is anticipated within or adjacent to the waterbody. Provide the results of consultations with resource agencies regarding any requested or recommended measures to minimize blasting impacts on sensitive aquatic species.

79. Section 3.1.6. Regarding Essential Fish Habitat (EFH), provide the following:

    a. Characterize and provide the extent of each EFH type located within the South Branch Elizabeth River or any other EFH waters. Include a map that depicts the location of each EFH type crossed by the project.

    b. Based on existing EFH and the species that may utilize the existing EFH, describe preferred timeframes for completing pipeline installation across EFH, acknowledging that inadvertent returns could have impacts on EFH and managed species.

    c. Identify if blasting would occur within or adjacent to EFH or waterbodies known to contain managed fish species. If planned, provide a discussion of blasting-related impacts on habitat and species, and identify how Atlantic and DTI would attempt to avoid or mitigate blasting impacts.

    d. The EFH discussion on page 3-30 states appendix 2C identifies two waterbodies potentially containing EFH species; however, appendix 2C does not identify the two waterbodies, or the species that may occur within them. Additionally, section 3.7.1.2 states several waterbodies may contain the Atlantic sturgeon. Clarify in section 3.1.6.1 and appendix 2C the waterbodies that may contain EFH or managed fish species, and the EFH or managed species that would occur within the waterbodies.

    e. Include a summary of any additional consultations with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service regarding EFH or managed fish species.

80. Section 3.2.1. Describe and characterize the predominant open land vegetation communities that would be affected by the planned project. For these open land communities, quantify (in acres) temporary and permanent vegetation impacts that would result from construction and operation of the planned facilities, including the temporary construction and permanent operational pipeline right-of-way, temporary extra workspaces, above ground facilities, yards, and access roads.

81. Section 3.2.3. Provide an estimate of the timeframe for successful restoration of the various forest and open land vegetation communities that would be temporarily impacted by construction of the project.

82. Section 3.2.3. Clarify if Atlantic and DTI would utilize pesticides during construction, restoration, or operation of the facilities. If planned, describe the pesticide(s) that would be applied and, when, where, and how it would be used.

83. Section 3.2.3. Clarify whether Atlantic and DTI would seed, plant, or allow natural recruitment of trees and other native vegetation that is cleared from the temporary construction right-of-way, particularly in riparian areas. Discuss whether selective plantings at riparian areas would offer more rapid and successful restoration of these areas.

84. Section 3.2.3. Identify how Atlantic and DTI would restrict access to the permanent right-of-way during restoration and to address the U.S. Forest Service concern that the new right-of-way may be utilized as a recreational trail by all-terrain vehicle users, hunters, and hikers.

85. Section 3.2.4. Identify by milepost where the project work areas, including aboveground facilities, yards, and access roads, would cross the following sensitive vegetation communities:

    a. State/Commonwealth Natural Heritage Communities;

    b. State/Commonwealth Lands;

    c. Monongahela National Forest vegetation management units/habitat types (e.g., old growth, red spruce by density);

    d. Lambert Restoration Project;

    e. George Washington National Forest habitat types;

    f. Appalachian Trail habitat types;

    g. Blue Ridge Parkway habitat types; and

    h. U.S. Fish and Wildlife Service (FWS) Great Dismal Swamp Wildlife Refuge habitat types.

86. Section 3.3.2.1. Address the following related to fragmentation:

    a. Provide in table format, an estimate of forested, woodland, and shrub fragmentation resulting from construction and operation of the proposed pipeline. This table should include by vegetation community type: the total

number of fragments, the total amount of acres fragmented, average size of a fragment, and the total length in miles of fragmentation.

b. Address federal and state agency concerns with regard to forest fragmentation, especially for those species that are sensitive to fragmentation, such as the Cheat Mountain Salamander and northern long-eared bat.

c. Address the impact of fragmentation on all forest interior dwelling species and wildlife movement.

d. Propose conservation measures to mitigate these impacts (e.g., road decommissioning, tree and riparian planting, brush pile corridors).

87. Section 3.3.1. Provide a list of game species by state or game management zones, including any known game corridors, herding or feeding areas, or game farms. Include a discussion of the potential impacts on these species during construction and operation of project and identify how Atlantic and DTI would avoid or minimize impacts on game species.

88. Section 3.3.2. Provide a discussion of the potential for wildlife and/or livestock to be injured by construction activities (e.g., falling into an open trench). Identify how Atlantic and DTI would attempt to avoid or mitigate for these impacts.

89. Section 3.3.2. Provide a discussion of potential impacts from HDD installation and other 24-hour construction activities, including the use of artificial light and noise emissions, on wildlife species, particularly nocturnal species such as bats. Identify how Atlantic and DTI would attempt to avoid or mitigate for these impacts.

90. Section 3.3.2.4. Provide a discussion of potential long-term noise impacts from aerial-monitoring of the pipeline after construction. Be sure to address the potential for startling effects on sensitive species.

91. Section 3.4.1. Provide mapping of the Important Bird Areas in the vicinity of the project, including the Atlantic Flyway.

92. Section 3.5. Clarify whether aerial surveys for bald eagles would be conducted prior to initial tree clearing activities.

93. Section 3.7. Provide the complete description and results of the desktop review and consultation process that was used to determine proximity of federally listed species to the projects. Include National Heritage Inventory search results or negative findings for all species.

94. Section 3.7.1. For all federally listed or candidate species, Regional Forester Sensitive Species, and Management Indicator Species identified in the Monongahela National Forest and George Washington National Forest, provide maps that identify the following:

    a. the locations of identified sensitive species in relation to the planned facility work areas;

    b. the locations of federally designated or proposed critical habitat and/or other federal, state, or local species conservation areas (e.g., Madison cave isopod priority area), as applicable; and

    c. the locations of potentially suitable foraging and/or breeding (nesting) habitat and hibernacula for bats, as applicable.

95. Section 3.7.1.1. Clarify whether ground surveys would be conducted to determine the presence of cavity trees for the red-cockaded woodpecker or provide confirmation from the FWS that aerial cavity surveys are adequate for this project.

96. Section 3.7.1.1. Clarify if both habitat assessments and surveys for individuals would be conducted for the federally listed bat species.

97. Section 3.7.1.1. Clarify if the 2015 Rangewide Indiana Bat Summer Survey Guidelines will be used for surveys. The resource report currently references the 2014 Rangewide Indiana Bat Summer Survey Guidelines.

98. Section 3.7.1.1. Per correspondence with the FWS, describe impacts on and avoidance measures for running buffalo clover.

99. Section 3.7.1.1. Update the information on the Interim 4d rule for the northern long-eared bat. Provide information regarding whether the rule will pertain to the projects, based on consultation with the FWS.

100. Section 3.7.1.3. To address concerns raised by the FWS, Virginia and North Carolina Ecological Field Offices in their December 16, 2014, January 23, 2015, and March 25, 2015 correspondence, for proposed waterbody crossings <u>where federally listed species or suitable habitat are present</u>, describe the following:

    a. alternative waterbody crossing locations and construction methods considered;

    b. justification for selecting the proposed crossing locations and construction methods;

    c. the potential site-specific impacts on the waterbodies (e.g., vegetation removal, substrate alteration, flow dynamics); and

d. where any trenchless crossing methods are proposed and sensitive species are known or assumed to be present, describe the impact of an inadvertent release of drilling fluids into the waterbody.

101. Section 3.7.2.1. Clarify in the text of the resource report if surveys would be conducted for the West Virginia flying squirrel.

102. Include the following information in the Restoration and Rehabilitation Plan:

a. The specific measures that would be implemented to monitor and actively restore the temporary and permanent rights-of-way.

b. The specific restoration, seeding, and planting criteria for all areas that require site-specific restoration requirements per agency or permitting conditions.

c. The specific measures that would be used to restrict access along the pipeline right-of-way during operation of the facilities, including the type of devices that would be used and the locations where the devices would be installed.

103. Include the following in the Invasive Plant Species Management Plan:

a. The measures that would be implemented to prevent construction equipment from transporting invasive species to the project area.

b. The measures that would be implemented to prevent the new right-of-way from being utilized as a recreational trail by off-highway and all-terrain vehicle users, hunters, and hikers who may transport and promote invasive plant species infestations.

c. The locations of invasive plant species individuals and/or populations identified during field surveys, and the measures that would be implemented to prevent the spread of existing invasive species.

d. A description of when, where, and how herbicides would be utilized to prevent or control the spread of invasive plant populations.

e. The measures that would be implemented to monitor the construction work areas after construction is complete and restoration commences.

Draft Resource Report 4 – Cultural Resources

104. Describe the potential impacts that blasting and vibrations could have on historic properties, and whether blasting activities are anticipated near historic properties.

Draft Resource Report 5 – Socioeconomics

105. Ensure that the most recent data available from the U.S. Census Bureau is utilized to assess the socioeconomic conditions in the project area.

106. Provide socioeconomic data for all counties and communities (as identified based on U.S. Census Bureau data TIGER/Line® files) that could be affected by the project. Include all demographic, economic and employment, housing, and public service infrastructure data at the community level.

107. Section 5.2.2. Identify the number of temporary and permanent workers that would be required to construct and operate the SHP and ACP Project facilities. Additionally, identify the criteria that was used to calculate full time equivalent workers.

108. Section 5.2.2. Identify where permanent employees would be hired (e.g., compressor stations, headquarter offices in Richmond, branch offices in certain cities).

109. Footnote 3, page 5-7. Provide anticipated peak workforce by year (e.g., in 2016, in 2017, in 2018).

110. Section 5.2.2, page 5-8. Define "commuting distance." Estimate the percentage of the construction workforce that would come from within the crossed or affected counties/cities. Separate this data by state/commonwealth and county, if known.

111. Table 5.3.1-1. Include a column for the top three industry sectors in each county/ city crossed or affected by the projects.

112. Section 5.3.1. Include the months of high and low season(s) for tourism and recreation in the project area and metrics to characterize the degree of tourism that occurs (e.g., visitors per day for parks, number of visitors a year to a particular destination) at the major tourism and recreation locations that could be affected by construction or operation of the project.

113. Section 5.3.1. In response to comments received during scoping, include a discussion of how the project could impact tourism or recreation at Rockfish Valley, Nelson County, Virginia, and the measures that may be implemented to avoid or reduce impacts during construction.

114. Section 5.3.1, page 5-17. The text discussing the agricultural industry in Virginia states "…farm sector employment as a percentage of total employment ranged from a high of 12.2 percent in Augusta County…." The number in the text does not match the data provided in table 5.3.1-7. The data in the table indicates that the highest percentage of farm sector employment is 15.5 percent in Highland County. Rectify this discrepancy.

115. Section 5.3.1, page 5-18. The text discussing the agricultural industry in North Carolina states, "In that year, farm cash receipts for crops totaled around $14 billion in North Carolina and almost $703 million in the Counties crossed by ACP." Two discrepancies have been noted between the text and the data presented in table 5.3.1-8:

    a. Table 5.3.1-8 indicates farm cash receipts from crops, livestock, and products in North Carolina totaled $14 billion. For consistency, the text should state "crops, livestock, and products…."

    b. Table 5.3.1-8 indicates that farm cash receipts from crops, livestock, and products in the counties crossed by ACP totaled over $3.3 billion, not $703 million as indicated in the text. Rectify this discrepancy.

116. Section 5.4. Provide an estimate of total worker payroll during construction and operation of the SHP and ACP Project. Where possible, provide an estimate of total *local* worker payroll during construction and operation.

117. Section 5.4. Provide an estimate of material purchases during construction and operation for both projects, and where possible, an estimate of total *local* material purchases.

118. Section 5.5.1. In addition to tables 5.5.1-1 and 5.5.1-2, provide a table that summarizes the existing housing accommodations in the local communities that would be affected by the project.

119. Section 5.6.1. Provide a table that summarizes the existing public service infrastructure in the project area using the data headings shown in the example table below. Provide the data for each county and city that would be crossed by the planned pipeline facilities and where compressor stations would be modified.

TABLE 5.X.X-X

Public Service Infrastructure in the Project Area

Project/State/ County	Number of Fire Stations	Nearest Distance to Mainline/ Facility (miles)	Number of Hospitals & Medical Facilities/ Hospital Beds	Nearest Distance to Mainline/ Facility (miles)	Number of Police & Sheriffs	Nearest Distance to Mainline/ Facility (miles)	Number of Public Schools
PROJECT							
STATE/ COMMON-WEALTH							
State							
COUNTY							
County							
LOCAL							
City							

120. Section 5.6.1. For cities or counties that would be affected by the project, identify Primary Care Health Professional Shortage Areas or Medically Underserved Areas or Populations.

121. Section 5.6.1. Assess the ability of public services to respond to emergency situations along remote portions of the project and the additional cumulative impacts these situations would pose on public services and the community. Identify measures or assistance that could be provided to alleviate any cumulative impact on public services, as applicable.

122. To address comments received during scoping regarding Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (April 1997), include:

    a. unconsolidated census tract or block group data for children under the age of 17 that reside along/within the project area; and

    b. a discussion of how the SHP and ACP Project would avoid adverse impacts on children's health.

123. Section 5.7.1. Include an estimate of project-related traffic during construction. Information should include, at a minimum:

    a. an estimate of anticipated number of vehicles, trips, travel routes, and timeframes for construction related activities;

    b. any plans for ride sharing or bussing of workers to construction work area from designated parking areas or worker camps;

    c. traffic related to delivery of construction equipment and materials; and

    d. current average daily traffic counts and anticipated daily traffic counts during facility construction on the roads used in the Project area.

124. Section 5.9. Include a table that summarizes racial and ethnic characteristics and poverty rates by census tract within 1 mile of the planned pipelines. Also include this data at the census tract level for a 1-mile radius around each new compressor station site. Bold the values that identify an environmental justice population and include figures that show the census tracts/blocks adjacent to the compressor stations within the radius area.

Draft Resource Report 6 – Geologic Resources

125. Identify the data source(s) for each figure.

126. The total crossing length for Wetzel County, West Virginia is not consistent between several tables (e.g., 9.6 or 9.7 miles). Resolve this discrepancy.

127. Table 6.1-1. The total crossing length for Greensville County, Virginia is listed as 18.5 miles and the slope class crossing length totals 17.6 miles. Resolve this discrepancy.

128. Section 6.3, page 6-10. Include the source and/or date range of the aerial photographs that were reviewed to determine mine locations.

129. Table 6.3-1, page 6-12. Include the mine name and/or owner.

130. Section 6.3, page 6-12. Replace "half-grabin" with half-graben.

131. Section 6.4.2. Expand discussion of the methodologies and parameters that would be used for the site-specific geotechnical studies for landslides and whether the studies will include an on-site geologic analysis, aerial photograph and Lidar evaluation, geologic field reconnaissance and mapping, or subsurface investigation. Specifically address how the results of the site-specific geotechnical studies will be used to reduce landslide potential during construction and operation of the project Also provide a discussion on how the identified landslides will be ranked in terms of potential hazard to the project and how this ranking may trigger additional investigation or re-routing. Provide a schedule for filing the results of site-specific geotechnical studies.

132. Table 6.4.2-1. The total crossing length of Wetzel County, West Virginia is listed as 9.6 miles and landslide incidence/susceptibility High/High is listed as 9.8 miles. Resolve this discrepancy.

133. Section 6.4.3. Describe the evaluation that will be performed to identify if abandoned underground mines exist under the proposed pipeline and what mitigation measures would be taken to ensure pipeline safety.

134. Section 6.4. Provide a separate discussion of geologic conditions and hazards at the three new compressor stations.

135. Section 6.4.4, pages 6-22 to 6-23. In geology, the term "terrain" refers to physiography and landforms, while the term "terrane" refers to a geologic formation or assemblage of related units with stratigraphy, structure, and/or geologic history distinct from surrounding areas. Apply the terms as appropriate in the discussions.

136. Section 6.4.4. Address the recommendation from the Virginia Department of Conservation and Recreation (VDCR) that the Virginia Speleological Survey be consulted regarding the locations of cave entrances near the pipeline route, and

any cave entrances discovered during construction should be reported to the VDCR.

137. Section 6.4.4. Characterize thoroughly the environmental conditions and potential impacts associated with the construction and operation of pipelines in karst terrane. Accordingly, update sections 6.4.4 and 6.6 to include:

a. an inventory and description of the karst terrane and features (e.g., karst geology, carbonate units, caves, and sinkholes, rock types, evaporate beds) that would be crossed by the project;

b. maps and/or tables that present the location of karst terrane and features in relation to the planned facilities;

c. the amount of karst terrane and features that would be crossed or are in proximity to the planned facilities;

d. A description of how the project was designed to avoid known karst features, or a description why certain features could not be avoided; and

e. data from the recently published open-file report from the USGS that characterizes karst conditions in the U.S. on a regional basis. Details are provided in the following reference: Weary, D.J. and D.H. Doctor. 2014. Karst in the United States: A Digital Map Compilation and Database, USGS Open-File Report 2014-1156, 23 p.

138. Section 6.6. Ensure that the Karst Monitoring and Mitigation Plan:

a. is completed by a licensed professional experienced in karst inventories and assessments in the project area;

b. provides a detailed discussion regarding the structural integrity of modern pipelines and their performance in karst and seismically active areas, including an assessment of the possible unsupported span width a 42-inch-diameter pipeline could withstand;

c. identifies the pre- and post-construction monitoring of water quality and yield that would be performed on wells and springs adjacent to the proposed alignment (within 500 feet of the centerline) in karst areas;

d. identifies construction set back from wells, springs, and karst surface expressions;

e. identifies the protection methods that Atlantic would use in karst areas to prevent contamination during construction;

f. identifies the measures that would be implemented to monitor the pipeline right-of-way in karst terrane, including the type and frequency of inspections that would be conducted during construction and operation of the facilities;

g. identifies possible backfill and mitigation measures that would be performed when unanticipated karst features are encountered during construction; and

h. provides a thorough description of the measures that would be implemented to repair or mitigate the development of a sinkhole in proximity to the pipeline facilities, and the monitoring efforts that would be implemented for repaired or mitigated sinkhole areas.

139. Section 6.6. The VDCR commented that the project route should avoid the use of HDD to prevent the loss of drilling fluids into karst features. Confirm whether the planned HDD under the Blue Ridge Parkway and Appalachian Trail near Wintergreen Virginia is located within karst terrane.

140. Section 6.6. The VDCR commented that slug test water should not be discharged into sinkholes or onto the land surface in karst areas, because this practice has been known to open new sinkholes on previous pipeline projects. Describe specific construction and mitigation practices that will be implemented for any project-related water discharges that would occur within areas with karst features.

141. Section 6.6. The Virginia Cave Board commented that discharge of hydrostatic test water should be prohibited in the Jackson River Valley. Identify if hydrostatic test water would be discharge within this river basin, and if discharge would occur, describe how impacts on karst, caves, and groundwater features would be avoided or minimized.

142. Section 6.6. Describe the potential for acidic soil and/or acid-producing rocks to impact the project facilities, including measures that would be implemented to minimize or mitigate potential impacts.

143. Section 6.4.5. Revise table 6.4.5-1 to include or provide an additional table that identifies each 100-year floodplain crossed by the project, including the location that the project enters and exits the floodplain, the length of the floodplain crossed, and the floodplain code (e.g., A, E, AO).

144. Section 6.4.5. Describe any permitting requirements or restrictions that may be required for constructing pipeline facilities within floodplains.

Draft Resource Report 7 – Soils

145. Provide an update on the status of agency consultations, specifically with the Monongahela National Forest and George Washington National Forest.

146. Table 7.4.2-1. Provide data for each individual aboveground facility, including permanent impacts to prime farmland and farmland of statewide importance.

147. Provide a table or tables that describe acreage of prime farmland soils, hydric soils, compaction prone soils, highly wind and water erodible soils, soils with revegetation concerns, stony/rocky soils and soils with shallow bedrock that would be impacted by the planned pipeline facilities, summarized by state, county and soil map unit.

148. Section 7.4.3 indicates that soil map unit characteristics for pipe storage and contractor yards are summarized in Appendix 7A; ensure, the data is provided. Provide a separate table outlining soil characteristics for pipe storage and contractor yards. Include acreages by soil map unit and both temporary and permanent impacts for each proposed yard.

149. Section 7.4.4 indicates that soil map unit characteristics for access roads are summarized in Appendix 7A; ensure, the data is provided. Provide a separate table outlining soil characteristics for access roads. Include acreages by soil map unit and indicate whether each road is proposed as a temporary or permanent access road.

Draft Resource Report 8 – Land Use, Recreation, and Visual Resources

150. Section 8.1. Verify if forested wetlands are included with the Upland Forest/ Woodland or Wetlands land use type.

151. Section 8.1. Provide the approximate locations (milepost ranges) of the reclaimed surface strip mines.

152. Section 8.2.1 states that narrowing of the construction corridors would be necessary and that these locations are depicted on the route maps provided in appendices 1A and 1B. However, neither appendix appears to show the construction right-of-way. Clarify this statement or provide revised appendices that depict the locations of narrowed rights-of-way.

153. Section 8.2.5 and table 8E summarize the location and amount of collocated rights-of-way. Identify (by milepost range) and quantify (by acreage) each instance where the planned construction or operational rights-of-way would overlap with any existing rights-of-way.

154. Section 8.3 and 5.3.1. Identify (by milepost) and quantify (in acres) the maple sugar stands that would be affected by construction and operation of the project. Identify the measures Atlantic and DTI would use to avoid or reduce impacting maple sugar stands.

155. Section 8.3. Identify by milepost managed tree plantations and harvested forests.

156. Section 8.3. Provide a discussion explaining the feasibility of reducing the construction right-of-way in National Forests and contiguous tracts of forested areas to less than that required in other land use types.

157. Section 8.5. Identify by milepost, to the extent known, drain tile, irrigation, and septic systems affected by the project.

158. Section 8.5. Specify the timing for temporary (immediately, within 24 hours, etc.) and permanent septic system repairs.

159. Section 8.3. Provide examples of the "other means" by which Atlantic and DTI would control excessive dust emissions.

160. Section 8.3. Provide Atlantic's and DTI's landowner dispute resolution procedures. Include information such as the format of communication (e.g., letter), when landowners would be notified of the procedures, contact number(s), and how quickly Atlantic and DTI would respond to issues.

161. Section 8.3. Clarify that Atlantic and DTI have also consulted with landowners regarding certificated organic farms along proposed new or modified access roads and other off-right-of-way facilities.

162. Section 8.3. Several comments were received during scoping regarding special farming designations such as the Virginia Century Farm Program. Identify by milepost where Atlantic and DTI would cross special farming designated areas and the construction and operation impacts (acres). Describe the program and, if construction or operation of the project would conflict with requirements of the program, how Atlantic and DTI would mitigate impacts.

163. Section 8.3. In response to scoping comments:

    a. verify if Atlantic and/or DTI would affect the Dutch Creek Agricultural and Forestal District; any certified wildlife habitat farms, as designated by the National Wildlife Federation; or the Shannon Farm Community in Nelson County, Virginia; and

    b. if these areas are affected:

        i. identify the location of these areas (milepost range);

ii. describe if the project would conflict with any special provisions of the area; and

iii. describe how Atlantic and/or DTI would mitigate for project impacts.

164. Section 8.6. In response to scoping comments, verify if Atlantic would:

a. adopt the mitigation measures for land use recommended in the Highland County Board of Supervisor's April 27, 2015 letter submitted to the FERC; and

b. adopt the Forest Resource Impact Mitigation measures recommended in the Commonwealth of Virginia, Department of Forestry's April 27, 2015 letter to the FERC.

165. Section 8.3. Verify that, in addition to the mitigation measures listed, Atlantic and DTI would ensure clean construction vehicles and equipment would be used to enter and work in certified organic farm areas.

166. Section 8.5. Identify if any proposed new or modified access roads and other off-right-of-way facilities would affect federal or state lands. If so, identify the ownership at each applicable facility.

167. Section 8.5. Clarify if Atlantic and DTI would develop site-specific plans for commercial structures within 50 feet of the construction work areas. Update table 8.5-1 to include commercial structures.

168. Section 8.5. Include on each residential construction plan other structures (e.g., garage, shed, septic systems) and if structures would be relocated, removed, or replaced following construction, and, as applicable, identify trees that would be protected/avoided.

169. Section 8.5. Confirm if and where by MP Atlantic and/or DTI would use the stovepipe or drag section construction techniques across residential lands.

170. Section 8.5. Describe the measures Atlantic and/or DTI would implement to avoid impacts on residences, businesses, and related structures due to equipment and/or construction activity-related vibrations, including those associated with the HDD method.

171. Section 8.6. Regarding planned developments:

a. Update table 8.6-1 to identify new or "TBD" information received since submittal of the draft resource report.

b. Provide supporting documentation and descriptions for new areas similar to other planned developments.

c. To the extent known, identify each planned development's construction schedule in relation to the proposed project's construction schedule.

172. Section 8.7 and 8.8. Regarding the special management areas and recreation and special interest areas, address the following:

a. Provide an update of Atlantic's and DTI's consultations with each area since submittal of the draft resource report.

b. Provide a figure(s) showing these areas in relation to the projects.

c. Identify any requests by the landowner/property manager for the use of special construction methods, timing, restoration measures, etc.; avoidance; or other mitigation. Clarify if Atlantic and/or DTI would adopt these measures.

d. Provide, as appropriate, site-specific detour or portage plans for special interest areas that would be closed to access during construction (e.g., trails, Nationwide Rivers Inventory Rivers). At a minimum, provide the following on each plan:

i. the construction and permanent workspace;

ii. locations of the detour or portage;

iii. where signage would be placed;

iv. the approximate timeframe in which the detour or portage would be established; and

v. an agency and Atlantic and/or DTI contact number.

Provide evidence that each plan was developed in consultation with and approved by the land managing agency.

e. In addition to compensation for crop losses, verify if Atlantic and DTI would compensate landowners or the land-managing agency for lost use or recreational revenues as a result of construction.

f. If any construction measures as requested by the landowner or land managing agency would conflict with the FERC staff's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) or Wetland and Waterbody Construction and Mitigation Procedures (Procedures), describe

how each proposed modification would provide equal or better environmental protection than the FERC staff's Plan and Procedures, or explain why the FERC staff's Plan or Procedures would be infeasible or unworkable based on project-specific conditions.

173. Section 8.7.1.1. Provide a reference or recent documentation to support the statement that the route does not cross any lands designated by the U.S. Forest Service as Roadless Areas, Wilderness Areas, or potential Wilderness Areas in the Monongahela National Forest and George Washington National Forest.

174. Section 8.7.1. Verify that the potential Wilderness Area identified as within 300 feet of milepost (MP) 111.9 and recommended to Congress for designation as a National Scenic Area is the same as the later mentioned Shenandoah Mountain National Scenic Area.

175. Section 8.7.1.2. Clarify if clearing would be necessary during construction or operation of the right-of-way between the HDD drill entry and exit points. If so, describe the extent of and frequency of clearing.

176. Section 8.7.1.3. Some lands enrolled in the Great Dismal Swamp National Wildlife Refuge's Conservation Plan programs are indicated as crossed by the AP-3 lateral route, while other programs are not discussed. Clarify what programs would be affected by or are applicable to the AP-3 lateral route.

177. Table 8K. Update table to include:

a. construction and operation impacts (acres);
b. the crossing method; and
c. if and where the project would be collocated with another right-of-way.

178. Table 8K lists several Conservation Reserve Enhancement Program Easements (an offshoot of the Conservation Reserve Program) that are not discussed in the text. Verify that, where easement agreements may need to be altered to accommodate the project (pipeline, aboveground facilities, etc.), including where tree removal is necessary, the landowner's participation in the program would not be discontinued and, as such, result in a loss of annual rental payments and cost-share assistance from the Farm Service Agency. If so, describe how Atlantic and DTI would mitigate the landowner for any lost incentives realized in the program.

179. Table 8K lists several North Carolina Ecosystem Enhancement Program areas that do not appear to be described in the text. Provide a discussion of these areas equivalent to others discussed in sections 8.7 and 8.8.

180. Table 8.7.4-1. Clarify the difference between the Natural Heritage Area listed in table 8.7.4-1 and those listed in table 3.1.3-4 in Draft Resource Report 3.

181. Section 8.8. Expand on the project's potential impacts on recreational fishing opportunities.

182. Section 8.8. Provide a table that lists by milepost the various wildlife hunting units crossed by the project. Identify if construction would overlap with peak wildlife hunting season(s) and describe how Atlantic and DTI would notify hunters of construction.

183. Section 8.8. Identify the access roads (new or modified) near the Wintergreen Resort that would be impacted by the project.

184. Table 8K. Update or provide a new table that lists the Civil War Battlefields as discussed in section 8.8.8. Include beginning and ending mileposts, crossing length, ownership/jurisdiction, area affected by construction and operation, and crossing method. Ensure the table includes linear segments of the battlefield sites crossed but not currently supported with milepost locations in the text (e.g., McDowell, Sailor's Creek).

185. Section 8.8.9. Provide mileposts of where the pipeline would cross areas authorized for off-highway and all-terrain vehicle use (trails).

186. Section 8.8.10 states it is Atlantic's and DTI's policy to avoid cemeteries by rerouting the pipeline; therefore, confirm that known cemeteries are actually avoided by the proposed project.

187. Section 8.9.2. Augusta County, Virginia. Provide an update of Atlantic's consultations with the Headwaters Soil and Water Conservation District regarding blasting within 0.75 mile of the Tom's Branch Reservoir and the Augusta County Service Authority regarding blasting near groundwater monitoring wells.

188. Section 8.11.1. Provide general milepost crossings for the physiological provinces.

189. Section 8.11.2. Verify if any aboveground facilities or access roads would be located within sensitive visual resource areas.

190. Section 8.11.2.1. Identify by MP where the project would cross and be closest to areas designated in the Monongahela National Forest as Management Prescription Unit 8.3 – Scenic Areas.

191. Section 8.11.2.1. Identify what treatments listed in the George Washington National Forest LRMP Atlantic and DTI would adopt when crossing areas designated with a Scenic Integrity Objective of Low, Moderate, and High.

192. Section 8.11.2.1. Provide a description of the existing conditions (land use, utility corridors, structures, etc.) at each scenic highway and river crossing.

193. Section 8.11.2.3. In response to scoping comments, provide a description of the Humpback Rocks, Founders/Wintergreen, and Raven's Roost scenic overlooks.

194. Section 8.11.3.1. Provide an update of Atlantic's and DTI's coordination with land management agencies to identify visually sensitive areas and visual mitigation measures for each location.

195. Section 8.11.3.1. Describe how Atlantic and DTI would visually screen (e.g., tree plantings, paint color) aboveground facilities. Also describe if aboveground facilities would be designed to be consistent with nearby structures (i.e., made to look like a house, barn, etc.).

196. Table 8C-1. Update table 8C-1 (Additional Temporary Workspaces for the Atlantic Coast Pipeline) to include a justification (e.g., wetland crossing, HDD) column.

197. Table 8D. Update (Access Roads for the Atlantic Coast Pipeline) to include the following columns:

    a. new or existing;
    b. temporary or permanent use;
    c. ownership;
    d. existing surface;
    e. a distinction between construction and operation impacts (acres); and
    f. a brief summary of the proposed improvement.

Draft Resource Report 9 – Air and Noise

198. Section 9.1.4.1. Quantify fugitive dust emissions from construction of the project.

199. Section 9.1.4.1. Quantify construction emissions from the entire project, including pipeline construction.

200. Section 9.1.4.1. Provide a Fugitive Dust Control Plan that includes the following:

    a. The specific measures Atlantic and DTI would implement and how they would be implemented.

    b. A statement that the environmental inspector (EI) would have the authority to determine if/when dust control measures are necessary.

    c. A statement that the EI would have the authority to stop work if the contractor does not comply with dust control measures.

201. Identify the specific emission limits that would apply to the project and how each subject emission units would comply with the limit(s). Some examples include,

but are not limited to, New Source Performance Standard Subpart KKKK, National Emission Standards for Hazardous Air Pollutants Subpart YYYY, and Pennsylvania particulate matter limit for combustion units (25 PA Code § 123.11).

202. Provide a discussion on the feasibility of

    a. installing one or more electric-driven compressor units in place of the proposed gas-fired compressor unit at each new Compressor Station; and

    b. providing the appropriate amount of electrical power needed to run the electric-driven compressor units.

203. Provide a discussion regarding the feasibility of using waste heat electric generation (cogeneration) for the proposed turbines at each of the new compressor stations. Provide the rate of electricity potentially generated on a kilowatt/month basis and compare this with the amount of electricity used by the compressor station(s) per month. Describe the average load factor of the facility and any impediments that would prevent the operation of the compressor station continuously at 60% minimum load. Compare the size of the electric transmission line necessary under the current proposal with what would be required under a cogeneration system with return to the electric grid.

Draft Resource Report 10 – Alternatives

204. Describe the ability to relocate the natural gas receipt and delivery points with planned customers to accommodate potential route alternatives or route variations.

205. Section 10.4.2. The calculations and analysis in section 10.4.2 assumes the entire capacity of the ACP Project would be used to generate electricity. ACP's stated purpose is to provide natural gas capacity that would be used for electric generation as well as distribution of natural gas to residential, commercial, and industrial end-users. Revise section 10.4.2 to assess only the volume of gas that would be used to generate electricity.

206. Section 10.4.2. Revise the cost to generate a solar power equivalent to reflect costs in trillions of dollars as opposed to billions of dollars.

207. Regarding the Mountain Valley Pipeline (MVP) Project system and collocation alternatives:

    a. Describe the facilities that would be required to transport the requested volume of gas for the MVP Project and ACP Project through a single large diameter pipeline, taking into consideration the planned 42-inch-diameter

Alaska LNG pipeline would be capable of delivering up to 3.5 bcf/d, the combined delivery volumes of the MVP and ACP projects.

b. Provide further detail on the ability to relocate the planned interconnects to the Columbia Gas Transmission and Transcontinental Gas Pipe Line Company pipelines, specifically describing whether the delivery/receipt points could be located at the points where these existing pipeline systems intersect the planned MVP Project. If relocation is feasible, describe the facilities that would be required to meet the delivery requirements of the customers at these delivery points.

208. Section 10.7.3. Analyze highway alternatives in proximity to corresponding segments of the planned ACP Project pipeline route, such as Interstate 95 in North Carolina and Highway 250 in West Virginia and Virginia.

209. Section 10.8.1.2. Include a comparative assessment of the potential karst and cave features that would be crossed by any alternatives in known karst areas.

210. Section 10.8.1.4. The section indicates the Stuarts Draft Alternative 3 is 0.7 mile from the single school; however, the map indicates an approximate distance of 2.2 miles. Clarify this discrepancy.

211. Section 10.8.1.5. Include a comparative assessment of source water protection areas that would be crossed by the Appalachian Trail South Route Alternative and the baseline route.

212. Section 10.8.1.5. If geotechnical analysis indicates a HDD of the Blue Ridge Parkway and Appalachian Trail is infeasible describe how Atlantic would modify its project to meet its objectives.

213. Section 10.8.1.6. Include an assessment of landslide potential for the East of Lovingston Route Alternative and baseline route.

214. Section 10.8.1.10. Clarify why the Johnston County Economic Development Authority would like the planned route to be located adjacent to the existing industrial properties, and describe whether an alternative route could meet the counties' request.

215. Section 10.8.1.13. Analyze and confirm whether the planned Compressor Station 2 could be relocated to approximate MP 297 of AP-2 and meet the gas distribution needs of the project. If relocation is feasible, revise the comparison analysis to exclude the 4.2-mile section of AP-3 that would be constructed adjacent to AP-2. If relocation of Compressor Station 2 would not meet the gas distribution needs of the project, analyze and confirm whether additional compression could be added

to the planned Compressor Station 1 to allow relocation of Compressor Station 2 and meet the gas distribution needs of the project.

216. Section 10.8.1.15. Identify the location of the conservation easement that would be crossed by the Franklin Route Alternative and describe whether a route variation along the Franklin Route Alternative could avoid the conservation easement.

217. Section 10.9.1.7. Consider an alternative that avoids both the Wingina Historic District and the James River Wildlife Management Area.

218. Section 10.9.1.13. For the Red Oak Route Variation:

    a. Develop a technically feasible alternative that would avoid the conservation easement.

    b. The current design is not consistent with the FERC's Procedures; therefore, design the adopted Red Oak Route Variation between MPs 336 and 337 to minimize waterbody crossings, to cross waterbodies close to perpendicular, and to minimize forested wetland impacts.

219. Section 10.9.1.17. Describe the "other two environmentally impacted sites" and whether the adopted Chesapeake Energy Center Route Variation 2 would cross these sites.

220. Section 10.11. Include prime farmland in the alternatives discussion for each aboveground facility that would impact 5 acres or more of prime farmland.

Draft Resource Report 11 – Reliability and Safety

None

Document Content(s)