

**Mountain Valley Pipeline, LLC
MVP Southgate Project
Docket No. CP19-14-000**

Matrix of Responses Filed for the Environmental Information Request Dated February 13, 2019

FERC Comments on General [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
<p>1. File copies of, or provide an anticipated submittal date for all outstanding plans and studies that Mountain Valley indicated were pending, such as, but not limited to:</p> <ul style="list-style-type: none"> a. Project-specific <i>Erosion and Sediment Control Plan (E&SCP)</i> in compliance with Virginia and North Carolina erosion control regulations; b. <i>Compensatory Wetland Mitigation Plan</i>; c. <i>Landslide Mitigation Plan</i>; d. <i>Emergency Response Plan</i>; and e. <i>Fugitive Dust Control Plan</i>. 	<p>1. a, b, d, e - March 5, 2019</p> <p>1.c. – March 28, 2019</p>	
FERC Comments on Resource Report 1 – General Project Description [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
<p>2. Regarding proposed contractor yards, provide the following information listed below.</p> <ul style="list-style-type: none"> a. Indicate the status of negotiations for landowner permission. Identify any issues that have been raised by landowners in opposition to placement of contractor yards and how those issues are being resolved b. Table 1.3-4 indicates extensive forested land is proposed to be cleared at contractor yards CY-01 (31.7 acres), CY-03 (4.2 acres), CY-07 (1.0 acre), and CY-09 (4.7 acres). If each contractor yard site cannot be configured to avoid forested impacts, provide site-specific justification for the clearing of forested areas at each of sites. c. Evaluate alternative areas to place contractor yards that would avoid sensitive areas/resources (e.g. forest, environmental justice communities, public recreational areas, places of worship, etc.). 	<p>March 28, 2019</p>	
<p>3. Provide site-specific justification for proposed additional temporary workspace (ATWS) located at the base of access roads where they intersect with the right- of-way, specifically where these ATWS areas are located within wetlands or forested areas.</p>	<p>March 5, 2019</p>	
<p>4. Provide the exact location and type of groundbeds for cathodic protection. Table 1.3-3 states that: "Testing for suitability of groundbed locations is ongoing," and "Final groundbed locations will be determined prior to the commencement of construction." If that information is currently undetermined, then provide a schedule for the filing of information about the exact locations and types of groundbeds and impacts associated with each location.</p>	<p>March 5, 2019</p>	
<p>5. Update table 1.7-1 to indicate the current status of all required federal, state, and local government permit applications and approvals. Include the date Mountain Valley submitted or would submit the application and indicate whether a permit was issued or its pending schedule</p>	<p>March 5, 2019</p>	
<p>6. Clearly state whether or not Mountain Valley would participate in FERC's third-party construction compliance monitoring program</p>	<p>March 5, 2019</p>	
<p>7. Provide the number of Environmental Inspectors (EI) expected to be used per spread.</p>	<p>March 5, 2019</p>	
<p>8. Provide a specific construction schedule for Spread 1, Spread 2, and the Lambert Compressor Station.</p>	<p>March 5, 2019</p>	

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9.	Provide the workforce size anticipated for the Lambert Compressor Station.	March 5, 2019
10.	Provide the following regarding non-jurisdictional electric utility facilities associated with the Project: a. clarify the primary source of electric power at the Lambert Compressor Station and confirm if commercial service would be purchased resulting in the construction of additional powerlines to the station; and b. describe the full impacts of potentially using solar power to supply electric power to the mainline valves (MLV), interconnect/meter stations, and cathodic protection sites as Mountain Valley stated in section 1.2.2.5 of RR1.	March 5, 2019
Cumulative Impacts		
11.	Clarify which geographic scopes (or regions of influence) were used to identify the projects listed in table 1.10-2. If the geographic scopes requested by FERC staff in pre-filing comments on draft RR1, dated October 5, 2018, were not used, revise table 1.10-2 to include projects consistent with staff's aforementioned request.	March 28, 2019
12.	Include the information below in the revised table 1.10-2: a. the hydrologic unit code (HUC)-12 watershed that the identified project shares with the Southgate Project, and: i. total acreage affected by the project within that shared HUC-12 watershed; ii. acreage of forest cleared within the shared HUC-12 watershed where the Southgate Project affects forest; and iii. acreage of wetlands (palustrine forested [PFO], palustrine scrub- shrub [PSS], and palustrine emergent [PEM]) affected within the shared HUC-12 watershed where the Southgate Project affects wetlands. b. the HUC-10 watershed that the identified project shares with the Southgate Project, and: i. total acreage affected by the project within that shared HUC-10 watershed; and ii. number of waterbodies crossed within the shared HUC-10 watershed where the Southgate Project affects waterbodies.	March 28, 2019
13.	Provide a table that lists each HUC-12 watershed affected by the Southgate Project, and include the information below for each watershed: a. acres of forest, wetlands (PFO, PSS, PEM), and total acreage affected by the Southgate Project (permanent and temporary impacts); b. acreage of forest, wetlands (PFO, PSS, PEM), and total acreage affected by the projects combined in each HUC-12 watershed (permanent and temporary impacts) for all relevant projects identified in table 1.10-2; c. percent of the watershed that is affected by Southgate Project; and d. percent of the watershed that is affected by the other projects identified in the shared HUC-12 watershed.	March 28, 2019
14.	Provide a table that lists each HUC-10 watershed affected by the Southgate Project, and include the information below for each watershed: a. number and type of waterbodies crossed by the Southgate Project; b. the total number and type of waterbodies crossed by the projects combined in each HUC-10 watershed for all relevant projects identified in table 1.10-2; c. percentage of the watershed that is affected by the Southgate Project; and	March 28, 2019

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	d. percentage of the watershed that is affected by other projects identified in the shared HUC-10 watershed.	
15.	For the resource-specific cumulative impacts analyses discussed in RR1, include additional information listed below (if available). a. Aquatic Resources: Identify if a perennial stream crossed by the Southgate Project has the potential to be crossed by another project within the same HUC-10 watershed. If so, give the distance between the crossings. b. Noise: i. identify any potential sound-emitting projects within 0.5-mile of proposed drill or direct pipe sites and if cumulative noise levels could affect noise sensitive areas (NSA) identified within the construction noise geographic scope; ii. identify all projects that could affect any NSAs within 1 mile of a noise emitting permanent aboveground facility; and iii. calculate cumulative noise levels affecting NSAs for projects that meet the above criteria. c. Air: i. identify all projects within 50 kilometers (km) of the Southgate Project operational facilities; and ii. report emissions for each project within 50 km of a Southgate Project compressor station.	15. b, c - March 5, 2019 15.a. – March 28, 2019
16.	There are at least nine solar generation facilities in various stages of planning or operation located near the Southgate Project in Rockingham and Alamance Counties, North Carolina. Include these facilities in table 1.10-2 if they fall within the geographic scopes for the corresponding resource. Describe potential resource-specific cumulative impacts resulting from these projects. In particular, describe the potential impacts from the 80-megawatt (MW) solar generation facility proposed in Gibsonville, North Carolina that may be sited directly adjacent to the existing Transco right-of-way at mileposts (MP) 49 to 50.	March 5, 2019
17.	Describe resource-specific cumulative impacts resulting from ongoing or potential resource extraction operations in the geographic scopes of the Southgate Project, or confirm none exist.	March 5, 2019
18.	RR1 does not currently include a resource-specific discussion regarding cumulative impacts on recreation, special interest areas, or visual resources. Describe potential cumulative impacts on these resources as a result of the Southgate Project using the geographic scope identified in table 1.10-1. Additionally, discuss potential cumulative impacts on ecotourism that could result from the Project when assessed with other projects in the area.	March 5, 2019
19.	RR1 does not currently include a resource-specific discussion regarding cumulative impacts on environmental justice communities. Identify all projects within shared or adjacent census tracts to Southgate Project facilities and discuss potential cumulative impacts on environmental justice communities as a result of the Southgate Project when considered with other projects in the area.	March 5, 2019

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FERC Comments on Resource Report 2 – Water Use and Quality [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
Water Resources		
<p>20. In response to the Virginia Department of Environmental Quality's (VADEQ) comments filed on January 10, 2019, address the items from their comments listed below and confirm that all laws, regulations, and permits required by the VADEQ would be followed.</p> <p>a. Wetlands and Water Quality: All comments, recommendations, and requirements in items 1(a) through 1(e).</p> <p>b. Erosion and Sediment Control and Stormwater Management: All comments, recommendations, and requirements in items 2(a) and 2(b).</p> <p>c. Water Supply: All comments, recommendations, and requirements in 3(a) and 3(b).</p> <p>d. Solid and Hazardous Wastes: All comments, recommendations, and requirements in 4(a) through 4(c).</p> <p>e. Water Planning and Monitoring: All comments, recommendations, and requirements in 5(a) through 5(c).</p>	<p>20. a, b, c, d, e - March 5, 2019</p> <p><u>20.a.- Additional information filed on March 28, 2019:</u> updated delineation maps and acreages; updated information on springs; updated delineation map and impact calculations for surface water features; updated Table 2.2.2 (FERC Resource Report 2); updated impact table with delineation maps and impact tables; updated surface water delineations, proposed impacts and compensation.</p>	
<p>21. Revise the <i>Water Resources Identification and Testing Plan</i> to include the information listed below.</p> <p>a. Testing of water supply wells and springs within 150 feet of the Project area should be offered regardless of whether the landowner has requested it. Therefore, confirm that Mountain Valley would <i>offer</i> both pre- and post- construction quality and yield testing to landowners for all water supply wells and springs within 150 feet of construction workspaces.</p> <p>b. Clarify the analytes Mountain Valley would test for in its second pre- construction sampling event ("reduced list") and whether post-construction water quality testing would include analytes from the full expanded target analyte list or the reduced list.</p> <p>c. Clarify how Mountain Valley identified the analytes to include on its target analytes lists.</p>	<p>March 5, 2019</p>	
<p>22. Provide an updated table 2.2-2 to address "TBD" and include groundwater springs. Also file updates to this table as field surveys are completed.</p>	<p>March 28, 2019</p>	
<p>23. Provide any additional septic systems identified during subsequent surveys and provide a plan to minimize impacts on septic systems that are within or near Project workspaces.</p>	<p>March 28, 2019</p>	
<p>24. Mountain Valley states that hydrostatic test water (at section 2.3.3), water for horizontal directional drills (HDD) (at section 2.3.4), and fugitive dust control water (at section 2.3.5) are anticipated to be obtained from municipal sources but that "if necessary, additional potential sources...may include groundwater supply wells, and/or approved surface waters." As previously requested in our pre-filing comments on draft RR2, dated October 5, 2018, specify the groundwater supply wells and surface waters that may be used to source construction water needs, and confirm that sources used would not have contaminants. Additionally, discuss measures Mountain Valley would follow to minimize impacts potentially resulting from</p>	<p>March 5, 2019</p>	

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	withdrawal from surface waterbodies.	
25.	Provide a copy of the Environmental Data Report (EDR) cited as follows: Environmental Data Resources, Inc. 2018. MVP Southgate Project EDR Area/ Corridor Report. August 2, 2018, Shelton CT. Cited in section 4.3.1.1.	March 5, 2019
26.	As previously requested in our pre-filing comments on draft RR2, dated October 5, 2018, for the crossings of Cascade Creek, Wolf Island Creek, and Deep Creek, provide: <ul style="list-style-type: none"> a. for the use of the conventional bore crossing method, provide a site-specific plan for each proposed crossing indicating the location and size of each bore pit, and the location of dewatering structures; b. estimated time frame to complete the conventional bore at each crossing; c. an assessment of the probability of a successful conventional bore at each site, the potential for inadvertent returns (IR) during the bore, and include measures to be taken if an IR occurs.; and d. due to the sensitivity of these streams in regards to potential presence of sensitive species, describe the feasibility of using a HDD, including geotechnical study, to cross each of these streams. 	March 5, 2019
27.	Provide any updated correspondence between Mountain Valley and the Virginia Department of Conservation and Recreation (VDCR) in regards to the crossing of the Sandy River. Identify and discuss any mitigation or minimization measures recommended by VDCR that Mountain Valley would implement to protect the Sandy River.	March 5, 2019
28.	Provide any updated correspondence between Mountain Valley and the owners/managers of the Stony Creek Reservoir. Identify and discuss any mitigation or minimization measures recommended by the owner/managers that Mountain Valley would implement to protect the Stony Creek Reservoir.	March 5, 2019
29.	Evaluate the feasibility of using a HDD to cross the Banister River and Sandy River. If the HDD method is not feasible, describe how Mountain Valley would ensure that impacts (including riparian impacts) from an open-cut crossing would not affect the current/future scenic designation (as described in section 8.4.1 of RR8) of these waterbody segments.	March 5, 2019
30.	Provide any updated correspondence between Mountain Valley and the North Carolina Department of Environmental Quality (NCDEQ) in regards to the crossing of the Jordan Lake riparian zone. In addition, file Mountain Valley's response to NCDEQ's January 10, 2019 request for additional information concerning the 401 Individual Water Quality Certification and Buffer Authorization application.	March 5, 2019
31.	Revise appendix 2-A to include any timing windows for the waterbody crossings as required by the Virginia Department of Game and Inland Fisheries (VDGIF) and/or the VDCR per VADEQ comments.	March 28, 2019
32.	Address the comment from the City of Burlington which has requested avoidance of all city owned property which includes Stony Creek Lake (accession number 20180911-5110).	March 5, 2019
Wetlands		
33.	Confirm that there are no wetland impacts (construction and operation) from contractor yards and cathodic protection. Table 3.4-1, notes 0.6 acre of wetland would be affected by contractor yards in North Carolina; however, no wetland impacts are accounted for in the wetland section and tables. Revise this section and update tables accordingly.	March 28, 2019
34.	In compliance with the FERC Procedures, confirm that there are no temporary access roads proposed in wetlands. Additionally, for existing permanent access roads in a wetland, confirm that Mountain Valley would not do any improvements to the portions of these roads that occur in wetlands or provide justification for why improvements are needed in wetlands.	March 28, 2019

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<p>35. Update appendix 2-B to include:</p> <ul style="list-style-type: none"> a. revised impact acreage to wetlands that are indicated as delineated by desktop analysis to include impact acreage based on actual field survey data where surveys have been completed; and b. impact acreage (construction and operation) to 2 decimal places for all impacts that are less than 1 acre in size 	March 28, 2019
<i>HDD Contingency Plan</i>	
<p>36. Revise the Project <i>HDD Contingency Plan</i> to be consistent with FERC’s <i>Draft Guidance for Horizontal Directional Drill Monitoring, Inadvertent Return Response, and Contingency Plans</i> (Docket No. AD19-6) and include the information listed below.</p> <ul style="list-style-type: none"> a. Describe visual and pedestrian monitoring that would occur during HDD activities, including frequency of monitoring and documentation that would be maintained. b. Provide a list of HDD drilling fluid additives proposed for use, as known, as well as the safety data sheets for these additives. Include within the <i>HDD Contingency Plan</i> a commitment that any additional drilling fluid additives would be pre-approved (by FERC) and would comply with all permit requirements and applicable regulations. c. Describe and quantify monitoring and sampling of drilling fluid physical properties during HDD activities (e.g., fluid weight, viscosity, sand content, pH). d. Describe any restrictions for equipment use and clearing to access and clean up an IR in uplands, wetlands, and waterbodies. e. Address procedures to monitor, secure landowner permission, obtain the necessary environmental and cultural resource clearances, and obtain the required FERC variances to access and restore affected resources and/or areas that are outside of approved workspaces, or not directly accessible without an approved workspace variance. f. Confirm that a down-hole annular pressure tool would be utilized during the HDD pilot hole drilling phase to ensure that the drilling contractor can respond to a loss and/or spike in drilling fluid pressure, potential hydrofracture, and IR at the ground surface or provide suitable alternative methods for monitoring the borehole annular pressure during pilot hole drilling. g. Include measures to be taken if an IR occurs in a wetland. h. With regard to the <i>HDD Contingency Plan</i> in section 6.0, which states “the bentonite used in the drilling process will be either disposed of at an approved disposal facility or recycled in an approved manner,” clarify: <ul style="list-style-type: none"> i. if this statement is referencing the disposal of excess drilling fluid, rectify the discrepancy with the statement in RR1 section 1.2.2.1 (e) that states “the Project will dispose of all HDD cuttings and fluids at approved disposal facilities”; and ii. what Mountain Valley would consider “an approved manner” of disposal for recycling. 	March 5, 2019

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FERC Comments on Resource Report 3 – Fish, Wildlife, and Vegetation [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
Fishery Resources		
37.	File all aquatic survey reports and consultations with federal and state agencies not yet filed.	March 5, 2019
38.	In table 3.2-2, clarify that the information source for waterbodies with potential for mussels in table note b/ is West Virginia Division of Natural Resources, 2018. Provide the sources and citations for the same information in Virginia and North Carolina.	
39.	In section 3.2.4.1, state the appropriate size for screens used on water intakes to prevent crushing, entrainment, or entrapment of mussels and fishes using the citation provided or other citations available (provide the citation if another is used).	March 5, 2019
40.	In section 3.2.4.3, provide additional details regarding Mountain Valley's plans for waterbody crossings restoration, including clarifying whether Mountain Valley would strictly follow only the FERC's Procedures or would develop a Project-specific <i>Restoration and Rehabilitation Plan</i> . If the latter, file the plan.	March 5, 2019
Vegetation and Wildlife		
41.	Identify whether Mountain Valley would clear vegetation for the path of the HDD guide wire and provide details if so.	March 28, 2019
42.	Provide location and acreage and/or linear feet of tree trimming, including along existing access roads. Include timing restrictions and whether sensitive or listed species would be affected (e.g., bats).	March 28, 2019
43.	Clarify if VDCR and North Carolina Natural Heritage Program (NCNHP) have approved the <i>Exotic and Invasive Plant Species Control Plan</i> . The plan states that Mountain Valley would monitor the right-of-way "during and post- construction". Clarify that timeframe and any state-specific herbicide requirements/considerations.	March 5, 2019
44.	Describe construction protocols that Mountain Valley would implement to minimize wildlife injury or death within the construction corridor (e.g., prior to start of construction day, trench and equipment would be inspected to ensure no wildlife present) in section 3.3.4.	March 5, 2019
45.	We do not believe that spacing wildlife escape ramps at a distance of one per mile is sufficient to protect wildlife. Supplement section 3.3.4 by providing one of the following: a. indicate why Mountain Valley would not commit to trench wildlife escape ramps at 50-foot intervals; or b. indicate a more appropriate escape route interval (e.g. every 500, 1,000, or 1,500 feet).	March 5, 2019
46.	Provide the following information regarding artificial lighting used during construction and operation: a. measures for minimizing impacts of light pollution from artificial lighting on wildlife during construction; b. description of existing artificial lighting associated with the industrial development adjacent to the proposed Lambert Compressor Station (i.e., describe whether artificial lighting is already present in the vicinity of where the compressor station would be located); and c. confirmation that artificial lighting would only be installed at the Lambert Compressor Station for use during operations (i.e., there would be no lighting at the MLV or interconnection sites).	March 5, 2019
47.	Section 3.3.3.2 states approximately 18.5 acres of forest would be cleared within the Virginia Piedmont Forest Block Complex Important Bird Area (IBA), of which 10.5 acres would return to forested conditions over time. This statement implies that 8.0 acres of forest would be permanently converted to non-forested habitat; however, section 3.3.3.2 states that	March 28, 2019

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	8.2 acres of forest cover would be converted to non-forested cover within the IBA. Clarify this discrepancy.	
48.	Explain how Mountain Valley would minimize forest clearing in the North Carolina Forest Legacy areas identified in section 3.3.2 and discuss whether a minor reroute would be possible to avoid crossing the Piedmont Land Conservancy Easement at MP 37.7.	March 5, 2019
49.	Clarify the statement in section 3.3.3.2, “Project-specific MBSC [Migratory Bird Species of Concern] most commonly use the following National Land Cover Database (“NLCD”) land covers and aerial photography as preferred nesting habitat...” and provide a citation to support this statement. The citations currently provided only cite the NLCD.	March 5, 2019
50.	Clarify the following regarding MBSC in section 3.3.3.3: a. the date range referred to as “peak” MBSC breeding season; b. descriptions of the threats to the Project MBSC (i.e., why they have the conservation status they do, as noted in table 3.3-3); c. acreage of suitable/occupied habitat that would be affected for each species; d. provide a citation that supports the statement in section 3.3.3.3 that a 0.6- mile buffer reflects the distance at which noise impacts are unlikely to disrupt migratory bird nesting behavior; e. whether Virginia state agencies would be solicited to determine appropriate conservation measures to minimize impacts on MBSC (currently only the U.S. Fish and Wildlife Service [FWS] and North Carolina Wildlife Resources Commission [NCWRC] are listed); f. what the framework would be for how this agency coordination would occur and be implemented (i.e., will Mountain Valley develop a <i>Migratory Bird Conservation Plan</i> to codify the steps that would be taken to minimize impacts on the greatest extent practicable); and g. if a <i>Migratory Bird Conservation Plan</i> will be developed, provide the date that it will be filed with the Commission.	March 28, 2019
51.	Provide a right-of-way restoration plan incorporating guidance received from the U.S. Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS), VDCR, NCWRC, and other “applicable regulatory agencies” regarding seed mixes and other restoration activities that would be implemented in restoring the pipeline right-of-way, as noted in section 3.3.4.	March 5, 2019
Endangered, Threatened, and Special Concern Species		
52.	Provide results of pending surveys and consultations with federal and state agencies regarding listed species.	March 5, 2019
53.	For the species descriptions for federal and state-listed species (including plants) listed in section 3.5, provide specifics for the species, such as (but not limited to) the counties/waterbodies in Virginia and North Carolina in which the species are known to occur, known local population levels, locations within the vicinity of the Project where the species have been documented (or the closest location if they are not known in the vicinity of the Project), specific locations/extents along the Project right-of-way that contain appropriate habitat, and the likelihood they would be affected, what impacts would be, etc.	March 5, 2019
54.	Provide a completed Streamline Consultation Form for the 4(d) rule for the northern long-eared bat.	March 5, 2019
55.	With regard to the correspondence received from the VDCR on September 5, 2018, provide correspondence from the VDGIIF that the Project’s proximity to the Transco Road Net Conservation would not significantly affect the state endangered tri-colored bat.	March 5, 2019

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56.	In section 3.5.2.1, confirm that the rare plant species listed here encompass all of the rare piedmont plants requested by the VDCR to be inventoried in correspondence dated September 5, 2018.	March 5, 2019
57.	Provide correspondence from the VDCR regarding Mountain Valley's approach to minimizing impacts on American bluehearts, downy phlox, and Piedmont Barbara's-button. Provide correspondence from the NCNHP regarding Mountain Valley's approach to minimizing impacts on cliff stonecrop.	March 5, 2019
58.	Provide updated correspondence from the FWS approving the approach to minimizing impacts on small-whorled pogonia and smooth coneflower.	March 5, 2019
FERC Comments on Resource Report 4 – Cultural Resources [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
59.	File the reviews by the State Historic Preservation Offices (SHPO) of Virginia and North Carolina, and interested Indian Tribes and other Native Americans of Mountain Valley's <i>Plan for Unanticipated Discoveries of Historic Properties and Human Remains</i> attached as appendix 4-C to RR4 included in the Project application to the FERC.	March 5, 2019
60.	Provide any updated communications between Mountain Valley and the SHPOs, other state agencies, Native Americans and Indian Tribes, conducted after the Project application was filed with the FERC.	March 5, 2019
61.	File copies of all Work Plans, Research Designs, Survey and Evaluation Protocols, testing, avoidance, treatment plans, and addendum reports for archaeological and historic architectural resources produced by Mountain Valley to date, and file reviews of those plans and reports by the SHPOs, and interested Native Americans and Indian Tribes.	March 5, 2019
62.	File copies of all pertinent communications (letters and emails) between Mountain Valley and Indian tribes and other Native Americans and state- recognized tribal organizations listed on the tables of Tribal Correspondence in RR4.	March 5, 2019
63.	File a table that lists all Project areas (e.g., pipeline areas, aboveground facilities, staging areas, ATWS, yards, and access roads) and indicate which areas have been surveyed for cultural resources and which remain to be surveyed.	March 28, 2019
64.	Update tables and appendices that list all previously recorded archaeological sites and historic architectural structures identified during the site file search and literature review within 0.5-mile of all Project components to include: <ul style="list-style-type: none"> a. Resource b. number/name; c. cultural type; d. milepost; e. distance (in feet) from component; recorder/organization; f. date of recording; recorder evaluation; and g. SHPO evaluation. 	March 28, 2019
65.	File a list of all archaeological and historic architectural sites identified by Mountain Valley within the area of potential effects (APE) by milepost.	March 28, 2019
66.	RR4 states that the indirect APE is a 450-foot-wide corridor centered on the pipeline. However, the historic architectural survey reports indicates that the indirect APE is 0.5-mile on each side of centerline. Clarify this discrepancy.	March 5, 2019

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FERC Comments on Resource Report 4 – Cultural Resources [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
67.	With regards to tables 4.5-1, 4.5-2, 4.5-3, and 4.5-4 in RR4, file a new table that lists all previously recorded archaeological and historic architectural sites that were located during Mountain Valley's surveys. The new table should list site number/name, cultural type, milepost or Project element (i.e., access road), original recorder/organization, original evaluation, Mountain Valley's new evaluation, and Mountain Valley's recommendation for future work.	March 28, 2019
68.	The narrative text of the Virginia archaeological survey report mentioned the following previously recorded sites 45PY258, 259, 263, 265, 267, 273, 277, 279, 280, 334, 373, and 374 as being located during the surveys. However, these sites are missing from tables 1.1 and 3.1 of the survey report. File information about these sites and explain why they were missing from the tables.	March 5, 2019
69.	The narrative text of the North Carolina archaeological survey report mentioned 31RK129 as a previously recorded site that was located during the surveys, but it is missing from tables 1.1 and 3.1 of the survey report. File information about site 31RK129 and explain why it was missing from the tables.	March 5, 2019
70.	RR4 states that there are 94 previously recorded historic architectural sites within 0.5-mile of the pipeline in North Carolina. But the historic architectural survey reports state that there are 101 previously recorded sites in the APE. Clarify this discrepancy.	March 28, 2019
71.	File copies of site forms for the historic architectural sites recorded in North Carolina.	March 5, 2019
72.	For all archaeological and historic architectural sites, file plan-view maps showing the site boundaries in relation to the construction right-of-way or other Project elements (i.e., access roads).	March 28, 2019
73.	The narrative text of the Virginia archaeological survey report indicates that 22 archaeological sites were found, but table 1.1 in the report lists 24 sites. The North Carolina archaeological survey report indicates that 42 archaeological sites were found, but table 1.1 in the report lists 30 sites. Clarify these discrepancies.	March 5, 2019
74.	Nineteen archaeological sites in Virginia and 10 archaeological sites in North Carolina are either potentially eligible or unevaluated. File plans to avoid those sites, or file the results of archaeological testing that leads to National Register of Historic Places (NRHP) evaluations.	March 28, 2019
75.	One historic architectural site in Virginia (Little Cherrystone Manor) and two in North Carolina (Willow Oak Plantation and Granite Mill) are listed in the NRHP. File plans to avoid these sites, or file treatment plans to resolve adverse effects.	March 5, 2019
76.	Five historic architectural sites in Virginia, and 16 in North Carolina were recommended as potentially eligible or unassessed. File plans to avoid those sites, or file the results of investigations that fully evaluate their NRHP status.	March 28, 2019
77.	There are 12 historic cemeteries found along the pipeline route. File plans to avoid those sites.	March 5, 2019
78.	In revisions to appendix 4-D and 4-E provide the following: <ul style="list-style-type: none"> a. clarification regarding the inconsistency of the 1-mile background search area and the 0.5-mile study area discussed in RR4; b. identify the survey area, APE, and Project area as these terms are used interchangeably; c. clarify the number of probes, negative and positive, for the entire survey; d. clarify the counts of resources found in Chapter 6 (appendix 4-D) and Chapter 7 (appendix 4-E) and update RR4 to match; and e. confirm that tribal coordination was not completed as part of the ethnographic study. 	March 28, 2019

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FERC Comments on Resource Report 4 – Cultural Resources [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
79.	Update the following tables to include the distance from construction corridor (in feet): a. appendix 4-D table 6.1; b. appendix 4-E table 7.1; c. appendix 4-F table 3.1 and table 6.1; and d. appendix 4-G table 3.1 and table 7.1.	March 28, 2019
80.	Appendix 4-D page 33 states, “Twenty-six sites are mapped within the Project corridor (in bold), and evidence of 11 of these were found during the Project survey.” However, the numbers listed do not add up to that total. Provide information concerning the resources that were not relocated.	March 5, 2019
81.	In appendix 4-D, clarify the number of shovel probes that were positive for locations 44PY270 and Segment 20, as mapping shows a higher number of positive probes than what is discussed in RR4.	March 5, 2019
82.	In appendix 4-G, provide forms as an appendix.	March 28, 2019
83.	Confirm that copies of all cultural resources investigation reports were conveyed to the Monacan Indian Nation, Nansmond Indian Tribe, Upper Mattaponi Indian Tribe, Sappony Tribe, and Occaneechi Band of the Saponi Nation. File all tribal comments on the reports with the FERC.	March 5, 2019
84.	In response to the letter from Cultural Heritage Partners to the FERC dated November 16, 2018 (accession number 20181116-5078), confirm that Mountain Valley’s cultural resources consultant (TRC) has reviewed the literature listed in the letter to become familiar with Monacan Indian Nation history and archaeology. In addition, the Monacan Nation recommends that Mountain Valley use the Monacan Museum as a source of information regarding the history and culture of the tribe.	March 5, 2019
85.	File a response and additional information as requested by the North Carolina SHPO in their letter dated December 20, 2018.	March 5, 2019

FERC Comments on Resource Report 5 – Socioeconomics [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
86.	Clarify and/or provide the following information described below regarding workforce numbers. a. Table 1.4-1 provides workforce numbers for two spreads. Confirm that the workforce for the compressor station and other aboveground facilities are included within the two spreads listed in the table. b. Table 1.4-1 lists a peak workforce of 650 workers (325 per spread). However, section 1.4.5 states that the peak workforce would be up to 900 people. Clarify. c. Section 5.4.1 states that table 1.4-1 provides the average and peak workforce numbers for the Project; however, only peak workforce numbers are presented. Update the table to include average workforce numbers.	March 5, 2019
87.	Provide correspondence with local emergency services, including any recommendations from local police and fire departments regarding additional training or staffing that may be needed during construction or operation of the Project.	March 5, 2019
88.	As previously requested in our pre-filing comments on draft RR5, dated October 5, 2018, update the <i>Traffic Mitigation Plan</i> with the following information:	March 5, 2019

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FERC Comments on Resource Report 5 – Socioeconomics [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
<ul style="list-style-type: none"> a. increased traffic from Project-related activities (including commuting workers, construction equipment, and truck deliveries), including the number of workers' cars, equipment, and trucks that would use local roads, and commuting periods; and b. locations of commuting workers collection points and bus routes and associated traffic impacts. 		
89.	In the <i>Traffic and Transportation Management Plan</i> Mountain Valley stated “emergencies or other designated construction activities may necessitate nighttime work”. Clarify and give examples of what “other designated activities” would mean during the construction of the proposed Project and require nighttime work.	March 5, 2019
90.	Clarify if Mountain Valley has accounted for socioeconomic and environmental justice impacts from all laydown/contractor yard/additional workspace areas, including those identified in RR1, table 1.3-4.	March 28, 2019
91.	Provide an updated environmental justice analysis, including an impacts discussion, using the following criteria (recommended by the NCDEQ and U.S. Environmental Protection Agency's <i>Environmental Justice Interagency Working Group Promising Practices for Environmental Justice Methodologies in NEPA Reviews</i>) to identify environmental justice communities: <ul style="list-style-type: none"> a. census block groups that have a minority population of more than 50 percent; b. census block groups that have a household poverty rate of more than 20 percent; and c. census block groups that have a household poverty rate or minority population that is 10 percent higher than their respective county. 	March 28, 2019

FERC Comments on Resource Report 6 – Geology [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
92.	Provide the analysis of Light Imaging Detection and Ranging (LiDAR) imagery and field verification of steep slopes discussed in section 6.5.4. Based on Mountain Valley's analysis of this site-specific data, provide a table that describes (by milepost) areas within or adjacent to the Project area with increased risk of slope instability. For each identified area, include a description and distance to nearby and downslope sensitive environmental resources (e.g., wetlands, waterbodies, residences).	March 28, 2019
93.	Address the following regarding landslide hazards, and steep and unstable slopes in a <i>Landslide Mitigation Plan</i> : <ul style="list-style-type: none"> a. provide additional assessment (such as field-based geotechnical investigations evaluating potential landslide areas) for sections of the pipeline route in areas with steep slopes; b. general guidelines defining where trench plugs, chips, and/or French plugs would and would not be used, or would be modified, to avoid water oversaturation of soils during significant or extended rainfall events which may result in increased pore pressure and potentially destabilize slopes (“bathtub effect”); c. locations where field (geologic mapping and measurements of bedrock bedding attitude) and/or geotechnical investigations would be conducted along the pipeline route to develop site-specific mitigation measures in areas with severe erosion potential, unstable, and/or steep slopes; and d. pre-construction, construction, and long-term (operational) monitoring and mitigation measures that would be used in areas characterized as landslide hazards, steep, and/or unstable slopes. (i.e., surface displacement surveys, manual 	March 28, 2019

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FERC Comments on Resource Report 6 – Geology [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
	or automated strain gauge monitoring, and groundwater level monitoring).	
94.	Provide a list of karst features present within 0.25-mile of the Project based on desktop data and field data where field surveys have been conducted.	March 5, 2019
95.	Appendix 6-E states field verification would be conducted along the Project alignment to verify whether karst features are present. File results of these surveys or indicate when these surveys would be completed and filed with the Commission.	March 5, 2019
96.	As previously requested in FERC’s September 24, 2018 pre-filing comments, if potential karst areas are identified within the Project workspaces, provide the following information concerning construction practices and mitigation measures: a. confirm that Mountain Valley would first attempt to avoid karst features with minor route variations, if possible; b. a table listing all groundwater supply wells and springs within 500 feet of Project workspaces in karst areas, and confirmation that Mountain Valley would offer pre- and post-construction monitoring of water quality and yield of wells and springs used for domestic water supplies; c. if contractors and EIs would be trained to identify karst features; d. the set-back distance from karst features for equipment storage, fueling, and maintenance; e. a discussion of the structural integrity of the proposed pipeline design and its performance in karst areas, including an assessment of the possible unsupported span-width; and f. measures that would be implemented to repair or mitigate the development of a sinkhole in proximity to the Project facilities, and the monitoring of these features during the Project operation.	March 5, 2019
97.	Revise section 6.5.1 to include the locations of any mapped sinkholes and cave systems in the area identified as “karst formations” in figure 6-C and their distances from proposed Project facilities.	March 5, 2019
98.	Provide figures 1 – 4 as listed in appendix 6E.	March 5, 2019
99.	Provide revised tables 6.2-2, 6B-1, and 6B-2 to include a subsection for the county crossed by the Project.	March 5, 2019
100.	Confirm if any mineral resources are located within 0.25-mile of any aboveground facilities.	March 28, 2019
101.	Provide the distance to Project workspaces of the East Alamance Quarry located near MP 66.8; and provide justification for the determination that the Project would have no effect on quarry operations.	March 28, 2019
102.	Provide a revised appendix D-6, table 1 (Areas of Potential Blasting) with potential blasting indicated for the entire pipeline, or clarify why milepost information provided is non-contiguous. Additionally, include the total distance for which blasting may be needed.	March 5, 2019
103.	The <i>General Blasting Plan</i> at section 4 states “if blasting is conducted within 150 feet of an active water well, as necessary, MVP will conduct a pre- construction evaluation of the well. Upon request by a landowner who had a pre-construction test, a post-construction test will be performed.” Testing of water supply wells and springs (whether in current use or not) within 150 feet of planned blasting should be offered regardless of whether the landowner has requested it. Therefore, confirm that Mountain Valley would offer both pre- and post-blasting water quality and yield testing to landowners for all water supply wells and springs within 150 feet of blasting. Revise and file the <i>General Blasting Plan</i> accordingly.	March 5, 2019
104.	Discuss the potential for blasting to cause or subsequently facilitate landslides or slope instability and describe the measures that Mountain Valley would use to avoid, minimize, or mitigate this risk. This discussion should identify slopes that would require blasting, and quantify the potential for blasting-induced slope instability or movement.	March 5, 2019

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FERC Comments on Resource Report 6 – Geology [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
105.	Based on the insufficient information provided in response to our pre-filing comments on draft RR6, dated September 24, 2018, discuss the potential for uranium to be exposed or mobilized (into surface water [sedimentation into streams], groundwater, and air [fugitive dust emissions and radiation]) during construction in Pittsylvania County, Virginia. This description should address known concentrations of uranium and radium in soil and groundwater in the Project vicinity.	March 5, 2019
106.	Based on comments received from the NCDEQ, state whether Mountain Valley would consult with North Carolina State agencies to determine the involvement of agency representatives during construction, with regard to unanticipated discoveries of paleontological resources.	March 5, 2019
107.	For each planned HDD crossing, provide a revised alignment profile that incorporates site-specific geotechnical investigations (subsurface lithology along the drill path and the top of the water table [zone of saturation], Standard Penetration Test [SPT] results, soil mechanic properties/Atterberg Limits, rock coring results including core recovery, and Rock Quality Designation [RQD] for each bedrock core run).	March 5, 2019
108.	Based on the insufficient information provided in response to our pre-filing comments on draft RR6, dated September 24, 2018, for each planned HDD crossing provide an assessment which includes a description of: <ul style="list-style-type: none"> a. the likelihood of success for each drill; b. any subsurface conditions that were identified as a result of geotechnical investigations that may increase the risk of HDD complications (e.g., unplanned IRs, drill hole collapse, contamination); and c. the measures that would be implemented to minimize these risks. 	March 5, 2019
109.	Mountain Valley's <i>Geotechnical Investigation Report</i> provides recommended soil parameters for hydraulic fracture modeling based on site-specific conditions; however, the analysis was not completed. Therefore, and as previously requested in our pre-filing comments on draft RR6, dated September 24, 2018, for each HDD crossing, describe the potential for hydrofracture and IR using the U.S. Army Corps of Engineers' Delft method (or an equivalent method) for crossings through unconsolidated material, and/or a qualitative analysis for an IR through bedrock utilizing RQD values obtained from bedrock cores.	March 5, 2019
110.	Clarify when Core Sample No. 2 would be drilled for the Dan River HDD crossing. If Mountain Valley does not intend to complete Core Sample No. 2, provide justification for how design and feasibility would be determined.	March 5, 2019
111.	Clarify when Core Sample No. 2 would be drilled for the Stony Creek HDD crossing. If Mountain Valley does not intend to complete Core Sample No. 2, provide justification for how design and feasibility would be determined.	March 5, 2019
FERC Comments on Resource Report 7 – Soils [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
112.	Update the "Percent of Project Area" values in table 7.2-1, specifically Prime Farmland or Farmland of Statewide Importance and Low Revegetation Potential to match the acreages in the table.	March 28, 2019
113.	Provide total acreage of Prime Farmland and Farmland of Statewide Importance that would be permanently affected by aboveground facilities and permanent access roads associated with the Project.	March 28, 2019

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FERC Comments on Resource Report 8 – Land Use, Recreation, and Visual Resources [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
114.	Reconcile the discrepancy between the total number of acres affected during construction and operation between tables 1.3-1, 3.4-1, and 8.2-2.	March 28, 2019
115.	Section 8.2.3.9 states that one potential contractor yard (CY-04) is located on a parcel with a church. Describe the measures that Mountain Valley would take to avoid impacts on users of the church (e.g. avoid using the contractor yard during days of worship).	March 5, 2019
116.	For section 8.3.2, provide specific details as to how the landowners would be notified of construction.	March 5, 2019
117.	Provide site-specific construction plans for all residences listed in table 8-D within 25 feet of construction workspace, including ATWS, access roads, aboveground facilities, and the pipeline right-of-way. Indicate on the plans whether the structures would be removed, relocated, or protected.	March 28, 2019
118.	Table 8-D lists numerous structures that are within the construction workspace of the Project. Update the table to indicate whether those structures would be removed, relocated, or protected.	March 28, 2019
119.	Describe any use restrictions and impacts on recreational users of the Dan River, Banister River, Sandy River, the planned regional trail at MP 68.6, and the Mountains-to-Sea Trail in the areas that would be crossed. If any use restrictions are anticipated, describe how users would be notified.	March 5, 2019
120.	Describe how Mountain Valley would maintain access across the right-of-way for farmers and equipment during construction.	March 5, 2019
121.	Provide a table for all tracts that are part of a forest land management program (i.e. North Carolina's Forest Development Program) or any other conservation easement. Provide mitigation measures that would ensure that landowners are not removed/ineligible for these programs (i.e., due to tree clearing activities associated with the Project).	March 28, 2019
122.	Describe measures that Mountain Valley would use to avoid or minimize potential impacts on conservation easements described in section 8.4.1 that are located within 500 feet of construction workspace, contractor yards, or access roads.	March 28, 2019

FERC Comments on Resource Report 9 – Air Quality and Noise [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
<i>Air Quality</i>		
123.	Update tables 9.2-8 and 9.2-9, and appendix 9-A to assess fugitive dust emissions from travel on paved and unpaved roads from on-road construction equipment and mobile commuter traffic (reference: AP-42 sections 13.3.1 and 13.2.2).	March 5, 2019
124.	Confirm that emissions from HDD activities are included in the pipeline component of construction emissions in appendix 9-A. If not, update RR9, tables 9.2-8 and 9.2-9, and appendix 9-A to assess.	March 5, 2019
125.	Reconcile greenhouse gas emissions from blowdown events at the Lambert Compressor Station from the following sources: a. appendix 9-B, table B-1 lists 1,109 tons per year (tpy) carbon dioxide equivalents (CO _{2e}); b. appendix 9-B, table B-8 adds up to 1,210 tpy CO _{2e} ; and	March 5, 2019

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FERC Comments on Resource Report 9 – Air Quality and Noise [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
	c. appendix 9-D, Modeling Report, table 2-1 shows 2,449 tpy CO _{2e} .	
126.	Pursuant to appendix 9-B, table B-10, provide a summary table to show volatile organic compound and CO _{2e} emissions separately for blowdown events and fugitive leaks. Include an assessment of hazardous air pollutant emissions for each.	March 5, 2019
127.	Provide any pertinent correspondence to and from the VADEQ regarding the Virginia air permit application and its completeness that has occurred since December 14, 2018.	March 28, 2019
Noise		
128.	Provide updated figures from appendix 9-E so that the distances from the noise source to the NSA are legible. a. Confirm that the distance to the nearest NSA to the LN 3600 Interconnect is 3,010 feet SE. If not, provide updated tables 9.3-8, 9.3-9, and 9.3-15 with correct information. b. Confirm that the distance to the nearest NSA to Railroad Crossing 4 is 700 feet N. If not, provide updated tables 9.3-11 and 9.3-12 with correct information.	March 5, 2019
129.	Provide an assessment of the applicability to the Pittsylvania County Noise Ordinance for the following activities: a. 24-hour construction of the Lambert Compressor Station/Interconnect; 24-hour construction of Railroad Crossings 1 and 2; b. maintenance blowdown at the Lambert Compressor Station; and emergency shutdown of the Lambert Compressor Station. c. If applicable, include the calculated noise level at the property line of the NSA and compare to the associated limit to assess compliance. Include mitigation measures as needed.	March 28, 2019
130.	Confirm if noise impacts in section 9.3.3.3 were assessed for HDD entry point and exit point equipment operating concurrently. Provide the expected duration of each HDD event.	March 5, 2019
131.	Per the discussion in section 9.3.5.1, the Lambert Compressor Station was modeled with one 10,915 horsepower (hp) Titan 130 turbine and one 15,900 hp Mars 100 turbine. Note that the Taurus turbine is rated at 11,792 hp and the Mars turbine is rated at 17,123 hp. Clarify this discrepancy and confirm whether the Titan 130 turbine or Taurus turbine would be used. Confirm that the noise model is a typical operational scenario.	March 5, 2019
132.	Provide the estimated noise levels from an emergency shutdown event at the nearest NSA.	March 5, 2019

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FERC Comments on Resource Report 10 – Alternatives [Dated: FEBRUARY 13, 2019]		DATE RESPONSE FILED
133.	Regarding the analysis of the Pollock Farm route variation, Mountain Valley did not identify disadvantages that would outweigh the advantages of incorporating the route variation. Provide reasons for why this route variation was not incorporated. Provide an evaluation of an alternative route variation that reduce the Project's impact on Mr. Robert Pollock's property.	March 5, 2019
134.	As previously requested in our pre-filing comments on draft RR10, dated October 5, 2018, provide revisions to the comparison tables in 10.5, 10.6, and 10.7 to include the following information in each table: a. residential land, and commercial/industrial land; b. listed/potential eligible historic properties; c. national trails, recreation trails, and other d. recreational areas; forest areas; and e. consistent reporting of environmental impacts.	March 28, 2019
135.	Reconcile the discrepancy between the number of acres required for construction between tables 1.3-2 and 10.7-2.	March 28, 2019
136.	In response to Ms. Katie Whitehead's comments submitted to the FERC Project Docket on September 11, 2018 (accession number 20180911-5002), address her concerns regarding an alternative route that avoids her property. Provide an analysis of route variations that were considered by Mountain Valley to avoid her property. Identify the alternative route that she states was provided to her at Mountain Valley's open house on June 28, 2018, and explain why this route variation was not incorporated into the final route.	March 28, 2019
137.	In response to Mr. and Mrs. Shambley's comments submitted to the FERC Project Docket on December 3, 2018 (accession number 20181203-5059), provide an analysis of route variations that would avoid or reduce impacts on the site where they are planning to construct a new home and install a septic system.	March 28, 2019
138.	Provide an analysis of route variations that would avoid or reduce impacts on groundwater wells and/or septic systems for the following property owners: a. Mr. Bombardier, comments submitted to the FERC Project Docket on August 20, 2018; b. Mrs. Moore, comments submitted to the FERC Project Docket on August 20, 2018; c. Mrs. Ore and Mr. Cowan, comments submitted to the FERC Project Docket on August 20, 2018; d. Mrs. Loeb, comments submitted to the FERC Project Docket on August 21, 2018; e. Mr. and Mrs. Marshall, comments submitted to the FERC Project Docket on August 21, 2018; f. Mr. and Mrs. Nicholson, comments submitted to the FERC Project Docket on August 21, 2018; g. Mr. and Mrs. Madrin, comments submitted to the FERC Project Docket on August 23, 2018; and h. Mr. Slade, comments submitted to the FERC Project Docket on August 23, 2018.	138. d, e, h - March 5, 2019 138. a, b, c, f, g – March 28, 2019

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FERC Comments on Resource Report 11 – Reliability and Safety [Dated: FEBRUARY 13, 2019]	DATE RESPONSE FILED
139. Update and provide a revised table 11.2-1 that provides separate values by county for the Class 1 pipeline located at MPs 20.41 and 30.4.	March 28, 2019

FERC Comments on Appendix 1-A Alignment Sheets [Dated: FEBRUARY 13, 2019]	DATE RESPONSE FILED
<p>140. Update and provide revised alignment sheets to correct the following noted discrepancies.</p> <ul style="list-style-type: none"> a. From table 1.9-2, these items are not identified on the alignment sheets: <ul style="list-style-type: none"> o Ground Bed – 4, MP 60.2; o Ground Bed – 1, MP 10.8; o Ground Bed – 2, MP 21.1; and o Ground Bed – 3, MP 44.9; b. From appendix 1-D, these items are missing: <ul style="list-style-type: none"> o table missing ATWS for H-605 Line; and o ATWS #1643, MP 68.8, mislabeled on alignment sheets as the arrow is not pointing to the correct feature; c. From appendix 1-E: <ul style="list-style-type: none"> o MPs 14.1 to 14.7 – Williams Transco Pipeline not labeled; and o Duke Power Electric Transmission not labeled on the alignments; d. From appendix 1-F, these items are missing from the alignments: <ul style="list-style-type: none"> o PA-PI-029, MP 12.4; o TA-PI-037, MP 15.2; o TA-PI-046A, MP 18.3; o TA-RO-072A, MP 27.0; o TA-RO-073A, MP 27.4; o PA-RO-000A, CY-08; o TA-RO-082A, CY-04; o TA-RO-082B, CY-07; o TA-RO-082C, CY-05; o TA-RO-082D, CY-05; o TA-RO-082E, CY-05; o PA-RO-114A, MP 42.2 o TA-RO-124A, MP 44.9; and o TA-GU-000, CY-09; e. From table 2.3-9, these items are missing from alignments: <ul style="list-style-type: none"> o S-B19-14, MP 63.2, p. 2-31; f. From appendix 2-A, these items are not labeled on the alignments: <ul style="list-style-type: none"> o S-E18-22, MP 10, on alignment sheet, not in table; o S-A18-140-2, MP 32; o S-A18-151-2, MP 33; o S-A18-154-2, MP 33; o S-A18-154-3, MP 33; o S-C18-38-2, MP 34.6; o S-C18-38-3, MP 34.8; o S-C18-38-4, MP 35; o S-B18-117-2, MP 37.7; 	March 28, 2019

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FERC Comments on Appendix 1-A Alignment Sheets [Dated: FEBRUARY 13, 2019]	DATE RESPONSE FILED
<ul style="list-style-type: none"> o S-A18-4-2, MP 38.5; o S-B18-74-2, MP 39.6; o S-A18-210-2, MP 40.4; o AS-APS-01, MP 47.7; o S-B18-59-2, MP 55.3; o S-A18-125-2, MP 56.6; o S-A18-125-3, MP 56.6; o S-A18-125-4, MP 56.6; o S-B18-22-2, MP 63.1; o S-B18-12-2, MP 63.1; o S-B18-12-3, MP 63.1; o S-B18-12-4, MP 63.1; o S-B18-12-5, MP 63.2; o S-B18-12-6, MP 63.2; o S-B18-14, MP 63.2; o S-B18-14-1, MP 63.2; o TA-PI-061, MPs 22.6 to 22.7, continues off map, S-E18-38, S-E18- 39, and S-E18-40 not shown; o TA-PI-063, MP 24, continues off map, S-E18-32 not shown; o TA-PI-067, MP 25, continues off map, S-C18-88 not shown; o TA-RO-073A, MP 27.4, AS-NHD-6003, AS-A18-40 not shown; o TA-RO-076, MP 28.3, S-A18-24 not listed in table; o PA-RO-000, MP 28.6, continues off map, AS-NHD-6002 not shown; o TA-RO-089, MP 34.1, continues off map, S-C18-50 not shown; o TA-RO-29, MP 46.7, continues off map, S-A18-239 not shown; o TA-RO-139, MP 50.2, continues off map, S-C18-71 not shown; o TA-AL-172, MPs 63.7 to 63.8, continues off map, AS-B18-138/AS- B18-137 not shown; o TA-AL-179A, MP 66.5, continues off map, AS-NHD-7000 not shown; o TA-AL-180, MP 67.3, continues off map, AS-APP-5006 not shown; and o Aboveground facilities not on alignment sheets: 	
<ul style="list-style-type: none"> ▪ CY-05; <ul style="list-style-type: none"> □ AS-NHD-115, MP 30.6; □ AS-A18-248/S-A18-248, MP 30.6; and □ AS-APP-1569, MP 30.7; ▪ CY-06; <ul style="list-style-type: none"> □ AS-A18-246/S-A18-246 MP 30.7; and □ S-A18-247, MP 30.7; g. From appendix 2-B, these items are not labeled on the alignments: <ul style="list-style-type: none"> o AW-D18-23, MP 14.3; o W-A18-33, MP 28.3, mislabeled on the alignment sheets, arrow pointing to wrong feature; o W-B18-39, MP 30.2; 	

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FERC Comments on Appendix 1-A Alignment Sheets [Dated: FEBRUARY 13, 2019]	DATE RESPONSE FILED
<ul style="list-style-type: none"> o Aboveground facilities not on alignment sheets: <ul style="list-style-type: none"> ▪ CY-05; <ul style="list-style-type: none"> □ W-A18-249, MP 30.6; □ AW-NWI-540, MP 30.7; and □ AW-NWI-541, MP 30.7; ▪ CY-06; <ul style="list-style-type: none"> □ W-A18-245; and ▪ T15 Dan River Interconnect; <ul style="list-style-type: none"> □ AW-B18-36, MP 30.3; 	
<ul style="list-style-type: none"> o TA-PI-043, MP 17.1, continues off sheet, W-F18-46 not shown; o TA-PI-052, MP 20.5, continues off sheet, W-F18-54 not shown; o TA-PI-061, MPs 22.6 to 22.7, continues off sheet, W-E18-37 not shown; o TA-PI-063, MP 24, continues off sheet, W-E18-31 not shown; o TA-PI-067, MP 25, continues off sheet, W-C18-87 not shown; and o TA-RO-080, MP 29.7, p. 2-B-9, continues off sheet, W-A18-20 not shown; 	
<ul style="list-style-type: none"> h. From table 8.2-6, these items are not shown on the alignments: i. Southern Railroad, MP 25.9; and <ul style="list-style-type: none"> o From appendix 8-B, these items are not shown on the alignments: o State Road 1982/Wolf Island Road, MP 36.6, labeled as "Mount Island Rd" on alignment sheet 39, but "Wolf Island Rd" on sheet 40; o Hidden Valley Trail Road crossing (approx. MP 64.4), not identified in table; o Fauchette Lane/Jim Barnwell Rd intersection (approx. MP 64.8), Jim Barnwell Rd not identified in table; and o State Road 1935/Stone St., MP 69.8, not labeled in Horizontal Stationing. 	