

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:  
OEP/DG2E/G3  
Mountain Valley Pipeline LLC  
Docket No. PF15-3-000  
§ 375.308(z)

March 13, 2015  
Paul Diehl, Senior Counsel  
Equitrans, L.P.  
625 Liberty Ave., Suite 1700  
Pittsburgh, PA 15222

Re: **Comments on First Draft Resource Reports 1 & 10**

Dear Mr. Diehl:

The enclosure contains the comments of the staff of the Federal Energy Regulatory Commission (FERC or Commission) on Mountain Valley Pipeline LLC's (Mountain Valley) first draft environmental resource reports (RRs) 1 (Project Description) and 10 (Summary of Alternatives) filed with the FERC on December 1, 2014, and additional alternative routes filed on February 18, 2015, for the planned Mountain Valley Project (MVP or Project) in West Virginia and Virginia in the above-referenced docket. The comments ask for clarifications of discrepancies and identify missing information that we believe is necessary to begin substantive preparation of an environmental impact statement for the Project.

In addition, we are requesting clarification of issues raised in comments filed by stakeholders that may be addressed in future draft RRs covering other environmental resources. To facilitate review of the future draft and revised RRs, Mountain Valley should include a matrix that identifies the specific locations in the RRs (i.e., section and page number) where the information requested in these comments may be found.

When filing documents and maps, be sure to prepare separate volumes, as outlined on the Commission's website at <http://www.ferc.gov/help/filing-guide/file-ceii/ceii-guidelines.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 CFR 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.**"

For all materials submitted, in addition to the copies filed with the Secretary of the Commission, please provide electronic and hard copies directly to our third-party environmental contractor, Cardno (one each to Lavinia DiSanto and Doug Mooneyhan).

Thank you for your cooperation. If you have any questions, please contact me at 202-502-8059 or paul.friedman@ferc.gov.

Sincerely,

Paul Friedman  
Environmental Project Manager  
Office of Energy Projects

Enclosure

cc: Public File, Docket No. PF15-3-000

**Mountain Valley Pipeline Project**  
Docket No. PF15-3-000

**ENVIRONMENTAL INFORMATION REQUEST**

**Draft Resource Report 1 – General Project Description**

1. Discuss whether, to the best knowledge of Mountain Valley, any natural gas transported for this Project would be designated for export. If all of the gas transported in the Mountain Valley pipeline would be for domestic use, describe the type of customers who would be using the gas. In particular, discuss realistic opportunities for use by local distribution companies along the pipeline route.
2. Include descriptions of any planned interconnections along the Mountain Valley pipeline route, including maps showing their locations, and detailed plan view drawings of any new proposed delivery meter stations.
3. Describe any modifications needed at Transcontinental Gas Pipe Line Company's (Transco) existing Station 165 to receive the natural gas from Mountain Valley. In addition, identify and describe any other modifications required to existing natural gas systems upstream or downstream of Station 165 to handle volumes from the Project.
4. Indicate if Mountain Valley plans to install any communication towers along the proposed pipeline route, and if so, identify their location and height.
5. Clarify the diameter of the pipeline. Would it be 36-inches or 42-inches in diameter? If multiple diameters would be used, include a table by milepost (MP) that provides the segment for each diameter.
6. Section 1.1 (page 1-1 of Resource Report [RR]1) stated that the Project would require approximately 217,000 horsepower while table 1.2-2 sums to 217,200 horsepower. Clarify the apparent discrepancy.
7. Clarify the expected operating range for the Harris Station.
8. Include information missing from table 1.3-1, Land Requirements (on page 1-8 of RR1).
9. Table 1.2-2 (page 1-6 of RR1) listed MP 75 as the location for one of the pig launcher/receivers, while table 1.3-3 (page 1-10) stated it would be located at MP 76. Clarify the apparent discrepancy.

10. Include a complete justification for the request to use a 125-foot-wide construction right-of-way in uplands and 75-foot-wide permanent easement. In particular, justify the proposed construction right-of-way width in forested areas. Include a detailed justification for the request to modify the FERC's *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures) to use a 85-foot-wide construction right-of-way across wetlands.
11. Revise table 1.3-3 (page 1-10 in RR1) to include the locations of cathodic protection rectifiers and beds.
12. Include measures to be implemented to avoid or minimize impacts on sensitive resources, such as wetlands and forest, along new access roads.
13. Describe and justify any Project-specific deviations from the FERC's May 2013 versions of our *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and Procedures.
14. Include Project-specific plans for burning slash, and detail measures to be implemented to protect forest, waterbodies, wetlands, air quality, nearby residents, and other sensitive resources in areas where slash would be burned.
15. Include a Project-specific plan for winter construction. If construction would be halted during the winter, provide a Winterization Plan that outlines measures to secure the right-of-way, and protect it from erosion or other damages, until construction would resume in Spring.
16. Clarify if automated welding techniques would be used during pipeline construction (see section 1.4.1.1, page 1-16 of RR1).
17. Justify the clearing of a 15-foot-wide swath associated with horizontal directional drills (HDD) (see section 1.4, page 1-21 of RR1). Outline measures that would be implemented to minimize impacts on trees along the centerline-guide wire of an HDD. Discuss the possibility that pulling an HDD in segments, thereby increasing construction flexibility and eliminating the need for prefabricated HDD sections (and pullback workspaces) to be the same length as the HDD.
18. Clarify the size of the foreign pipeline crossing at MP 0.6 listed on Table 1.4-2 (page 1-22 of RR1) as -99. Also, include details about the size of the seven foreign pipelines at MPs 35.8 and 286.2 listed as "unknown."
19. Describe special measures that would be used for construction or restoration in steep terrain. Explain how Mountain Valley would prevent rocks from rolling off the right-of-way, install erosion controls, and prevent post-construction landslides. Address the comment filed by stakeholders that steep ridge tops often form property boundaries, and that these boundaries could be affected by post-restoration changes in topography.

20. Identify any nonjurisdictional facilities associated with the Project (implied in Section 1.9, page 1-38 of RR1). If there are any nonjurisdictional facilities that would be built as a result of the new gas volumes associated with this Project, include the following detailed information for each facility:
  - a. company/owner;
  - b. type of facility;
  - c. dimensions (pipe diameter, length, horsepower, etc. as appropriate for pipeline and land area for other facilities);
  - d. maps showing locations;
  - e. federal permits required and their status;
  - f. status of local and state permits required; and
  - g. any environmental reviews required for local, state, or federal permitting authorities.
21. Clearly state whether or not Mountain Valley would participate in FERC's third-party construction compliance monitoring program.
22. Revise Section 1.10 of RR1 to identify the location [e.g., county, state, watershed, and Air Quality Control Region (AQCR)], timeframe, general description, and estimated impact acres of recently completed, current, and reasonably foreseeable projects. Use the fifth-field hydrologic unit code (HUC) watershed as the geographic extent of the analyses, except where that is non-applicable, such as for an air quality basin and socioeconomics at the county level. Include a detailed discussion of cumulative impacts that these projects combined with the proposed MVP would have on each of the applicable environmental resources, such as soils, vegetation, wildlife, cultural resources, land use, air quality, etc. Outline measures other project proponents may implement, if required for local, state, or federal permitting, to avoid, minimize, or mitigate cumulative impacts.
23. Describe the material(s) Mountain Valley would use to backfill the trench over the pipeline. Discuss whether "fly-ash" would be used for backfilling material, as claimed by a comment filed by a stakeholder.

### **Draft Resource Report 10 – Alternatives**

1. Include a map illustrating the locations of existing pipeline systems, existing electric transmission lines, and existing major highways in the region (West Virginia and Virginia), and explain if the Mountain Valley pipeline could follow all or portions of those existing rights-of-way as route alternatives.
2. Discuss if any existing interstate pipelines in the region could be used as a system alternative for the Project. Include a table listing the current capacity of each existing system, and their potential to transport the additional volumes proposed by Mountain Valley.

3. Include a map and an analysis of an alternative route that would follow the existing East Tennessee Natural Gas pipeline near Blacksburg, Virginia, then proceed southeast to the existing Transco pipeline, then follow the Transco line northeast to Transco Station 165.
4. Include an analysis regarding whether a modified Alternative 1 route is feasible, where the alternative would be collocated with an electrical transmission line route and periodically deviate away to avoid severe side slopes before resuming collocation. Additionally, consider the feasibility of a hybrid Proposed Route-Alternative 1 route, and include a complete analysis of resource impacts along the hybrid route.
5. Further assess the potential for collocation of the Mountain Valley pipeline with other proposed pipeline systems in the region, such as the proposed Dominion Atlantic Coast Pipeline (PF15-6), Spectra Carolina Pipeline, Dominion Supply Header Project, and Williams Appalachian Connector Project. Include a map, and consider alternative routes that would totally or partially follow any of the proposed pipeline routes. Include an analysis of each of the alternative routes that lists potential impacts on environmental resources, based on a desk-top review of existing data bases. In addition, assess the potential for two or more proposed pipelines (including the Mountain Valley pipeline and the Atlantic Coast pipeline) in the region for combination into a single pipeline alternative.
6. Revise Sections 10.3, 10.4 and 10.5 to ensure that data categories are consistent in tables for all alternative routes considered. Data categories should include the extent of collocation, river crossings, acres of wetlands affected, miles of forest, acres of habitat for federally-listed threatened and endangered species, National Register of Historic Places listed or eligible sites, miles of steep side-slope construction, areas with landslide potential, karst geology, numbers of landowner parcels affected, and residences within 50 feet of work areas.
7. Revise Section 10.5 (page 10-9 of RR10) to include alternative locations for the crossing of the Blue Ridge Parkway, Appalachian Trail, and the Mill Creek Springs Natural Area Preserve. Include collocation of the pipeline with existing roads or utilities at alternative crossing locations, and consider ways to minimize visual impacts and impacts on forest in the vicinity of the alternative crossings.
8. Discuss route alternatives identified by stakeholders in comments filed in this docket. Illustrate the location of each of the alternative routes on maps, and include a description and analysis of each alternative that compares impacts on environmental resources; in a manner as suggested in question 6 above.
9. Include a table that lists all minor modifications adopted into the proposed pipeline route since Mountain Valley's filing of the Summary of Alternatives in December

2014. The table should list each route modification by location (by MP), description, and rationale for why each minor route adjustment was made.

10. Add the location of existing communication facilities that were avoided to Figure 10.5-4 (page 10-15 of RR10).
11. Revise Section 10.6 (page 10-20 of RR10) to balance consideration of alternative compressor station locations near existing roads with the desire to locate compressor stations in isolated areas away from residences. For each compressor station alternative location, evaluate site topography and existing vegetation (i.e., trees) as potential sound and visual buffers relative to the nearest noise sensitive areas and residents. Include all applicable information for the sites as described in the comparison table included in Section 10.4 of the FERC's "Guidance Manual for Environmental Report Preparation."
12. Include an analysis of alternative sites for all other (non-compressor station) aboveground facilities, such as meter stations and valves, that considers their potential for visual impact or noise effects upon residents in comparison to the proposed aboveground facilities locations.
13. Table 10.4-1 (page 10-5, RR10) stated that there are no populated areas within 0.5-mile of the proposed route. However, the proposed route would cross the community of Preston Farms. Identify all residential areas, housing tracts, or subdivisions within 0.5 mile of the proposed route and all alternative routes considered. Discuss how the proposed route and all alternative routes would avoid or minimize impacts on specific nearby residential areas, housing tracts, or subdivisions.
14. Compare each of the new alternative routes provided in Mountain Valley's February 18, 2015 filing with the FERC, using the data categories suggesting in question 6 above. Identify and describe any associated Project changes associated with each new alternative considered, such as relocation of aboveground facilities. Discuss any environmental issues raised by stakeholders for each of the new alternative routes.
15. Describe the public outreach efforts conducted or planned for stakeholders located along the new alternative routes identified in Mountain Valley's February 18, 2015 filing.

**Based on comments received by the FERC to date from stakeholders, address the following in the specified first draft RRs:**

**Draft Resource Report 2 – Water Use and Quality**

1. Describe how Mountain Valley would determine the Project's effect on groundwater supplies, such as wells or springs. If construction would adversely

- affect a groundwater supply, outline the measures Mountain Valley would implement to mitigate impacts on landowners, including ensuring that a temporary source of water would be provided until the well is restored, and explain how the damaged water supply system would be repaired and returned to its former quality and quantity.
2. Include a detailed discussion of the Red Sulphur Public Service District watershed. Include the distance crossed of both the watershed and the “Zone of Critical Concern,” a map of these areas, and proposed impact avoidance, minimization, and mitigation measures.
  3. Include a discussion of the Town of Boones Mill water source and treatment plant and the Banister River Basin (Cherry Stone headwaters). Include distance crossed, a map of these areas, and proposed impact avoidance, minimization, and mitigation measures for each feature.
  4. List, in a table organized by MP, site-specific methods to be used to cross all waterbodies, based on waterbody size and designation, in accordance with the FERC Procedures. Identify any waterbodies that would be crossed using Direct Pipe trenchless technologies.
  5. Include a detailed discussion of the crossing of the headwaters (Mill Creek near MP 230) to Bottom Creek, an Exceptional State Water (Tier III) stream. The analysis should outline measures proposed to avoid, minimize, or mitigate impacts on this stream system.

### **Draft Resource Report 3– Fish, Wildlife, and Vegetation**

1. List, in a table organized by MP, all parcels of forest or wood lots that would be crossed by the proposed pipeline route. Include miles and acres of forest affected by Project construction and operation. Discuss how the creation of forest edge or fragmentation would affect habitat and wildlife, including potential impacts on federally-listed threatened and endangered species and migratory birds. Describe measures that would be implemented to avoid, minimize, or mitigation impacts on forest habitat.
2. In response to stakeholder comments, include a detailed discussion regarding impacts on local apiaries and honey bees due to removal of flowering vegetation along the proposed pipeline route.
3. Discuss if state and federally protected bat species would be affected by the Project. Identify bat habitat, including caves and forest, that would be crossed by the proposed pipeline route. Outline measures that would implemented to avoid, minimize, or mitigate impacts on bat habitat. Document consultations with state and federal wildlife agencies regarding Project impacts on bats.

4. Discuss if state and federally protected mussels would be affected by the Project. Identify any streams containing mussel populations or habitat for mussels that would be crossed by the proposed pipeline route. Outline measures that would be implemented to avoid, minimize, or mitigate impacts on mussels. Document consultations with state and federal wildlife agencies regarding Project impacts on mussels.
5. Identify and describe the migratory bird species of special concern and their habitats known to occur in the project area. Include the following information:
  - a. an evaluation of the short-term, long-term, and permanent impacts on these species of special concern by construction and operation of the proposed facilities. The evaluation should include the direct, indirect, and cumulative effects of the Project;
  - b. Project-specific conservation measures and best management practices, developed in consultation with the U.S. Fish and Wildlife Service (FWS), to protect migratory birds and their habitats and to avoid or minimize take; and
  - c. documentation of consultation with the FWS regarding project-related impacts on migratory bird species of special concern.
6. Include an assessment of the recommendations regarding aquatic resources provided by the Virginia Chapter of the American Fisheries Society in their filing dated March 9, 2015. State which recommendations would be adopted by Mountain Valley, and if some recommendations would not be adopted, include a discussion of the rationale.

#### **Draft Resource Report 4– Cultural Resources**

1. Discuss how the Project would avoid, minimize impacts, or mitigate impacts on the following National Register of Historic Places (NRHP) listed Historic Districts or other NRHP listed or potentially eligible properties identified by stakeholders in the vicinity of the pipeline route or alternatives:
  - a. Pence Springs Hotel Historic District, Summers County, WV;
  - b. Colonel Gwin Plantation, Summers County, WV;
  - c. Colonel James Graham Home, Summers County, WV;
  - d. Prehistoric archaeological sites along the New River, Giles County, VA;
  - e. Two historic covered bridges near Newport, VA;
  - f. Greater Newport Rural Historic District, Giles County, VA;
  - g. Civil War cemetery along Alternative 210;
  - h. North Fork Valley Rural Historic District, Montgomery County, VA;
  - i. Cahas Mountain Rural Historic District, Franklin County, VA; and
  - j. Bowman Farm, Franklin County, VA.

2. Prepare a cultural resources research design and survey strategy for the Project, and document that the design was reviewed by the State Historic Preservation Offices of West Virginia and Virginia, and Indian tribes that may attach religious or cultural importance to properties within the area of potential effect.

### **Draft Resource Report 5– Socioeconomics**

1. Estimate the number of temporary and permanent jobs that would be generated during construction and operation of the Project. Provide a breakdown of temporary Project-related construction jobs by construction spread (and the MPs and counties for each spread).
2. Identify areas along the proposed pipeline route (by census block) that contain populations of ethnic groups or minorities, economically disadvantaged, disabled, non-English speakers, children, or elderly, and evaluate if the Project would have adverse economic, environmental, or health impacts on those populations. Explain if the pipeline route was selected in a manner that would disproportionately affect minority or low-income populations.

### **Draft Resource Report 6 – Geological Resources**

1. Include a discussion of the Saint Clair fault line. Indicate what impacts the fault may have on the pipeline. Outline measures that would be implemented to avoid, minimize, or mitigate impacts from this fault.
2. List, by MPs, areas along the pipeline route that have the potential for landslides. Outline the measures Mountain Valley would implement to avoid, minimize impacts, or mitigate impacts related to landslides.
3. List, by MPs, areas along the pipeline route that have karst features or the potential for sinkhole development. Outline measures Mountain Valley would implement to avoid, minimize impacts, or mitigate impacts related to karst features or sinkholes. Document consultations with appropriate local, state, and federal resource agencies regarding karst features and sinkholes.
4. List, by MPs, any caves that would be crossed, or would be within 0.5-mile of the pipeline route. For each cave, provide its name (if known), distance (in feet) and direction from the pipeline centerline, depth of the cave, use for recreational purposes, and potential habitat for bats. Include site-specific information on caves identified by stakeholders in comments filed with the FERC, such as: Pig Hole Cave, Smoke Hole Cave, Tawney Cave, Mill Creek Nature Preserve Caves, and Cross Smokehole Cave. Outline measures Mountain Valley would implement to avoid, minimize impacts, or mitigate impacts related to the pipeline crossing or being near a cave. Document consultations with appropriate local, state, and federal resource agencies regarding caves.

5. List, by MPs, all oil or gas wells within 0.25-mile of the pipeline. The table should provide the name of the well, distance in feet and direction from centerline, and well depth. Also, illustrate the locations of the nearby oil and gas wells in relation to the pipeline route on 7.5-minute U.S. Geological Survey topographic quadrangle maps. Outline measures Mountain Valley would implement to avoid, minimize impacts, or mitigate impacts on those oil and gas wells.
6. List, by MPs, any active or abandoned mines, including coal mines and quarries, within 0.25-mile of the pipeline. The table should provide the name of the mine, its distance (in feet) and direction from centerline, type of mine, material quarried or removed, and indicate if the mine is active or abandoned. In particular, identify any underground mine workings that may be crossed. Outline measures Mountain Valley would implement to avoid, minimize impacts, or mitigate impacts on mines that would be crossed or near the pipeline.

### **Draft Resource Report 7 – Soils**

1. In response to comments received from stakeholders, identify areas where uranium may be found near the ground surface along the pipeline route. As appropriate, based on soil concentrations and potential for exposure, outline measures that Mountain Valley would implement to handle radioactive soils if encountered, and measures to minimize or mitigate any possible impacts on the public health. Document consultations with appropriate local, state, and federal resource agencies regarding uranium in the project area.
2. List, by MP, any hazardous waste sites crossed or within 0.5-mile of the pipeline route. Document that data bases were reviewed at the West Virginia Department of Environmental Protection and the Virginia Department of Environmental Quality. Include a discussion of industrial sludge that may have been spread by farmers, according to a stakeholder's comment filed with the FERC. Outline the measures Mountain Valley would implement to avoid known hazardous waste sites, and describe what actions would be taken if hazardous wastes from any known or unknown sites are encountered during construction.
3. List, by MP, all soils found along the pipeline route. The table should identify soil types and characteristics, including prime farmland, erosion potential, shallow bedrock, high watertable, compaction, and reclamation potential. Document consultations with the local offices of the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service regarding potential Project impacts on soils.

### **Draft Resource Report 8– Land Use, Recreation, and Aesthetics**

1. Document consultations with the U.S. Department of the Interior National Park Service (NPS) Appalachian Trail Office, and the USDA Forest Service Jefferson National Forest (FS) regarding the crossing of the Appalachian Trail. Outline the

measures Mountain Valley would implement to reduce impacts at the trail crossing, including following existing rights-of-way, reducing forest clearing, and conducting a visual impact assessment.

2. Document consultations with the NPS and FS regarding the crossing of the Blue Ridge Parkway. Outline the measures Mountain Valley would implement to reduce impacts at the Parkway crossing, including following existing rights-of-way, reducing forest clearing, and conducting a visual impact assessment.
3. Include a discussion of impacts to parcels enrolled in resource protection programs, such as, but not limited to:
  - a. the Monroe County Voluntary Farmland Protection Program;
  - b. Agricultural Forrestral Districts of Montgomery County;
  - c. Catawba Valley Special Project Areas; and
  - d. Conservation easements with the Blue Ridge Land Conservancy.

Outline measures Mountain Valley would implement to avoid, minimize, or mitigate impacts on those areas.

4. Include a detailed discussion regarding visual impacts on the Cahas Mountain Scenic Overlook.
5. Include a detailed discussion regarding potential Project impacts on Virginia and West Virginia scenic highways and byways such as (but not limited to): Farm Heritage Road, Mountain's Shadow Trail, Big Stony Creek Road, Virginia Route 635, Bluegrass Trail, and Catawba Road.

### **Draft Resource Report 9– Air Quality and Noise**

1. Include a discussion of impacts resulting from greenhouse gas emissions from the Project. This analysis should include fugitive emissions from all Project components. Further, estimate how much of the natural gas delivered from the Project would be used to supplant other existing fuel sources, such as using new natural gas supplies to replace retiring coal-fired power plants.