



**Office of  
Energy Projects**

September 2018

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**Rover Pipeline LLC**

**Docket No. CP18-499-000**

# **Iron Bank Meter Station Project Environmental Assessment**

**Washington, DC 20426**

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## TECHNICAL ACRONYMS AND ABBREVIATIONS

APP Midstream	APP Midstream, LLC
CAA	Clean Air Act
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
CO	carbon monoxide
Commission	Federal Energy Regulatory Commission
dBA	decibels on the A-weighted frequency scale
DOT	U.S. Department of Transportation
EA	environmental assessment
EI	environmental inspector
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
GHG	greenhouse gas
IPaC	Information for Planning and Consultation
L <sub>eq</sub>	24-hour equivalent sound level
L <sub>dn</sub>	day-night sound level
M&R	meter and regulating
NAAQS	National Ambient Air Quality Standards
NGA	Natural Gas Act
NHPA	National Historic Preservation Act
NO <sub>x</sub>	oxides of nitrogen
NSA	noise-sensitive area
OEP	Office of Energy Projects
Plan	Rover's <i>Upland Erosion Control, Revegetation and Maintenance Plan</i>
PM <sub>2.5</sub> / PM <sub>10</sub>	inhalable particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers / less than or equal to 10 micrometers
Project	Iron Bank Meter Station
SHPO	West Virginia State Historic Preservation Office
SO <sub>2</sub>	sulfur dioxide
SPR Procedures	Spill Prevention and Response Procedures
VOC	Volatile organic compounds
WVDEP	West Virginia Department of Environmental Protection

## **A. PROPOSED ACTION**

The Federal Energy Regulatory Commission (Commission or FERC) staff has prepared this environmental assessment (EA) to assess the environmental impacts of the construction and operation of the Iron Bank Meter Station Project (Project) proposed by Rover Pipeline LLC (Rover) in Docket No. CP18-499-000. We<sup>1</sup> prepared this EA in compliance with the National Environmental Policy Act of 1969 (NEPA), according to the regulations issued by the Council on Environmental Quality at Title 40 of the Code of Federal Regulations (CFR), Parts 1500–1508 (40 CFR 1500–1508), and the Commission’s regulations at 18 CFR 380.

### **A.1. Introduction**

On June 8, 2018, Rover filed an application for the Project with the FERC in Docket No. CP18-499-000 for a Certificate of Public Convenience and Necessity (Certificate) under section 7(c) of the Natural Gas Act (NGA) to construct, install, own, and operate a new meter and regulating (M&R) station and appurtenant facilities in Marshall County, West Virginia.

FERC is the lead federal agency for the Project and for the preparation of this EA, as described in 40 CFR 1501.5. The principal purposes for preparing this EA are to:

- identify and assess potential impacts on the natural and human environment which could result from the proposed action;
- identify and recommend alternatives and specific mitigation measures, as necessary, to avoid and minimize Project related environmental impacts; and
- facilitate public involvement in the environmental review process.

The EA will be used by the Commission in its decision-making process to determine whether to authorize Rover’s proposal.

### **A.2. Purpose and Need**

Under section 7(c) of the NGA, the Commission determines whether interstate natural gas transportation facilities are in the public convenience and necessity and, if so, grants a Certificate to construct and operate them. The Commission bases its decisions on technical competence, financing, rates, market demand, gas supply, environmental impact, long-term feasibility, and other issues concerning a proposed project.

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<sup>1</sup> “We,” “us,” and “our” refer to the environmental staff of the Commission’s Office of Energy Projects.

Rover’s stated Project purpose is to receive up to 500 million standard cubic feet per day of pipeline quality natural gas from an interconnect with the gathering pipeline facilities of APP Midstream, LLC (APP Midstream). APP Midstream would build approximately 12.9 miles of 24-inch-diameter pipeline upstream of the Rover interconnect at the proposed Iron Bank Meter Station.

### **A.3. Scope of the Environmental Assessment**

As the lead federal agency for the Project, FERC is required to comply with Section 7 of the Endangered Species Act (ESA) and Section 106 of the National Historic Preservation Act (NHPA). These statutes have been considered in the preparation of this EA. FERC will use this document to consider the environmental impacts that could result if it authorizes the Project. In addition to FERC, other federal, state, and local agencies may use this EA in approving or issuing permits for all or part of the proposed Project. Permits, approvals, and consultations for the Project are discussed in section A.8.

The topics addressed in this EA include geology, soils, wildlife, vegetation, species of special concern, cultural resources, air quality, noise, land use, reliability and safety, and cumulative impacts. This EA describes the affected environment as it currently exists and the environmental consequences of the Project, and compares the Project’s potential impact with that of various alternatives. This EA also presents our<sup>2</sup> recommended mitigation measures.

### **A.4. Public Comment**

On June 18, 2018, the Commission issued a *Notice of Application* for the proposed Project.<sup>3</sup> The notice provided options for the public to submit written comments for the Commission to consider in determining the appropriate action to be taken. We did not receive comments on this Project.

### **A.5. Proposed Facilities**

Rover proposes to construct, own, and operate an M&R Station as described further in the following sections. An overview map of the Project location is provided on figure 1 below.

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<sup>2</sup> “We,” “us,” and “our” refer to the Commission’s environmental staff within the Office of Energy Projects.

<sup>3</sup> The notice was published in the Federal Register (FR): 83 FR 29553

Figure 1 Location of Proposed Project



## Aboveground Facilities

The Project would consist of one new M&R Station on open land north of Rover's Majorsville Lateral at approximate Milepost 5.5 in Marshall County, West Virginia.

The station would consist of various components including a horizontal filter separator, ultrasonic meter skid, flow control skid, gas quality and measurement buildings, satellite communications, and a condensate storage tank. A small satellite dish would be installed for Supervisory Control and Data Acquisition. The satellite dish would have a diameter of approximately 4 feet and would be mounted on a pole approximately 5 feet in height.

## Access Roads and Contractor Yards

Access to the new meter station would be along a 2-mile-long permanent access road to be improved by APP Midstream by adding gravel and widening to a width of 25 feet. The access road includes 1.4 miles along Oxen Drive, an existing gravel road which extends from Highway 7 (McCreary's Ridge Road) to a farm complex south of the APP Midstream property and 0.6 mile along a two-track dirt road, which extends from the end of Oxen Drive to the proposed site.

No contractor yards are proposed.

### **A.6. Land Requirements**

Rover would construct the Project adjacent to its Majorsville Lateral on 6.6 acres of open land, of which 1.7 acres would be fenced and maintained for operation. APP Midstream owns the approximate 234-acre site within which the Project would be sited. Improving the 2-mile-long access would affect 6.1 acres. The access road and Project are shown in figure 1.

### **A.7. Construction Procedures**

#### Construction Schedule

Rover anticipates that mobilization and construction of the Project would commence in 2018. The start date is subject to receipt of necessary permits and regulatory approvals. Construction would take approximately three months.

#### Construction, Operation, and Maintenance Procedures

The Project would be designed, constructed, operated, and maintained in accordance with applicable requirements defined by U.S. Department of

Transportation (DOT) regulations in 49 CFR 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*; by FERC’s *Siting and Maintenance Requirements* in 18 CFR 380.15; and by other applicable federal and state safety regulations.

Rover would implement the FERC’s *Upland Erosion Control, Revegetation, and Maintenance Plan*, without modification.

**A.8. Permits and Approvals**

Table 1 below provides a list of federal and state permits for the Project, as well as any responses received to date. Rover would be responsible for obtaining all permits and approvals required for the Project regardless of their listing in the table.

Table 1. Permits and Approvals			
Agency	Permit	Initiated	Pending/Approved Date
FERC	Section 7(c)	June 2018	Pending
U.S. Fish & Wildlife Service – West Virginia Field Office	Consultation - Section 7 Endangered Species Act Consultation - Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act	May 2018	No further consultation necessary due to <i>no effect</i> determination.
<b>WEST VIRGINIA</b>			
West Virginia Division of Culture and History	Consultation Section 106 National Historic Preservation Act	May 2018	June 2018

**A.9. Nonjurisdictional Facilities**

Under Section 7 of the NGA, the Commission is required to consider, as part of the decision to approve facilities under its jurisdiction, all factors bearing on the public convenience and necessity. Occasionally, projects have associated facilities that do not come under the jurisdiction of the Commission. These non-jurisdictional facilities may be integral to the need for the proposed facilities or may be minor components of the jurisdictional project. Rover identified one non-jurisdictional facility associated with the Project.

APP Midstream would construct its Casterly Rock-to-Castle Black Project consisting of 12.9 miles of 24-inch-diameter pipeline upstream of the Rover interconnect at the Iron Bank M&R Station.

Rover would contract with the local electric company to provide electric power to the proposed station. The extension for the powerline would be installed adjacent to the

two-track dirt permanent access road. These facilities are discussed further in our cumulative impacts analysis in section B.8 of this EA.

## **B. ENVIRONMENTAL ANALYSIS**

This analysis generally describes temporary, short-term, long-term, and permanent impacts and effects caused by the Project's construction and operation. A temporary effect generally occurs during construction with the resource returning to pre-construction condition immediately after restoration or within a few months. A short-term effect could continue for up to 3 years following construction. Long-term effects would last more than 3 years, but the affected resource would eventually recover to pre-construction conditions. A permanent effect would result from an activity that modifies a resource to the extent that it would not return to pre-construction conditions during the life of the Project. In the following sections, we address direct and indirect effects collectively, by resource. There would be no impact on the following resources:

- groundwater (no EPA-designated sole-source aquifers or state-designated aquifers in the Project area; no public or private water supply wells within 250 feet of the Project)
- surface waters and fisheries (no waterbodies on the proposed site; nearest waterbodies are over 1,000 feet from the Project)
- wetlands (no wetlands on the proposed site; nearest wetland is 990 feet from the Project)

These resources will not be discussed further in this EA. Section B.8 of this EA analyzes the Project's contribution to cumulative impacts.

### **B.1. Geology and Soils**

#### Geology

In the immediate Project area, slopes are relatively steep and coal beds are numerous. However, the proposed Project site is on a relatively level grassy meadow at 1,285 feet in elevation over the Kanawha Section of the Appalachian Plateaus Province of the Appalachian Highlands, Central Allegheny Plateau (USGS, 2007). The bedrock at the Project site consists of sandstone and siltstone of the Dunkard Group. The Project site does not contain karst topographic features (Tetra Tech, 2015).

There are some known surface faults in the Project area, and unknown subsurface faults could exist (Hansen, 2015). A review of the USGS Quaternary Fault and Fold Database of the United States did not identify any active Holocene-age faults in the vicinity of the Project (FERC, 2016). Seismic activity in the immediate Project area is limited to infrequent, low-intensity earthquakes typically undetected by human senses and responsible for little or no structural damage (Hansen, 2015). No areas of high incidence of earthquakes were identified within Ohio, Pennsylvania, or West Virginia. The closest earthquakes known to have caused minor damage occurred in 1824 (magnitude 4.1 on the Richter scale, 20 miles distant) (Hansen, 2015) and in 2011

(magnitude of 4.0, 30 miles distant) (West Virginia Geological and Economic Survey, 2016). Generally, only large, abrupt ground displacements have caused serious impacts on pipeline facilities. Given the low incidence and likelihood of significant seismic activity exhibited in the Project area, lack of seismic faults, and the relatively high-tensile strength of modern arc-welded gas pipelines in good repair, we conclude there is little likelihood for an earthquake damaging the Project.

Given the low probability of a significant seismic event occurring in the Project area, we conclude soil liquefaction is unlikely.

Landslides involve the down slope movement of earth materials under a force of gravity due to natural or man-made causes. While slopes in the Project area exhibit a high susceptibility to land sliding (over 15 percent of the land area) (Mid-Ohio Valley Regional Council, 2016), Rover has chosen a site for its meter station on relatively level ground; thus, the potential for landslides at the Project site is low.

Rover may encounter shale bedrock within 30 inches of the surface during construction. If bedrock is encountered, Rover would use mechanical methods such as conventional excavation with a backhoe, ripping with a dozer followed by backhoe excavation, or hammering with a backhoe attachment followed by excavation. No blasting was required in the Project area during installation of the adjacent Majorsville Lateral pipeline buried at depths of 5 feet. Taking this experience and the presence of soft shale into consideration, Rover does not anticipate it would require blasting for the Project. In the event that blasting does become necessary, Rover would use its Blasting Plan<sup>4</sup> which we find acceptable and includes procedures for blasting safety, warnings, protection of public property and residences, post-blast cleanup and inspections of structures, and permitting.

Localized surface subsidence is a potential hazard to the Project during and after construction given the presence of an underground mine at the Project site. Consolidated Energy operates one active underground mine of unknown material directly beneath the proposed Project site (USGS, 2018).

Rover completed a subsidence hazard evaluation for the associated Rover Pipeline Project which includes the Project location (FERC, 2016). Rover conducted inspections prior to pipeline construction of the Rover Pipeline Project to determine pipeline construction modifications, appropriate mining operations procedures, and communication procedures with mine operators to reduce subsidence hazards to the pipelines. Rover committed to using these risk minimization measures for this Project.

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<sup>4</sup> Rover's blasting plan for this Project is identical to that used for the Rover Pipeline Project, and is available online on the Commission's internet website at <http://www.ferc.gov/docs-filing/elibrary.asp> under Docket No. CP18-118, filing date May 22, 2018, accession number 20180522-5213, in Attachment 7-1.

Rover would also conduct visual inspection of the Project facilities for signs of subsidence during operations.

As part of development and construction of the Rover pipeline system, Rover worked with mine operators to 1) review forecasted mining operations in the vicinity of proposed meter station, and 2) assess any controlled land subsidence planned as part of mine operations. Rover also developed a communications plan it would use during operations, including notification by the operator of any planned blasting, and/or any land subsidence events that occur in the vicinity of the Project.

Rover imposed onto the mine operators easement provisions such as: 1) where they can excavate within their easements; 2) requirement for how to cross over the pipeline easement with heavy equipment; and 3) requiring an engineered blasting plan to be submitted to Rover for Rover's approval. Rover has committed to using these provisions for the Project. Thus, we conclude that Rover's monitoring and mitigation measures are adequate to minimize subsidence risks to the Project facilities.

There are no existing oil or gas wells within 0.25 mile of the Project site, except for those that are being developed by American Petroleum Products on site or in nearby areas. American Petroleum Products is in the process of developing up to five natural gas wells, including three wells in 2018 at the Casterly Rock well pad (due west of the Project) and two wells in early 2019 at the Castle Black well pad (north and east of the Project). Due to the depth of the resource below ground, we conclude no impacts on mineral resources would occur as a result of construction or operation of the Project.

### Soils

Identification of soils at the Project site was based on the digital Soil Survey Geographic Database maintained by the Natural Resource Conservation Service. The Project area is comprised of soils with a low compaction potential. Other important characteristics of soils on the site include being moderately drained or well-drained, highly susceptible to soil erosion, shallow to bedrock (30 inches), resistant to droughtiness, and having poor revegetation potential. None of the soils at the Project site are classified as prime farmland soils or are conservation easements.

Construction activities that could affect soils include clearing, grading, trenching, spoil storage, and backfilling. Primary risks to soils include erosion and subsequent loss of soils during construction. Additional lesser risks include soil mixing during construction with rock given the shallow depths to bedrock, and soil contamination during construction and operations from equipment oil and fuel spills.

Rover's use of measures within its Plan during construction to minimize and mitigate soil disturbance and restore soils would reduce impacts from soil erosion and soil mixing. Such measures include: 1) installing and maintaining erosion and sediment

controls within and around the perimeter of the Project's workspace, such as hay bales, silt fence, and soil berms immediately following land disturbance; 2) conserving topsoil and protecting it through the end of restoration; 3) removing excess stone or rock from surface soils such that the rock content would be no higher than that within adjacent similar soils; and 4) restoring contours and stabilizing the surface by revegetating temporary workspaces and installing gravel or pavement within the permanent right-of-way workspaces.

In addition, Rover would use implement its Spill Prevention and Response Procedures (SPR Procedures) to lessen the chance and impact of fuel and lubricant spills onto soils. The SPR Procedures specifies preventive measures and cleanup procedures related to inadvertent releases of fuels, lubricants, coolants or solvents, and contains measures to ensure that, if a release did occur, it would be contained, cleaned up appropriately, and disposed of using approved waste disposal measures. Finally, Rover would inspect the Project site during construction, restoration, and the first two years of operations for maintenance of erosion and sediment controls as necessary until the meter station's temporary and permanent right-of-way is stable and revegetated.

We have determined that, given the limited area of disturbance, and with implementation of its Plan and SPR Procedures, Rover would adequately minimize soil impacts during construction and restoration so impacts on soils would not be significant. In addition, while Rover would convert the soil surfaces within the permanent right-of-way portion of the Project site to hard or gravel-covered surfaces, the minimal acreage of permanent impact (1.7 acres) would not be significant.

## **B.2. Vegetation, Wildlife, and Special Status Species**

### Vegetation

The proposed Project site is in an open field, consisting of herbaceous vegetation. However, at the time of construction of the Iron Bank M&R Station, the site would already be cleared of vegetation and graded by another entity as part of a gathering project. Therefore, construction of the Project would not impact any vegetation. After the M&R station is completed, 1.7 acres of the 6.6-acre construction area would be permanently impacted by the facility. This area would be permanently covered by gravel, concrete, or asphalt and would not revegetate. Rover would revegetate the remaining 4.9 acres in accordance with our Plan. Given the mostly limited impact and minimal permanent removal of vegetation, we conclude that impacts on vegetation would not be significant.

### Wildlife

Other than the small amount of habitat that would be permanently converted to industrial use and fenced, impacts of the Project on wildlife would be temporary. Construction activities and human presence would result in a temporary disturbance of

local wildlife due to noise and habitat loss. During construction, wildlife would temporarily leave the Project area and seek suitable habitat nearby. After construction is complete and temporary workspaces are restored, wildlife would likely return. Therefore, we conclude that the Project would not have a significant impact on wildlife.

### *Migratory Birds*

Migratory birds are species that nest in the United States and Canada during the summer and then migrate to and from the tropical regions of Mexico, Central and South America, and the Caribbean for the non-breeding season. The migratory bird nesting season is generally April 1-August 30. Rover plans to begin construction of the Project in the fall/winter of 2018 and last approximately 3 months. In addition, no tree clearing would be necessary which reduces the direct impact on nests and nesting birds. According to the U.S. Fish and Wildlife Service (FWS) Information for Planning and Consultation (IPaC), no Birds of Conservation Concern are expected to occur within the Project area. Therefore, we conclude that the Project would not have a significant impact on migratory birds.

### Special Status Species

Rover, acting as the Project non-federal representative to FERC, initiated informal consultation with the FWS using IPaC. Two species, Indiana bat and northern long-eared bat, were identified as potentially occurring in the Project area. Both of these bat species hibernate in caves or mines during the winter months. During the summer months, Indiana bats and northern long-eared bats use forested areas for maternity, roosting, and foraging; however, northern long-eared bats tend to be more opportunistic in their selection of roost trees. Because construction would occur during the fall/winter months, no bat caves or mines are present on the proposed site, and no forested land would be affected, we conclude that the Project would have *no effect* on the Indiana bat or northern long-eared bat. No further consultation with the U.S. Fish and Wildlife Service is necessary.

West Virginia has no state threatened and endangered species legislation. However, all freshwater mussels are protected by the state resource agencies. Because no waterbodies would be affected by the Project, there would be no impacts on state protected species.

### **B.3. Land Use and Visual Resources**

As summarized in section A.6, the Project would be constructed adjacent to Rover's Majorsville Lateral on 6.6 acres of open land, of which 1.7 acres would be fenced and maintained for operation. APP Midstream owns the approximate 234-acre site within which the Project would be sited. A 2-mile-long access road would be improved by APP Midstream to an approximate width of 25 feet, affecting an additional 6.1 acres. The access road includes 1.4 miles along Oxen Drive, an existing gravel road which extends from Highway 7 (McCreary's Ridge Road) to a farm complex south of the

APP Midstream property and 0.6 mile along a two-track dirt road, which extends from the end of Oxen Drive to the proposed site. The Project would not disturb any land in conservation easements.

There are no known planned residential or commercial development projects in the Project area based on plans on file with the local planning board or county. There are no residences within 50 feet of the site boundary. There are no parks, recreation areas, scenic rivers, scenic roads, scenic areas, or other specially-designated areas at the federal, state, and local level, in the vicinity or within 0.25 mile of the Project facilities. Given the minor scope of the Project, we conclude there would not be any significant land use impacts.

The proposed M&R Station would be small in scale, the tallest structure being a terminal antenna mounted on a pole extending 5 feet above ground level. Therefore, we do not expect any impacts on visual resources.

#### **B.4. Cultural Resources**

Section 106 of the National Historic Preservation Act/cultural resources review was completed for 3.7 acres of the Iron Bank Meter Station site as part of the Rover Pipeline Project (Docket No. CP15-93-000). No architectural or archaeological resources were identified within or near this portion of the meter station site. Rover completed cultural resources surveys of the remaining acreage of the meter station site and associated access road, and provided two survey reports (one for a 16.7-acre parcel for the meter station site and the access road, and an addendum report for an additional 1.4-acre parcel of the meter station site) to the FERC and West Virginia State Historic Preservation Office (SHPO). No archaeological sites were identified as a result of the surveys. In a letter dated June 8, 2018, the SHPO commented on the addendum report and indicated the Project would have no effect on historic properties. In a letter dated June 15, 2018, the SHPO commented on the survey report and indicated that the Project would have no effect on archaeological properties, but requested additional information regarding architectural resources. Rover provided the additional information, and in a letter dated July 31, 2018, the SHPO indicated the Project would have no effect on architectural resources. We agree with the SHPO and find that the Project would have no effect on historic properties.

Rover contacted the Osage Nation and Seneca-Cayuga Nation regarding the Project, providing a Project description and mapping. The Osage Nation expressed no concerns with the Project, but requested to be notified of unanticipated discoveries during construction. The unanticipated discovery plan (see below) provides for notification of Native American tribes in the event of a discovery. No other responses have been received.

Rover provided a plan to address the unanticipated discovery of cultural resources and human remains during construction. We reviewed the plan and found it acceptable.

## **B.5. Air Quality**

Federal and state air quality standards are designed to protect human health. The U.S. Environmental Protection Agency (EPA) has developed National Ambient Air Quality Standards (NAAQS) for criteria air pollutants such as oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and inhalable particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>). PM<sub>2.5</sub> includes particles with an aerodynamic diameter less than or equal to 2.5 micrometers and PM<sub>10</sub> includes particles with an aerodynamic diameter less than or equal to 10 micrometers. The NAAQS were set at levels the EPA believes are necessary to protect human health and welfare. Volatile organic compounds (VOC) and hazardous air pollutants are also emitted during fossil fuel combustion. Air emissions are regulated under the federal Clean Air Act and state law administered by the West Virginia Department of Environmental Protection (WVDEP). The WVDEP Division of Air Quality has adopted the federal NAAQS.

Greenhouse gases (GHG) produced by fossil-fuel combustion are carbon dioxide, methane, and nitrous oxide. GHGs are non-toxic and non-hazardous at normal ambient concentrations, and there are no applicable ambient standards or emission limits for GHG under the Clean Air Act (CAA). GHG emissions due to human activity are the primary cause of increased levels of all GHGs since the industrial age. During construction and operation of the Project, these GHGs would be emitted from construction equipment and as a result of minor fugitive leaks during operation.

If measured ambient air pollutant concentrations for a subject area remain below the NAAQS criteria, the area is considered to be in attainment with the NAAQS. The Project is in Marshall County and is within the Steubenville-Weirton-Wheeling interstate Air Quality Control Region. Parts of Marshall County are designated nonattainment for SO<sub>2</sub>; however, the Project site would be in the attainment portion of the county. Marshall County is also designated as a maintenance area for ozone and PM<sub>2.5</sub>.

Federal actions are subject to the thresholds provided in Subpart B of 40 CFR for determining conformity of these actions to state or federal Implementation Plans. These conformity levels apply to nonattainment areas and maintenance areas. As noted above, the Project is proposed in maintenance areas for ozone and PM<sub>2.5</sub>. *De minimis* emission rates for an ozone and PM<sub>2.5</sub> maintenance area are 100 tons per year of ozone, CO, nitrogen dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, and VOC. Construction emissions from the Project for these pollutants would be less than 1.5 tons per year, well below the *de minimis* emission rates. Therefore, a general conformity determination is not required under the CAA.

The CAA is the basic federal statute governing air pollution in the United States. We have reviewed the following federal requirements and determined that they are not applicable to the proposed Project:

- New Source Review;
- Title V;
- National Emissions Standards for Hazardous Air Pollutants;
- New Source Performance Standards;
- Greenhouse Gas Reporting Rule; and
- General Conformity of Federal Actions.

### Construction Impacts

During construction, a temporary reduction in ambient air quality may result from criteria pollutant emissions and fugitive dust generated by construction equipment. The quantity of fugitive dust emissions would depend on the moisture content and texture of the soils that would be disturbed. Fugitive dust and other emissions due to construction activities generally do not pose a significant increase in regional pollutant levels; however, local pollutant levels could increase. Dust suppression techniques, such as watering the right-of-way may be used as necessary in construction zones to minimize the impacts of fugitive dust on sensitive areas.

### Operational Impacts

Emissions from the proposed Project would be minimal. There are no operational emission sources and the only source of emissions would be small amounts of fugitive emissions from flanges that would not have a significant impact on ambient air quality and would not contribute to an exceedance of any air quality standards.

Given the implementation of construction work practices, the short duration of the construction activities (three months), and the minimal emissions expected from operation, we find there would be no regionally significant impacts on air quality.

## **B.6. Noise**

The noise environment can be affected both during construction and operation of the Project. The magnitude and frequency of environmental noise may vary considerably over the course of the day, throughout the week, and across seasons, in part due to changing weather conditions and the effects of seasonal vegetative cover. Two measures to relate the time-varying quality of environmental noise to its known effect on people are the 24-hour equivalent sound level ( $L_{eq}$ ) and day-night sound level ( $L_{dn}$ ). The  $L_{eq}$  is the level of steady sound with the same total (equivalent) energy as the time-varying sound of interest, averaged over a 24-hour period. The  $L_{dn}$  is the  $L_{eq}$  plus 10 decibels on the A-

weighted scale (dBA) added to account for people’s greater sensitivity to nighttime sound levels (between the hours of 10 p.m. and 7 a.m.). The A-weighted scale is used because human hearing is less sensitive to low and high frequencies than mid-range frequencies. The human ear’s threshold of perception for noise change is considered to be 3 dBA, 6 dBA is clearly noticeable to the human ear, and 10 dBA is perceived as a doubling of noise.

Construction Noise

Construction noise is highly variable. Many construction machines operate intermittently, and the types of machines in use at a construction site changes with the construction phase. The sound level impacts on residences due the construction activities would depend on the type of equipment used, the duration of use for each piece of equipment, the number of construction vehicles and machines used simultaneously, and the distance between the sound source and receptor. Construction noise would be minimal as all noise-sensitive areas (NSA) are more than 0.5 mile away.

Operational Noise

Table 2 below shows the projected noise levels from the proposed M&R Station.

Table 2. Projected Noise Levels from the Proposed M&R Station				
Distance and Direction of NSA from M&R	Ambient L <sub>dn</sub> (dBA)	M&R Station Operation L <sub>dn</sub> (dBA)	M&R Station Operation and Ambient Noise L <sub>dn</sub> (dBA)	Potential Increase
3,615 feet W, NW	50.4	39.8	50.8	0.4
2,985 feet W	50.4	42.6	51.1	0.7
2,660 feet E	46.6	24.7	46.6	0.0
3,310 N	54.9	18.4	54.9	0.0

Conclusion

As shown in table 3, the potential noise increases from the Project would be imperceptible to the human ear at all NSAs. Given the temporary nature of construction activities and minimal potential increase in noise attributable to the M&R Station, we conclude construction and operation noise impacts would not be significant.

## **B.7. Reliability and Safety**

The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas. The greatest hazard is a fire or explosion following a major pipeline rupture. Methane, the primary component of natural gas, is colorless, odorless, and tasteless. It is not toxic, but is classified as a simple asphyxiate, possessing a slight inhalation hazard. If breathed in high concentration, oxygen deficiency can result in serious injury or death.

The aboveground facilities associated with the Project must be designed, constructed, operated, and maintained in accordance with the DOT Minimum Federal Safety Standards in 49 CFR 192. The regulations are intended to ensure adequate protection for the public and to prevent natural gas facility accidents and failures.

The DOT pipeline standards are published in Parts 190-199 of Title 49 of the CFR. For example, Part 192 of 49 CFR specifically addresses natural gas pipeline safety issues, prescribes the minimum standards for operating and maintaining pipeline facilities, and incorporates compressor station design, including emergency shutdowns and safety equipment. Part 192 also requires a pipeline operator to establish a written emergency plan that includes procedures to minimize the hazards in a natural gas pipeline emergency.

Facilities associated with Rover's Project must be designed, constructed, operated, and maintained in accordance with DOT standards, including the provisions for written emergency plans and emergency shutdowns.

Rover's construction and operation of the Project would represent a minimal increase in risk to the nearby public and we are confident that with implementation of the standard safety design criteria, that the Project would be constructed and operated safely.

## **B.8. Cumulative Impacts**

In accordance with NEPA and with FERC policy, we evaluated the potential for cumulative effects of the Project. Cumulative impacts represent the incremental effects of a proposed action when added to other past, present, or reasonably foreseeable future actions, regardless of the agency or party undertaking such other actions. Cumulative impacts can result from individually minor, but collectively significant actions, taking place over time.

This cumulative effects analysis generally follows a method set forth in relevant Council on Environmental Quality and EPA guidance and focuses on potential impacts from the proposed Project on resource areas or issues where the incremental contribution would be potentially significant when added to the potential impacts of other actions. To

avoid unnecessary discussions of insignificant impacts and projects and to adequately address and accomplish the purposes of this analysis, an action must first meet the following three criteria to be included in the cumulative analysis:

- affect a resource potentially affected by the Project;
- cause this impact within all, or part of, the Project area; and
- cause this impact within all, or part of, the time span for the potential impact from the Project.

Our cumulative impacts analysis considers actions that impact environmental resources affected by the proposed action, within all or part of the Project area affected by the proposed action (i.e., geographic scope), and within all or part of the time span of the impacts. The geographic scope used to assess cumulative impacts for each resource are discussed below.

The EA analyzed the Project's impacts on geology and soils; vegetation and wildlife; cultural resources; land use and visual resources; and air quality and noise. We determined there would be no impacts to cultural resources; therefore, this resource is not accessed further in this cumulative impact analysis. Similarly, we determined that the Project impacts on geology, vegetation and wildlife, air quality, and noise would not be sufficient to cause cumulative impacts. Therefore, the potential for the proposed Project to result in cumulative impacts is limited to the resource areas of soils and land use. The following describes the geographic scope for these resources and rationale for our cumulative impact analysis:

- Project construction and restoration measures, including erosion control devices, are designed to confine impacts on soil resources to the project workspaces. Therefore, we evaluated potential cumulative impacts on soils resources within the same construction footprint as the Project.
- Impacts on general land uses would be restricted to the construction workspaces and the immediate surrounding vicinity; therefore, the geographic scope for land use is 0.5 mile.

An evaluation was performed to identify past, present, and reasonably foreseeable future projects within the resource-specific geographic scopes. In this analysis, we consider the impacts of past projects as part of the affected environment (environmental baseline) which was described and evaluated in the preceding analysis. However, present effects of past actions that are relevant and useful are also considered. The following table shows the projects that were identified within the geographic scope of the project that could have potential cumulative impacts.

Table 3. Existing or Proposed Projects in the Geographic Scope for Potential Cumulative Impacts				
Project	Description	Approximate Distance to Project (miles)	Watershed	Project Status
APP Casterly Rock-to-Castle Black Project	Approximately 12.9 miles of 24-inch-diameter, and two 16-inch-diameter laterals (2.65 miles and 3.0 miles) to deliver gas to the Rover interconnect from two wells pads.	Adjacent	UpperOhio-Wheeling	Pending, estimated construction in first quarter 2019
Rover Pipeline Project Rover Majorsville Lateral	711.2 miles of pipeline and numerous aboveground facilities. In Marshall County, the Majorsville Lateral included the Majorsville Compressor Station, receipt meter station, and 12.5 miles of 24-inch-diameter pipeline	Adjacent	Upper Ohio-Wheeling	Constructed
Powerline extension for proposed Project.	The powerline extension would be installed adjacent to the two-track dirt permanent access road.	Adjacent	Upper Ohio-Wheeling	Pending, concurrent with Project

## Soils

The APP Casterly Rock-to-Castle Black Project and Rover Pipeline Project Majorsville Lateral are adjacent or within the footprint of the proposed Project. Concurrent or consecutive construction schedules could prolong the duration of soil disturbance and thus susceptibility to erosion and invasive species establishment. We determined in our analysis that, given the limited area of disturbance, and with implementation of its Plan and SPR Procedures, Rover would adequately minimize soil impacts during construction and restoration so that impacts on soils would not be significant. The two aforementioned projects would implement erosion and sediment control measures similar to the proposed Project, which would limit soil erosion in the Project area. Rover stated in a letter filed to the Commission on September 9, 2018 that revegetation of the Majorsville Lateral is 75% complete and that general restoration and cleanup is 25% complete, which further indicates a reduced risk of soil erosion. Moreover, we continually assess the progress of the Majorsville Lateral Project restoration through our compliance monitoring program to ensure there are no significant impacts on soils. Finally, a powerline extension for the proposed Project would be installed adjacent to the two-track dirt permanent access road. Because the powerline would be collocated with the access road, the only impacts would likely be setting of power poles, and would likely not result in additional impacts on soils. Therefore, we do not anticipate any significant cumulative soil impacts.

## Land Use

The proposed Project would permanently convert about 1.7 acre of open land to industrial land use. The APP Casterly Rock-to-Castle Black Project and Rover Pipeline Project Majorsville Lateral, which are adjacent or within the footprint of the proposed Project, would not permanently impact land use because the pipelines in those projects are buried. With the exception of forest practices, pre-construction land uses of temporary construction areas could resume once restoration of the projects are complete. As stated above in soil resources, the powerline would be collocated with the access road and would therefore likely not result in additional land use impacts. In conclusion, we do not anticipate any cumulative land use impacts.

## Cumulative Impact Conclusion

Overall, the cumulative impacts of the Project are anticipated to be minimal due to the limited scope of the Project, as well as the limited resource impacts from other projects identified within the Project's geographic scopes that could occur during the construction and operation of the Project. We conclude that cumulative impacts of the Project when combined with past, present, and reasonably foreseeable projects would have minimal cumulative effects on all resources.

## C. ALTERNATIVES

In accordance with NEPA and FERC policy, we evaluated alternatives to the Project to determine whether they would be reasonable and environmentally preferable to the proposed action. These alternatives included the no-action alternative, system alternatives, and site alternatives. The evaluation criteria used for developing and reviewing alternatives were:

- ability to meet the Project's stated objective;
- technical feasibility and practicality; and
- significant environmental advantage over the proposed action.

Through environmental comparison and application of our professional judgment, each alternative is considered to a point where it becomes clear if the alternative could or could not meet the three evaluation criteria. To ensure a consistent environmental comparison and to normalize the comparison factors, we generally use desktop sources of information (e.g., publicly available data, geographic information system data, aerial imagery) and assume the same workspace requirements.

The alternatives were reviewed against the evaluation criteria in the sequence presented above. The first consideration for including an alternative in our analysis is whether or not it could satisfy the stated purpose of the Project. An alternative that cannot achieve the purpose for the Project cannot be considered as an acceptable replacement for the Project.

Many alternatives are technically and economically feasible. Technically practical alternatives, with exceptions, would generally require the use of common construction methods. An alternative that would require the use of a new, unique or experimental construction method may not be technically practical because the required technology is not available or is unproven. Economically practical alternatives would result in an action that generally maintains the price competitive nature of the proposed action. Generally, we do not consider the cost of an alternative as a critical factor unless the added cost to design, permit, and construct the alternative would render the project economically impractical.

Alternatives that would not meet the Project's objective or were not feasible were not brought forward to the next level of review (i.e., significant environmental advantage). Determining if an alternative provides a significant environmental advantage requires a comparison of the impacts on each resource as well as an analysis of impacts on resources that are not common to the alternatives being considered. The determination must then balance the overall impacts and all other relevant considerations. In comparing the impact between resources, we also considered the

degree of impact anticipated on each resource. Ultimately, an alternative that results in equal or minor advantages in terms of environmental impact would not compel us to shift the impacts from the current set of landowners to a new set of landowners.

### **C.1. No Action Alternative**

Under the no-action alternative, the Project would not be constructed and no environmental impacts would occur. However, Rover would be unable to meet the customer's transportation requirements for natural gas volumes and pressures at the intended delivery and receipt points. It is reasonable to assume that the customers would identify alternative transportation measures that would also result in some level of environmental impact. Based on the minor impacts identified for the Project, the alternative of the customers seeking another transportation mechanism is not likely to provide a significant environmental advantage. Further, the no-action alternative would not meet the objective of the Project. Therefore, we did not consider it further.

### **C.2. System Alternatives**

We assessed system alternatives to evaluate whether a system alternative could satisfy the objective of the Project and provide a significant environmental advantage over the Project. System alternatives to the Project include making use of existing, modified, or already proposed natural gas pipeline systems to meet the objectives of the Project. A system alternative may make it unnecessary to construct all or part of the Project, although some modifications or additions to other existing pipeline systems may be required to increase the respective capability, or another entirely new system may need to be constructed. Such modifications or additions would result in environmental impacts that could be less than, similar to, or greater than that associated with the Project.

Based on the nature of the Project to meter and regulate gas, any other system would necessarily entail the same kinds of facilities. We did not identify system alternatives that would provide a significant environmental advantage over the Project.

### **C.3. Site Alternatives**

Rover's proposed M&R Station site would not result in any significant environmental impacts. Any other project sites would likely have similar or greater impacts. Additionally, we did not receive any comments requesting us to evaluate alternatives to the proposed location. Therefore, alternative site locations were not considered.

## Conclusion

We did not identify any alternatives that would meet all three evaluation criteria to be considered a successful alternative to the Project. In summary, we have determined that the proposed action, as modified by our recommended mitigation measures, is the preferred alternative that can meet the Project's objectives.

## D. CONCLUSIONS AND RECOMMENDATIONS

Based upon the analysis in this EA, we have determined that if Rover was to construct and operate the proposed facilities in accordance with its application, supplements, Project-specific plans, and the staff's recommended mitigation measures below, approval of the Project would not constitute a major federal action significantly affecting the quality of the human environment. The staff recommends that the Commission Order contain a finding of no significant impact and the following mitigation measures be included as conditions of any Certificate the Commission may issue.

1. Rover shall follow the construction procedures and mitigation measures described in its application and supplements, including responses to staff data requests and as identified in the EA, unless modified by the Order. Rover must:
  - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
  - b. justify each modification relative to site-specific conditions;
  - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
  - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) **before using that modification.**
2. The Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of this Order, and take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the Project. This authority shall allow:
  - a. the modification of conditions of the Order;
  - b. stop-work authority; and
  - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from Project construction and operation.
3. **Prior to any construction**, Rover shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

4. The authorized facility location shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Rover shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Rover's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Rover's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Rover shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area**.

This requirement does not apply to extra workspace allowed by the FERC's Plan and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;
- c. recommendations by state regulatory authorities; and
- d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

6. **Within 60 days of the acceptance of the authorization and before construction begins**, Rover shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Rover must file revisions to the plan as schedules change. The plan shall identify:

- a. how Rover will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;
- b. how Rover will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
- c. the number of EIs assigned, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
- d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
- e. the location and dates of the environmental compliance training and instructions Rover will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change),
- f. the company personnel (if known) and specific portion of Rover's organization having responsibility for compliance;
- g. the procedures (including use of contract penalties) Rover will follow if noncompliance occurs; and
- h. a Gantt or PERT chart (or similar Project scheduling diagram), and dates for:
  - (1) the completion of all required surveys and reports;
  - (2) the environmental compliance training of onsite personnel;
  - (3) the start of construction; and
  - (4) the start and completion of restoration.

7. Rover shall employ at least one EI. The EIs shall be:

- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
- b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
- c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;

- d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
  - e. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Rover shall file updated status reports with the Secretary on a **biweekly** basis until all construction and restoration activities are complete. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Rover's efforts to obtain the necessary federal authorizations;
  - b. the construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally-sensitive areas;
  - c. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
  - d. a description of the corrective actions implemented in response to all instances of noncompliance;
  - e. the effectiveness of all corrective actions implemented;
  - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
  - g. copies of any correspondence received by Rover from other federal, state, or local permitting agencies concerning instances of noncompliance, and Rover's response.
9. Rover must receive written authorization from the Director of OEP **before commencing construction of any Project facilities**. To obtain such authorization, Rover must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
10. Rover must receive written authorization from the Director of OEP **before placing the Project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, Rover shall file an affirmative statement with the Secretary, certified by a senior company official:

- a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
- b. identifying which of the conditions in the Order Rover has complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

## E. REFERENCES

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