

**Office of
Energy Projects**

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Rover Pipeline LLC

Docket No. CP20-10-000

Wick Meter & Regulator Station Project

Environmental Assessment

Washington, DC 2042

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TECHNICAL ACRONYMS AND ABBREVIATIONS

AQCRs	air quality control regions
CAA	Clean Air Act
CO	carbon monoxide
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
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
Eureka	Eureka Midstream LLC
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
GHG	greenhouse gas
HAPs	hazardous air pollutants
LOD	limits of disturbance
M&R	meter and regulating
MAOP	maximum operational allowable pressure
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NGA	Natural Gas Act
NHPA	National Historic Preservation Act
NNSR	Nonattainment New Source Review
NO _x	nitrous oxide
NOI	<i>Notice of Intent to Prepare an Environmental Assessment for the Proposed Wick Meter and Regulator Station Project and Request for Comments on Environmental Issues</i>
NSA	noise sensitive area
NSPS	New Source Performance Standards
OEP	Office of Energy Projects
PHMSA	Pipeline and Hazardous Materials Safety Administration
Plan	<i>Rover's Upland Erosion Control, Revegetation, and Maintenance Plan</i>
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns
Project	Wick Meter and Regulator Station
Rover	Rover Pipeline LLC
SHPO	West Virginia State Historic Preservation Office
SPR Plan	Spill Prevention and Response Plan
VOCs	volatile organic compounds

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 Wick Meter and Regulator Station Project (Project) proposed by Rover Pipeline LLC (Rover) in Docket No. CP20-10-000. We¹ prepared this EA in compliance with the National Environmental Policy Act (NEPA) according to the regulations issued by the Council on Environmental Quality at Title 40 Code of Federal Regulations (CFR), Parts 1500–1508 (40 CFR 1500–1508) and the Commission’s regulations at 18 CFR 380.

1. Introduction

On November 1, 2019, Rover filed an application with FERC in Docket No. CP20-10-000 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 Tyler 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; and
- identify and recommend alternatives and specific mitigation measures, as necessary, to avoid and minimize project related environmental impacts.

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

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 both economic issues, including need, and environmental impact. Rover’s stated Project purpose is to receive up to 300 million standard cubic feet per day of pipeline quality natural gas from an interconnect with the gathering pipeline facilities of Eureka Midstream LLC (Eureka).

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

Rover executed an Interconnect and Operating Agreement with Eureka for the Project, to allow for the delivery of natural gas supplies from gathering facilities under development by Eureka, for transportation on the Rover pipeline system in Tyler County, West Virginia.

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, groundwater, wildlife, vegetation, species of special concern, cultural resources, air quality, noise, land use, visual resources, 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 recommended mitigation measures.

4. Public Comment

On January 21, 2020, the FERC issued *Notice of Intent to Prepare an Environmental Assessment for the Proposed Wick Meter and Regulator Station Project and Request for Comments on Environmental Issues* (NOI) under Docket No. CP20-10-000. No comments were filed in response to the NOI and no environmental issues have been raised by intervenors, agencies, or the public.

5. Proposed Facilities

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

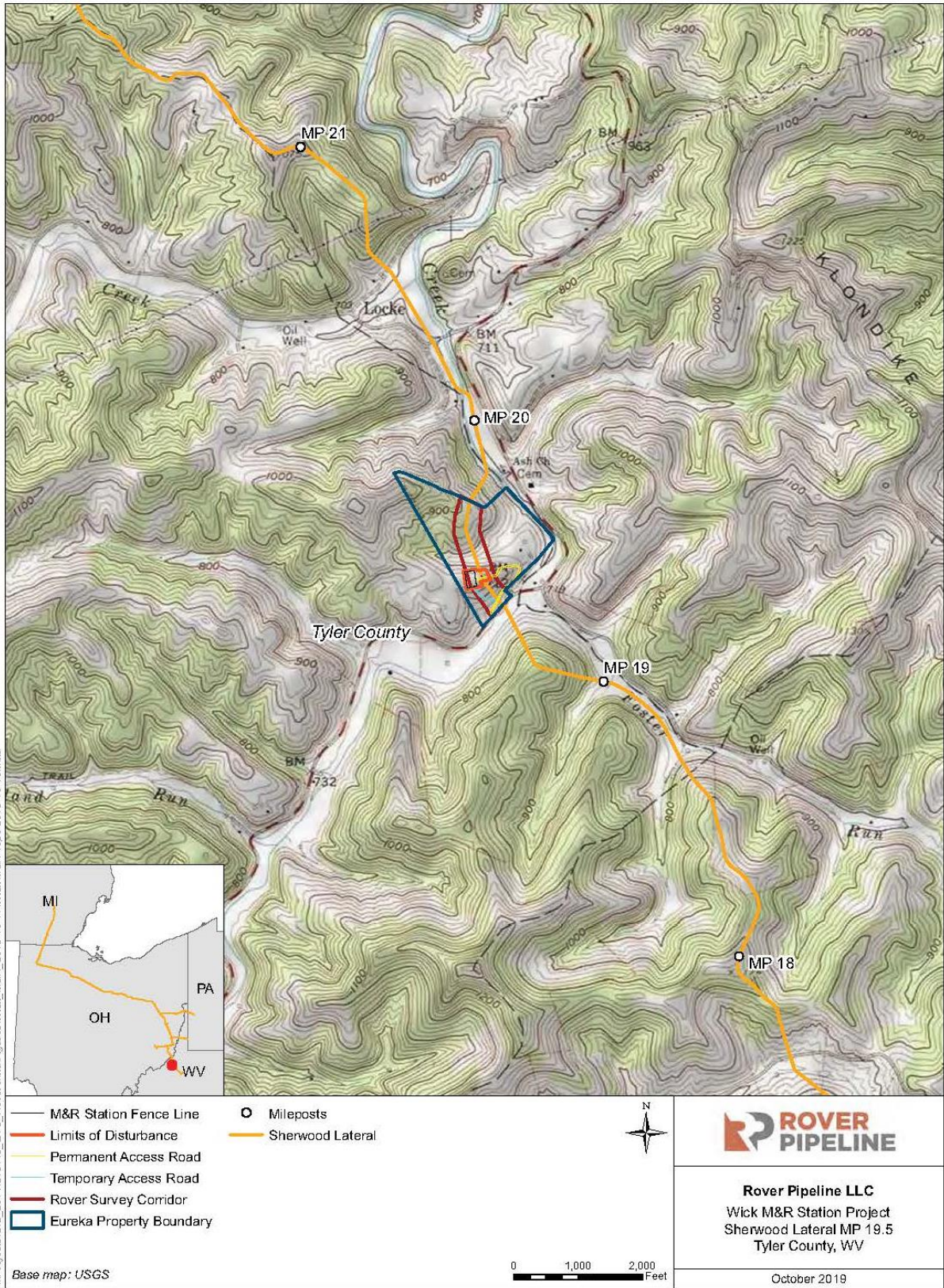


Figure 1. Regional Project Map

5.1 Aboveground Facilities

The Project would consist of one new M&R station on open land, located off Wick Road at approximate milepost 19.5 on Rover's Sherwood Lateral in Tyler 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 four feet and would be mounted on a pole approximately five feet in height. Telephone or cellular service also would be required for voice communications and Supervisory Control and Data Acquisition backup.

5.2 Access Roads and Contractor Yards

Rover would utilize an existing temporary access road and one new permanent access road. Rover would stage equipment and materials for the Project within the temporary workspace at the M&R Station site. No contractor yards are proposed.

6. Land Requirements

The M&R station would be constructed on 2.1 acres of land, of which 0.9 acre would be fenced and maintained for operation. All land required for the Project is owned by Eureka and the M&R station site would be adjacent to Rover's existing right-of-way for the Sherwood Lateral. Access to the M&R station would be along temporary access road TAR-25C, which was previously used by Rover during construction of the Sherwood Lateral, and the new permanent access road that would be constructed by Eureka as part of development of its facilities. TAR-25C is approximately 460 feet long, 25 feet wide, and affects approximately 0.3 acre. The permanent access road is approximately 1,664 feet long, 25 feet wide, and affects approximately 1.0 acre.

7. Construction Procedures

7.1 Construction Schedule and Workforce

Rover anticipates that mobilization and construction of the Project would commence in the second quarter 2020, and the facilities would be placed into service in the third quarter of 2020. These dates are subject to receipt of necessary permits and regulatory approvals. Construction would take approximately three months using a peak work force of 30 workers. Approximately 50 percent of the workforce is expected to be residents who reside in the area or within daily commuting distance of the Project.

7.2 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 its *Upland Erosion Control, Revegetation and Maintenance Plan* (Rover Plan) which follows the 2013 version of FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan*, without modification. Rover would also implement *Spill Prevention and Response Procedures* and *Procedures Guiding the Discovery of Unanticipated Cultural Resources and Human Remains*. Rover would assign an Environmental Inspector (EI) responsible for ensuring compliance with environmental conditions attached to any certificate issued by the Commission for the Project. Rover would provide training for its EI and would conduct an environmental training session for all Rover construction management and contractor personnel prior to and during installation of the Project facilities.

Eureka would grade and prepare the M&R station site, as part of the development of its interconnect project. Eureka would also construct the permanent access road from the public highway (Wick Road) to the Wick M&R Station site. Equipment for the M&R station would be trucked to the site, offloaded, positioned on foundations, leveled, grouted where necessary, and secured with anchor bolts. Following equipment installation, the facilities would be tested and commissioned in accordance with Rover's construction specifications.

Following construction, debris and wastes would be disposed of as appropriate. The M&R station would be fenced and ground areas in and around the station facilities would be covered with crushed rock (or equivalent). Disturbed areas outside the fence line would be revegetated and restored. Rover would operate and maintain the Project facilities in compliance with DOT regulations and would perform routine checks of facility, including calibration of equipment and instrumentation, inspection of critical components, and scheduled and preventative maintenance of equipment.

7.3 Hydrostatic testing

Rover would obtain approximately 4,640 gallons of water for hydrostatic testing from a municipal source. Water would be trucked into and hauled off site. No additives or chemicals would be added to the hydrostatic test water. Once hydrostatic testing is complete, Rover would dispose of the water at a municipal or other off-site facility.

8. Permits and Approvals

Table 1 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.²

Table 1: Permits and Approvals			
Agency	Permit	Initiated	Approval Date
FERC	Certificate of Public Convenience and Necessity under Section 7(c) of the NGA	November 1, 2019	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	October 22, 2019	November 2019
West Virginia Division of Culture and History	Consultation – Section 106 of the National Historic Preservation Act	October 21, 2019	November 2019

8.1 Non-jurisdictional 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. There are two non-jurisdictional projects associated with the Wick

² Rover has stated Eureka would improve the access road, and would grade and prepare the meter station site, as part of development of its project under permits and clearances obtained for that project.

M&R Station Project: Eureka's interconnect project and electrical facilities for the M&R Station.

Eureka's interconnect project includes 16 miles of 16- and 8-inch-diameter pipeline in Tyler and Pleasants counties, West Virginia that would deliver natural gas to the proposed Wick M&R Station. Eureka's project involves a 100-foot-wide construction right-of-way for pipeline construction, as well as access roads and extra workspaces. Eureka will gain access to the Wick M&R Station by building an approximately 660-foot-long temporary access road, approved for construction of the Rover Pipeline Project, and an approximately 1,650-foot-long new permanent access road that will be constructed along Wick Road, resulting in approximately 1.4 acres of additional disturbance. Upon successful reclamation of the temporary road, the impacts to land from the permanent access road would be reduced to approximately 1.0 acre of disturbance.

Although the construction right-of-way for the interconnect pipeline would be narrowed to a maximum of 50 feet in width at aquatic resources crossings, by assuming a nominal 100-foot-wide construction right-of-way for the entire length, we estimate that Eureka's project would disturb approximately 194 acres of land to build the interconnect pipeline. Rover states that Eureka has obtained the appropriate permits and clearances and plans to begin construction of the pipeline in January 2020, with a planned in-service date of July 2020. Permits include a U.S. Army Corps of Engineers Nationwide Permit, clearances from the U.S. Fish and Wildlife Service and West Virginia State Historic Preservation Office, West Virginia Stream Activity Permit, National Pollutant Discharge Elimination System Permit, and a permit for the permanent access road entrance on Wick Road.

In addition to the non-jurisdiction pipeline, Rover would contract with the local electric company, Potomac Edison, to provide electric power from Wick Road to the new station. Rover has determined that the distance between the proposed Wick M&R station and the nearest existing utility pole is 1,050 feet and would require 4-5 poles to cover the span, all installed on Eureka-owned land. Though construction of the non-jurisdictional electrical facilities may overlap with the construction of the Project, we find that construction of these facilities would result in negligible environmental impacts due to the minor activities associated with extension of the existing power service to the proposed facilities.

FERC has no authority over the permitting, licensing, construction, or operation of Eureka's interconnect project or the local electric service lines. However, these non-jurisdictional facilities are addressed further in our cumulative impacts analysis in section B.9 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:

- surface waters;
- wetlands,
- fisheries;
- recreation; and
- socioeconomics

These resources will not be discussed further in this EA. Section B.9 of this EA analyzes the Project's contribution to cumulative impacts.

1. Geology and Soils

1.1 Geology

The Wick M&R Station would be within the Kanawha section of the Appalachian Plateaus physiographic province (Fenneman and Johnson, 1946). The Project area is a relatively level open field at an approximate elevation of 850 feet above mean sea level.

Based on geologic mapping, the Project would overlie sandstone, siltstone, mudstone, and shale bedrock of the Dunkard Group (Cardwell et al., 1968). This is consistent with geotechnical investigation completed at the site by Rover, which encountered sandstone bedrock at depths of approximately 6 to 9 feet below the ground surface. Sandstone bedrock was overlain by overburden consisting of clay, sands, and silts.

Mineral Resources

West Virginia's primary mineral resources include oil and gas production and coal, as well as non-fuel mineral resources, including clay, sand, gravel, and limestone. No active or historic surface or subsurface mines were identified within 0.25 mile of the Project area (U.S. Geological Survey [USGS], 2011; West Virginia Geological and Economic Survey [WVGES], 2015).

Based on a review of WVGES information, two dry wells and three active natural gas extraction wells were identified within 0.25 mile of the Project area, of which one well (a dry well) would be within the proposed workspace. Aboveground features of this well, if any, would be surrounded with orange safety fencing during construction. Table 2 lists the oil and gas wells within 0.25 mile of the Project (WVGES, 2020).

Table 2: Oil and Gas Wells with 0.25 mile of the Project					
Well Number	Operator Name	Well Type	Total Depth (ft)	Distance from the Project (mi)	Direction From the Project
888	Lydick, W.J.,Inc.	Dry	3,450	0.09	West
889	Lydick, W.J., Inc.	Dry	3,422	Within LOD	--
1922	Sancho Oil & Gas	Gas	6,330	0.18	North
1923	Sancho Oil & Gas	Gas	6,160	0.03	Southeast
1934	Sancho Oil & Gas	Gas	6,330	0.02	West
LOD = limit of disturbance Source: WVGES, 2020					

Given the scope and nature of Project activities, which would involve shallow disturbance within and adjacent to Rover’s existing permanent right-of-way, and given the distance from active mineral resource extraction, we conclude that the Project would not significantly impact availability of or access to mineral resources.

Geologic Hazards

Geologic hazards are natural, physical conditions that can result in damage to land and structures or injury to people. Such hazards typically are seismic-related, including earthquakes, surface faulting, and soil liquefaction. Geologic hazards discussed below also include landslides, ground subsidence (including karst terrain), and flood hazards.

Seismicity and Soil Liquefaction

The shaking during an earthquake can be expressed in terms of the acceleration as a percent of gravity (g), and seismic risk can be quantified by the motions experienced at the ground surface or by structures during a given earthquake expressed in terms of g. For reference, a peak ground acceleration (PGA) of 10 percent g (0.1g) is generally considered the minimum threshold for damage to older structures or structures not constructed to resist earthquakes. USGS National Seismic Hazard Probability Mapping shows that for the Project area, within a 50-year period, there is a 2 percent probability of an earthquake with an effective PGA of 4 to 10 percent g; and a 10 percent probability of

an earthquake with an effective PGA of 2 to 3 percent g being exceeded (USGS, 2018). Even under much higher ground vibrations, the main risk to pipelines and aboveground facilities would be a slip fault that displaces laterally during an earthquake. Project facilities are not underlain by this type of feature (USGS, 2019).

Given these conditions, we conclude that there is low potential for prolonged ground shaking, ground rupture, or soil liquefaction to occur or significantly impact Project facilities.

Ground Subsidence

Ground subsidence, involving the localized or regional lowering of the ground surface, may be caused by karst dissolution; sediment compaction due to oil, gas, and/or groundwater extraction; and underground mines. Minimal extraction of natural gas and groundwater resources occurs in the Project vicinity. However, subsurface mines were not identified within 0.25 mile of any Project area. Rover evaluated potential karst conditions for the Rover Pipeline Project using publicly available sources.³ Karst terrain or lithology with the potential to develop karst features were not identified. Based on this assessment, we conclude that there is low potential for subsidence to occur in the Project area.

Landslide and Flood

Although the Project vicinity has steep topography and high susceptibility to landsliding, the Project area is on relatively level ground. Therefore, the potential for the Project to contribute to or be affected by significant landslides is low. Further, Rover states that Eureka would grade and prepare the Wick M&R Station site as part of the development of its gathering project prior to Project commencement.

The Project would also not be within any Federal Emergency Management Agency designated flood hazard zones; therefore, we conclude that the Project would not affect floodplain storage capacity and would not be significantly affected by flood hazards.

Based on the above assessment, we conclude the Project would not significantly impact or be significantly impacted by geologic resources or hazards, or mineral resources.

1.2 Soils

Soil characteristics were assessed using the Natural Resources Conservation Service (NRCS) Soil Survey geographic database (NRCS, 2019). Soils were evaluated according to characteristics that could affect construction or increase the potential for soil

³ Rover's Characterization of Karst Prone Areas Relative to the Proposed Pipeline Route for the Rover Pipeline Project is available on the FERC's eLibrary website, located at <http://ferc.gov/docs-filing/elibrary.asp>, by searching Docket Number CP20-10 and Accession No. (20191220-5024).

impacts during construction or operation. The Otwell Silt Loam complex soil series underlies the Project area. Otwell Silt Loam is classified as prime farmland but is not associated with other limitations. Specifically, soils are not classified as highly erodible by wind or water, do not have poor revegetation potential, and are not hydric, highly compaction prone, stony/rocky, or underlain by shallow bedrock.

While Project area soils are not highly susceptible to erosion, clearing, grading, and equipment movement can accelerate the erosion process. To minimize or avoid potential impacts, Rover would implement measures in accordance with its Rover Plan. Temporary erosion controls would be installed immediately following land disturbing activities and would be inspected on a regular basis and after each rainfall event of 0.5 inch or greater to ensure proper functioning. Rover would additionally utilize dust-control measures in accordance with its Fugitive Dust Control Plan, including routine wetting of work areas, as needed. Most areas in and around the buildings, meters, and associated piping and equipment would be covered with crushed rock (or equivalent) and the permanent access road and parking area may be covered with crushed rock, concrete, or asphalt. Other temporary work areas would be seeded and revegetated. Temporary erosion controls would be maintained until the Project area is successfully revegetated or otherwise stabilized.

The Project would disturb approximately 2.1 acres of prime farmland soils. New, permanent impacts on prime farmland would be limited to a total of approximately 1.9 acres that would be converted to industrial use for operation of the Wick M&R Station and associated permanent access road. Areas that would be permanently converted are currently used for hay production. The acreage of prime farmland that would be permanently impacted is negligible when compared to the total acreage of prime farmland in Tyler County. Therefore, we conclude impacts on the availability of prime farmland would not be significant.

Based on a review of state and federal databases, no hazardous waste sites, landfills, or other sites with the potential for soil or groundwater contamination were identified within 0.25 mile of the Project area (West Virginia Department of Environmental Protection [WVDEP], 2020; U.S. Environmental Protection Agency [EPA], 2020a; EPA, 2020b).

Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could adversely affect soils. Rover has developed Spill Prevention and Response Procedures (SPRP) that specify cleanup procedures in the event of soil contamination from spills or leaks of these materials. Rover and its contractors would use its SPRP to minimize accidental spills of materials that may contaminate soils, and to ensure that inadvertent spills are contained, cleaned up, and disposed of as quickly as possible and in an appropriate manner.

The Project would result in minor permanent impacts on the availability of prime farmland; however, given Rover's proposed mitigation measures and that disturbed areas

would be revegetated or otherwise stabilized with surface cover, we conclude that significant impacts to soil resources would not occur.

2. Water Resources

Surface Waters and Wetlands

No waters bodies or wetlands were identified in the Project workspace and there would be no impacts on these resources.

Groundwater Resources

The Project overlies the Pennsylvanian and Permian age sedimentary aquifer. This aquifer is comprised of cyclic sequences of sandstone, shale, limestone, and coal. Sandstone members are most common and most productive, with well yields ranging from 5 to 400 gallons per minute (Trapp and Horn, 1997). The chemical quality of water in the freshwater parts of the bedrock aquifers of the Appalachian Plateaus province is somewhat variable but is generally satisfactory for municipal supplies and other purposes (Trapp and Horn, 1997).

The EPA oversees the Sole Source Aquifer Protection Program to protect high production aquifers that supply 50 percent or more of the region's water supply and for which there are no reasonably available alternative drinking water sources, should the aquifer become contaminated. The Project does not overlie EPA-designated sole source aquifers (EPA, 2019). Further, the Project does not overlie state-designated wellhead protection areas (West Virginia Department of Health and Human Resources, 2020).

In 2014 and 2015, civil surveyors for the Rover Pipeline Project field-identified public and private water supply wells and springs within a 250 to 400-foot wide survey corridor along the centerline of the Sherwood Lateral, inclusive of the 150-foot radius of the Project area. Verification of water well locations with landowners was also conducted prior to construction of the Rover Pipeline Project in 2017. Based on the results of these efforts and a review of public records for public water supply wells (West Virginia Department of Health and Human Resources, 2020), no public or private water supply wells or springs were identified within 150 feet of any Project area.

The Project would not cross areas of known groundwater contamination (WVDEP, 2020; EPA, 2020a; EPA, 2020b). Groundwater was not encountered during geotechnical investigation at the Wick M&R Site within depths of up to 26 feet below the ground surface. The maximum depth of excavation for Project facilities would be approximately 12 feet below the ground surface; therefore, construction is not anticipated to intercept shallow groundwater.

Groundwater contamination could occur from accidental spills of fuels, solvents, and lubricants used during Project construction. Rover would implement the measures

outlined in its SPRP to minimize the risk of potential impacts from fuel or hazardous material spills.

Based on Rover's proposed measures, the depth to shallow groundwater, and absence of use of groundwater resources in the Project vicinity, we conclude that the Project would not have a significant impact on availability of groundwater resources or groundwater quality.

3. Vegetation, Wildlife, and Threatened and Endangered Species

3.1 Vegetation

The Project would be in an open field, consisting of herbaceous vegetation. Prior to the start of the Project, the site would be cleared and graded by Eureka as part of its interconnect project. Eureka would install perimeter erosion controls that would be maintained and inspected at least once every 7 days and within 24 hours after any storm event. If construction activities have ceased for more than 21 days, Eureka would temporarily seed and mulch the site. Construction of the Project would permanently convert 0.9 acre of open land to industrial use for operation of the M&R station. Following construction, Rover would reseed the site with the state recommended multi-seasonal grass mix. Therefore, the Project would not significantly impact vegetation.

3.2 Wildlife

Typical wildlife found in the Project area includes eastern cottontails, killdeer, white-tailed deer, wild turkey, prairie warbler, and red fox. Construction of the Project would result in a temporary disturbance of local wildlife due to increased noise, increased human activity, and habitat loss. After construction is complete and temporary workspaces are restored, wildlife would be able to return to the area. Therefore, we conclude that the Project would have temporary but not a significant impact on wildlife.

3.3 Migratory Birds

Migratory birds are protected under the Migratory Bird Treaty Act (16 U.S. Code [U.S.C.] 703-711); bald and golden eagles are additionally protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d). Executive Order 13186 (66 FR 3853) directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and to avoid or minimize adverse impacts on migratory birds through enhanced collaboration with the U.S. Fish and Wildlife Service (FWS). On March 30, 2011, FWS and the Commission entered into a Memorandum of Understanding that focuses on avoiding, minimizing, or mitigating adverse impacts on migratory birds and strengthening migratory bird conservation through enhanced collaboration between the Commission and the FWS.

Construction activities that affect bird nesting habitat and occur during the nesting season (April 1- August 31) could result in direct and indirect effects on bird species. Our review of the FWS Information for Planning and Consultation system showed three birds of conservation concern that could potentially occur within the Project area. However, these species, the cerulean warbler, the prairie warbler, and the wood thrush all prefer wooded and forested habitats. Since the Project would not involve any tree clearing, the Project would not have a significant impact on migratory birds.

3.4 Special Status Species

Special status species are those species for which state or federal agencies provide an additional level of protection by law, regulation, or policy. Included in this category are federally listed species that are protected under the ESA, designated critical habitat, or species that are considered as candidates for protected listing by the FWS and those species that are state-listed as threatened, endangered, or state species of special concern.

Federally Listed Species

Rover, acting as the Commission's non-federal representative, initiated informal consultation with the FWS using the Information for Planning and Consultation system. Two mammal species and four clam/mussel species were identified as potentially occurring in the Project area. The Indiana bat and northern long-eared bat were identified as potentially occurring in the Project area. Both species utilize caves and mine shafts as hibernation habitat. Summer habitat for the Indiana bat includes mature trees in riparian or floodplain forests and upland forests for roosting and foraging. The northern long-eared bat utilizes cavities and crevices under the bark of both live and dead trees for roosting. The Project is within the Rover Pipeline Project Indiana Bat Conservation Plan and there is no critical habitat for any of the listed species located within the Project workspace. No hibernacula were identified adjacent to the Project and the Project would not involve tree clearing. Therefore, we conclude that the Project would have *no effect* on the Indiana bat or the northern long-eared bat.

The clubshell, fanshell, sheepnose mussel, and snuffbox mussel are federally listed endangered species that could potentially occur within the Project area. These species are aquatic and found in streams; however, there are no streams in or within 300 feet of the Project workspace. Therefore, we conclude that the Project would have *no effect* on the federally listed clubshell, fanshell, sheepnose mussel, and snuffbox.

State-listed Species

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.

4. Land Use and Visual Resources

The Wick M&R Station would be constructed on approximately 2.1 acres of agricultural land, of which 0.9 acre would be fenced and graveled for operation. The station site would be on land owned by Eureka and adjacent to Rover's existing right-of-way for the Sherwood Lateral pipeline. Access to the meter station would be along a temporary access road, previously utilized for the Rover Pipeline Project, and a new permanent access road that would be constructed by Eureka as part of development of its facilities. The temporary access road would affect approximately 0.3 acre, while the permanent access road would affect about 1.0 acre. Land not used for operation would be restored and maintained in a grassy condition. Rover has executed a landowner agreement with Eureka for the Project's temporary and permanent workspaces.

The Project would result in both temporary and permanent visual impacts. Construction of the M&R station would result in temporary visual impacts including increased numbers of construction personnel, equipment, and materials, removal of vegetation cover, and disturbance of soil. Construction impacts would generally cease following the completion of construction and restoration. During operations, the M&R station would represent a permanent alteration to the viewshed. The major components for the M&R station would include a 6-foot high fence surrounding the site, filter separator and piping, and a condensate storage tank. The tallest component, the single condensate storage tank, would be 13 feet, 7 inches in height. There are no residences within 50 feet of the site boundary and no known planned residential or commercial development projects in the Project area; however, there is a residence located 500 feet southwest of the site boundary.

Based on the proximity of the nearest residence and at similar elevation, we requested that Rover provide a visual simulation to further assess the viewshed impacts. Rover's response, filed January 21, 2020, did not include a visual simulation as requested; however, Rover stated the M&R station would potentially be visible to a residence located 1,825 feet to the north-northeast, and likely be visible to the residence located 500 feet to the southwest, partially mitigated by an existing deciduous stand of trees. Rover stated that views of the station would not be dissimilar to what is already in the landscape, based on the presence of an existing tank, outbuildings, and various equipment storage areas. We disagree. The station would introduce a new industrial element into a rural agricultural landscape, and would likely be visible to the nearest residence, particularly during the winter months leaf loss. Rover further stated that the residence is not potentially historical nor otherwise addressed by a regulatory provision to be afforded visual screening. We disagree. The Commission's siting regulations at 18 CFR § 380.15(g)(5) require the planting of trees or other appropriate landscaping to enhance the appearance of aboveground facilities if they are visible from nearby residences. Therefore, to minimize permanent visual impacts to residences, **we recommend that:**

- **Prior to construction, Rover should file with the Secretary of the Commission (Secretary), for review and written approval by the Director of the Office of Energy Projects (OEP), a visual screening plan for the Wick Meter and Regulator Station. The plan should identify the locations of facility components and the location, type, quantity, and height of vegetation to be planted, or other equivalent screening, to minimize permanent visual impacts to residences. The plan should include measures to inspect, maintain, and replace vegetation screening if mortality occurs. The plan should also address nighttime lighting and include measures to mitigate nighttime visual impacts to adjacent residences.**

With the implementation of our recommendation, we find the Project would not result in significant impacts to visual resources or aesthetics.

5. Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) requires the FERC to take into account the effects of its undertakings on historic properties, and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Historic properties are prehistoric or historic districts, sites, buildings, structures, objects, or properties of traditional, religious, or cultural importance, which are listed or eligible for listing on the National Register of Historic Places (NRHP). Northern provided us with information, analyses, and recommendations necessary to document compliance with Section 106.

Cultural resources review was completed for the proposed Project site as part of the Rover Pipeline Project (Docket No. CP15-93-000). Forty-two Federally recognized Native American groups were contacted as part of development of the Rover Pipeline Project (CP15-93-000). On October 21, 2019, Rover sent letters to the Osage Nation and the Seneca-Cayuga Nation. Rover included a description of the Project, an overview map and Rover's unanticipated discovery plan. No concerns or objections were provided regarding the location of the Project area. We sent our NOI to these same tribes. No responses to our NOI were received.

On October 18, 2019 Rover sent a letter to West Virginia Division of Culture and History, which serves as the State Historic Preservation Office (SHPO), detailing that "no architectural or archaeological resources were identified within or near the M&R Station site." In a letter dated November 18, 2019, the SHPO agreed and stated that no further consultation is necessary. We agree.

Rover provided a plan to address the unanticipated discovery of cultural resources and human remains during construction. We reviewed the plan and requested minor revisions. The revised plan was filed on December 19, 2019 and we find the plan acceptable.

6. Air Quality

Air quality would be affected by construction and operation of the Project. During construction, short-term emissions would be generated by operation of equipment, land disturbance, and increased traffic from worker and delivery vehicles for all locations. There would be no operational emissions associated with the Project, with the exception of minor fugitive releases.

Ambient air quality is protected by federal and state regulations. Under the Clean Air Act (CAA) and its amendments, the EPA has established National Ambient Air Quality Standards (NAAQS)⁴ for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_x) ozone, particulate matter less than 10 microns (PM₁₀), particulate matter less than 2.5 microns (PM_{2.5}), and sulfur dioxide (SO₂). The WVDEP have the authority to implement permit programs under the CAA for the Project facilities.

These standards incorporate short-term (hourly or daily) levels and long-term (annual) levels to address acute and chronic exposures to the pollutants, as appropriate. The NAAQS include primary standards, which are designed to protect human health, including the health of sensitive subpopulations such as children and those with chronic respiratory problems. The NAAQS also include secondary standards designed to protect public welfare, including economic interests, visibility, vegetation, animal species, and other concerns not related to human health. Table 3 presents the NAAQS.

⁴ The current NAAQS are listed on EPA's website at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>.

Table 3: National Ambient Air Quality Standards

Pollutant	Averaging Period	Standards	
		Primary	Secondary
Sulfur dioxide (SO ₂)	1-hour ^{l,m}	75 ppb	
		196 µg/m ³	0.5 ppm
	3-hour ^b	--	1300 µg/m ³
	Annual ^{a,m}	0.03 ppm	--
		80 µg/m ³	
24-hour ^{b,m}	0.14 ppm	--	
PM ₁₀	24-hour ^d	365 µg/m ³ 150 µg/m ³	150 µg/m ³
PM _{2.5} (2012 Standard)	Annual ^e	12.0 µg/m ³	15.0 µg/m ³
PM _{2.5} (2006 Standard)	24-hour ^f	35 µg/m ³	35 µg/m ³
Nitrogen Dioxide (NO ₂)	Annual ^a	0.053 ppm (53 ppb)	0.053 ppm (53 ppb)
		100 µg/m ³	100 µg/m ³
	1-hour ^c	100 ppb 188 µg/m ³	--
Carbon Monoxide (CO)	8-hour ^b	9 ppm	--
		10,000 µg/m ³	
	1-hour ^b	35 ppm 40,000 µg/m ³	--
Ozone (2008 Standard)	8-hour ^{g,h}	0.075 ppm	0.075 ppm
Ozone (2015 Standard)	8-Hour ⁱ	0.070 ppm	0.070 ppm
Ozone (O ₃)	1-hour ^{j,k}	0.12 ppm	0.12 ppm
Lead (Pb)	Rolling 3-month ^a	0.15 µg/m ³	0.15 µg/m ³

a. Not to be exceeded
b. Not to be exceeded more than once per year
c. Compliance based on 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area
d. Not to be exceeded more than once per year on average over 3 years
e. Compliance based on 3-year average of weighted annual mean PM_{2.5} concentrations at community-oriented monitors
f. Compliance based on 3-year average of 98th percentile of 24-hour concentrations at each population-oriented monitor within an area
g. Compliance based on 3-year average of fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area
h. The 2008 8-hour ozone standard would remain in effect until one year after an area is designated for the 2015 8-hour ozone standard, which corresponds with January 16, 2019 based upon attainment designations for the 2015 ozone standard issued on January 16, 2018
i. Permit applications that have not met EPA's grandfathering criteria would have to demonstrate that the proposed project does not cause or contribute to a violation of any revised ozone standards that are in effect when the permit is issued, including the 2015 revised standards
j. Maximum 1-hour daily average not to be exceeded more than one day per calendar year on average
k. The 1-hour ozone standard has been revoked in all areas in which Project activities would occur
l. Compliance based on 3-year average of 99th percentile of the daily maximum 1-hour average at each monitor within an area
m. The 24-hour and annual average primary standards for SO₂ have been revoked.
ppm = parts per million by volume; ppb = parts per billion by volume.
µg/m³ = micrograms per cubic meter.

Air quality control regions (AQCRs) are areas established by the EPA and local agencies for air quality planning purposes, in which State Implementation Plans describe how the NAAQS would be achieved and maintained. The AQCRs are intra- and interstate regions such as large metropolitan areas where improvement of the air quality in one portion of the AQCR requires emission reductions throughout the AQCR. Each AQCR, or smaller portion within an AQCR (such as a county), is designated, based on compliance with the NAAQS, as attainment, unclassifiable, maintenance, or nonattainment, on a pollutant by-pollutant basis. Areas in compliance or below the NAAQS are designated as attainment, while areas not in compliance or above the NAAQS are designated as nonattainment. Areas previously designated as nonattainment that have since demonstrated compliance with the NAAQS are designated as maintenance for that pollutant. Maintenance areas may be subject to more stringent regulatory requirements to ensure continued attainment of the NAAQS. Areas that lack sufficient data to determine attainment status are designated unclassifiable and treated as attainment areas. All Project components occur within areas that are designated as attainment for all criteria pollutants.

Permitting/Regulatory Requirements

Prevention of Significant Deterioration and Nonattainment New Source Review

The Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) air permit programs are designed to protect air quality when air pollutant emissions are increased either through the construction of new major stationary sources or major modifications to existing stationary sources. The WVDEP administer the PSD and NNSR permitting programs in their state. These programs do not apply to the Project.

Title V Permitting

Title V is an operating air permit program run by each state for each facility that is considered a “major source.” Emissions associated with the Project would result from construction activities and would not result in any new sources. Therefore, this program does not apply to the Project.

New Source Performance Standards (NSPS)

The EPA promulgates NSPS to establish emission limits and fuel, monitoring, notification, reporting, and recordkeeping requirements for stationary source types or categories that cause or contribute significantly to air pollution. Emissions associated with the Project are from construction activities and would not result in any new sources; therefore, this program does not apply to the Project.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The 1990 CAA Amendments established a list of 189 hazardous air pollutants (HAPs), resulting in the promulgation of NESHAP. The NESHAP regulate HAP emissions from specific source types located at major or area sources of HAPs by setting emission limits, monitoring, testing, record keeping, and notification requirements. Emissions associated with the Project are from construction activities, no new sources of emissions are proposed, and therefore, this program does not apply to the Project.

State and County Regulations

There are no state or county regulations that apply to the Project.

General Conformity

The EPA promulgated the General Conformity Rule to implement the conformity provision of Title I, Section 176(c)(1) of CAA. Section 176(c)(1) requires that the federal government not engage, support, or provide financial assistance for licensing or permitting, or approve any activity not conforming to, an approved CAA implementation plan.

The General Conformity Rule is codified in Title 40 CFR Part 51, Subpart W and Part 93, Subpart B, Determining Conformity of General Federal Actions to State or Federal Implementation Plans. A conformity determination must be conducted by the lead federal agency if a federal action's construction and operational activities is likely to result in generating direct and indirect emissions that would exceed the conformity threshold (*de minimis*) levels of the pollutant(s) for which an air basin is in nonattainment or maintenance. According to the conformity regulations, emissions from sources that are subject to any NNSR or PSD permitting/licensing (major or minor) are exempt and are deemed to have conformed.

The General Conformity Rule was developed to ensure that federal actions in nonattainment and maintenance areas do not impede states' attainment of the NAAQS. The lead federal agency must conduct a conformity determination if a federal action's construction and operational activities is likely to result in generating direct and indirect emissions that would exceed the General Conformity Applicability threshold levels of the pollutant(s) for which an air basin is designated nonattainment or maintenance. As noted earlier, the Project facilities would be constructed and operated within counties in attainment for all criteria pollutants, therefore, a General Conformity Determination would not be required.

Greenhouse Gases

Greenhouse gases (GHGs) occur in the atmosphere both naturally and as a result of human activities, such as the burning of fossil fuels. GHGs are gases that absorb

infrared radiation in the atmosphere, and an increase in emissions of these gasses has been determined by the EPA to endanger public health and welfare by contributing to global climate change. The most common GHGs emitted during fossil fuel combustion and natural gas transportation are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Emissions of GHGs are typically expressed in terms of CO₂ equivalents (CO₂e), where the potential of each gas to increase heating in the atmosphere is expressed as a multiple of the heating potential of CO₂ over a specific timeframe, or its global warming potential (GWP)⁵. The 100-year GWP of CO₂ is 1, CH₄ is 25, and N₂O is 298. During construction and operation of the Project, these GHGs would be emitted from non-electrical construction and operational equipment, as well as from fugitive CH₄ leaks from the pipeline and aboveground facilities.

On November 8, 2010, the EPA signed a rule that finalizes reporting requirements for the petroleum and natural gas industry under 40 CFR 98. Subpart W of 40 CFR 98 requires petroleum and natural gas facilities that emit 25,000 metric tons or more of CO₂e per year to report annual emissions of specified GHGs from various processes within the facility. Construction emissions are not covered under the GHG Reporting Rule, but those related to the Project are expected to be well below the 25,000 metric tons reporting threshold. There are no operational emissions from the proposed facilities, aside from minor fugitive releases. The EPA has expanded its regulations to include the emission of GHGs from major stationary sources under the PSD program. The EPA's current rules require that a stationary source that is major for a non-GHG-regulated New Source Review pollutant must also obtain a PSD permit prior to beginning construction of a new or modified major source with mass-based GHG emissions equal to or greater than 100,000 tons per year (tpy) and significant net emission increases in units of CO₂e equal to or greater than 75,000 tpy. There are no NAAQS or other significance thresholds for GHGs.

Construction Emissions

Construction of the Project would result in short-term increases in emissions of some pollutants from the use of fossil fuel-fired equipment and the generation of fugitive dust due to earthmoving activities. Some temporary indirect emissions, attributable to construction workers commuting to and from work sites during construction and from on-road and off-road construction vehicle traffic, could also occur. Large earth-moving equipment and other mobile equipment are sources of combustion-related emissions, including criteria pollutants (i.e., NO_x, CO, VOC, SO₂, and PM₁₀).

Rover would mitigate exhaust emissions from construction equipment by requiring contractors to meet all air quality regulations and emission standards associated with each piece of equipment and employ catalytic reduction technology to reduce diesel

⁵ These GWPs are based on a 100-year time period. We have selected their use over other published GWPs for other timeframes because these are the GWPs the EPA has established for reporting of GHG emissions and air permitting requirements. This allows for a consistent comparison with these regulatory requirements.

fuel emissions. Fugitive dust emissions during construction would be mitigated by measures outlined in the Fugitive Dust Control Plan, such as spraying water on unpaved areas subject to frequent vehicle traffic. These emissions present the combined emissions for each facility of construction equipment combustion, on-road vehicle travel, off-road vehicle travel, and earthmoving fugitives.

Construction related emission estimates were based on a typical construction equipment list, hours of operation, and vehicle miles traveled by the construction equipment and supporting vehicles for each area of the Project. Rover conservatively utilized emission factors from EPA's AP-42 along with EPA's NONROAD2008a and MOVES2014a emission modeling software.

Construction is estimated to begin in the second quarter of 2020, lasting approximately three months. The air quality impacts of Project construction would be considered short-term and would be further minimized by Rover's implementation of measures outlined in the Fugitive Dust Control Plan. Following construction, air quality would revert back to previous conditions. Construction emissions for the Project are presented in table 4.

Table 4: Estimated Construction Emissions								
Construction Activity	Emissions (Tons)							
	NO_x	SO₂	CO	PM₁₀	PM_{2.5}	VOC	CO_{2e}	Total HAPs
2020								
Commuter transit	1.9E-02	9.2E-05	0.13	5.0E-04	4.5E-04	1.9E-03	13.46	4.9E-04
On-road vehicles	5.9E-02	2.4E-04	0.10	1.8E-03	1.7E-03	4.3E-03	29.36	9.7E-04
Off-road equipment	0.25	4.8E-04	0.13	2.2E-02	2.2E-02	3.2E-02	63.81	1.3E-03
Open burning	-	-	-	-	-	-	-	-
Construction fugitive dust	-	-	-	0.38	3.9E-02	-	-	-
Roadway fugitive dust	-	-	-	0.74	8.2E-02	-	-	-
Total	0.32	8.1E-04	0.36	1.14	0.15	3.8E-02	106.63	2.8E-03

Given the temporary nature of construction, and the intermittent nature of construction emissions, we find that emissions from construction-related activities for the Project would not be expected to cause or significantly contribute to a violation of any applicable ambient air quality standard, or significantly affect local or regional air quality.

Operational Impacts

There are no operational emission sources aside from 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.

7. Noise

Construction and operation of the Project would affect the local noise environment in the Project area. The ambient sound level of a region, which is defined by the total noise generated within the specific environment, is usually comprised of sounds emanating from both natural and artificial sources. At any location, both the magnitude and frequency of environmental noise may vary considerably over the course of the day and throughout the week, in part due to changing weather conditions and the impacts of seasonal vegetative cover.

The EPA published its Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Two measurements used by some federal agencies to relate the time-varying quality of environmental noise to its known effects on people are the equivalent sound level (L_{eq}) and the day-night sound level (L_{dn}). The L_{eq} is an A-weighted sound level containing the same sound energy as the instantaneous sound levels measured over a specific time period. Noise levels are perceived differently, depending on length of exposure and time of day. The L_{dn} takes into account the duration and time the noise is encountered. Specifically, in the calculation of the L_{dn} , late night to early morning (10:00 PM to 7:00 AM) noise exposures are penalized +10 decibels (dB), to account for people's greater sensitivity to sound during the nighttime hours. The A-weighted scale (dBA) is used because human hearing is less sensitive to low and high frequencies than mid-range frequencies. For an essentially steady sound source that operates continuously over a 24-hour period and controls the environmental sound level, the L_{dn} is approximately 6.4 dB above the measured L_{eq} .

The EPA has indicated that an L_{dn} of 55 dBA protects the public from indoor and outdoor activity interference. We have adopted this criterion and use it to evaluate the potential noise impacts from the proposed Project at noise sensitive areas (NSAs), such as residences, schools, or hospitals. Also, in general, a person's threshold of perception for a perceivable change in loudness on the A-weighted sound level is about 3 dBA, whereas a 6 dBA change is clearly noticeable, and a 10 dBA change is perceived as either twice or half as loud.

Construction Noise

Construction of the facilities would involve operation of general construction equipment and noise would be generated during the installation of the Project components. The construction activities would cause a temporary increase in the ambient noise in the immediate vicinity of the construction site; however, because of the temporary nature of the construction activities, there would be no significant noise impact from construction. Construction noise would be highly variable because the types of equipment in use at a construction site changes with the construction phase and the types of

activities. Noise from construction activities may be noticeable at nearby NSAs. However, construction equipment would be operated on an as-needed basis during the short-term construction period. Further, Rover would limit construction activities to occur during daytime hours, typically 7:00 AM – 5:00 PM Monday-Saturday. Rover stated these hours may be extended if necessary to meet schedule; however, nighttime construction is not anticipated.

Because construction of the Project would be intermittent and primarily limited to daytime hours, we conclude that construction noise would not have a significant impact on the environment.

Operational Noise

Five NSAs were identified near the Project. Estimated operational noise impacts are presented in table 5. As shown in the table, modeling indicates that noise from the Wick M&R Station during operation would be below an L_{dn} of 55 dBA, which protects the public from indoor and outdoor activity interference. There would be no perceptible noise increase at NSAs 1-4. Noise may be perceptible at NSA 5, but the increase falls below the level of being clearly noticeable.

Table 5: Noise Impact Analysis						
NSA	Distance from Meter Station to NSA	Direction	Measured Existing Ambient	Estimated Contribution of Station	Ambient + Station	Increase Above Existing
	feet		dBA	dBA	dBA	dBA
			L_{dn}	L_{dn}	L_{dn}	dBA
1	1,000	E	53.4	25.9	53.4	0.0
2	1,375	SW	47.4	19.5	47.4	0.0
3	1,825	NNE	53.2	31.2	53.2	0.0
4	1,900	NNE		17.0	53.2	0.0
5	500	SW	49.8	52.2	54.2	4.4

To confirm the noise modeling, **we recommend that:**

- **Rover should file noise surveys with the Secretary no later than 60 days after placing the Wick M&R Station in service. If the noise attributable to the operation of the station exceeds an L_{dn} of 55 dBA at any nearby NSAs, Rover should file a report with the Secretary on what changes are needed and should install the additional noise controls to meet the level within 1 year of the in-service date. Rover should confirm compliance with the above requirement by filing a second noise survey with the Secretary no later than 60 days after it installs the additional noise controls.**

Based on the analysis above and our recommendation, we conclude that the Project would not result in significant noise impacts on residents and the surrounding communities.

8. Reliability and Safety

The transportation of natural gas by pipeline involves some incremental risk to the public due to the potential for accidental release of natural 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 DOT is mandated to prescribe minimum safety standards to protect against risks posed by pipeline facilities under Title 49, U.S.C. Chapter 601. The DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) administers the national regulatory program to ensure the safe transportation of natural gas and other hazardous materials by pipeline. It develops safety regulations and other approaches to risk management that ensure safety in the design, construction, testing, operation, maintenance, and emergency response of pipeline facilities. Many of the regulations are written as performance standards which set the level of safety to be attained and allow the pipeline operator to use various technologies to achieve safety. PHMSA's safety mission is to ensure that people and the environment are protected from the risk of pipeline incidents. This work is shared with state agency partners and others at the federal, state, and local level. The DOT pipeline standards are published in Parts 190-199 of Title 49 of the CFR. Part 192 specifically addresses natural gas pipeline safety issues.

The DOT has the exclusive authority to promulgate federal safety standards used in the transportation of natural gas. Section 157.14(a)(9)(vi) of the FERC's regulations require that an applicant certify that it would design, install, inspect, test, construct, operate, replace, and maintain the facility for which a Certificate is requested in accordance with federal safety standards and plans for maintenance and inspection. Under a Memorandum of Understanding on Natural Gas Transportation Facilities (Memorandum) dated January 15, 1993, between the DOT and the FERC, the FERC accepts this certification and does not impose additional safety standards. If the Commission becomes aware of an existing or potential safety problem, there is a provision in the Memorandum to promptly alert DOT. The Memorandum also provides for referring complaints and inquiries made by state and local governments and the general public involving safety matters related to pipelines under the Commission's jurisdiction.

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 specifies material selection and qualification; minimum design requirements; and protection from internal, external, and atmospheric corrosion. 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.

Rover's construction and operation of the Wick M&R Station would represent a minimum increase in risk to the nearby public and we are confident that with implementation of the required design criteria for the design of these facilities, that they would be constructed and operated safely.

9. Cumulative Impacts

In accordance with NEPA and with FERC policy, we identified other actions in the vicinity of the proposed facilities and evaluated the potential for a cumulative impact on the environment. As defined by the Council on Environmental Quality (CEQ), a cumulative effect is the impact on the environment that results from the incremental impact of the action when added to other past, present, and 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. The CEQ guidance states that an adequate cumulative effects analysis may be conducted by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions.

In this analysis, we consider the impacts of past projects within defined geographic scopes as part of the affected environment (environmental baseline) which were described and evaluated in the preceding environmental analysis. However, present effects of past actions that are relevant and useful are also considered. Therefore, we considered the Sherwood Lateral portion of the Rover Pipeline Project as part of the environmental baseline. The Sherwood Lateral includes 23.4 miles of 36-inch-diameter pipeline in Tyler County, West Virginia. It was placed in service in 2018 and the workspaces have been restored. The proposed Project is adjacent to the right-of-way for the Sherwood Lateral.

Our cumulative effects analysis focuses on potential impacts from the proposed project on resource areas or issues where the incremental contribution could result in cumulative impacts 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:

- affects a resource also potentially affected by the Project;

- causes this impact within all, or part of, the Project area defined by the resource-specific geographic scope; and
- causes this impact within all, or part of, the time span of the Project’s estimated impacts.

The EA analyzed the Project’s impacts on geology and soils; groundwater; vegetation and wildlife; land use and visual resources; cultural resources; and air quality and noise. We determined there would be no impacts on surface water, wetlands, fisheries, recreation, and socioeconomics; therefore, these resources are not considered in this cumulative impact analysis. We also determined there would be “no effect” on ESA listed species and that no cultural resources are within or near the Project; therefore, special status species and cultural resources are not considered further in this cumulative impact analysis. Similarly, we determined that the Project impacts on geology, groundwater, visual resources, vegetation, wildlife, and air quality and noise would not be sufficient to cause cumulative impacts. The resources considered in the cumulative impact analysis for the Project therefore includes soils and land use (including visual aesthetics). The geographic scope used to assess cumulative impacts for each resource are discussed below in table 6.

Table 6: Geographic Scope of Cumulative Impacts Analysis	
Resource	Geographic Scope
Soils	Construction workspace
Land Use, Visual Resources	1 mile radius

The actions considered in our cumulative impact analysis may vary from the Project in nature, magnitude, and duration. These actions are included based on the likelihood of their impacts coinciding with the Project, meaning the other actions have current or ongoing impacts or are “reasonably foreseeable.” The actions we considered are those that could affect similar resources during the same timeframe as the Project. Multiple projects were identified as possible contributors to cumulative impacts in the area, these are listed in table 7. The anticipated cumulative impacts of the Project and these other actions are discussed below.

Table 7: Existing or Proposed Projects in Tyler County Evaluated for Potential Cumulative Impacts				
Project	Description	Approximate Closest Distance to Project (miles)	Project Status	Potential Resources Cumulatively Affected
Equitrans/Eureka Interconnect Project	Equitrans/Eureka proposes to construct 16 miles of 16- and 8-inch-diameter pipeline in Tyler and Pleasants counties to an interconnection with Rover's Sherwood Lateral in Tyler county.	Adjacent	Construction scheduled to start January 2020	Soils, land use
Powerline extension for proposed Project	Rover proposes to electrify the proposed Project facility, necessitating 4-5 utility poles to across a 1,050' span	Adjacent	Construction scheduled to start third quarter of 2020.	Land use

Soils

Construction of the Project would result in minor and primarily temporary impacts on near-surface soils, as discussed in section B.1.2. Cumulative impacts on soils can occur if projects are constructed concurrently or if one project re-disturbs an area that has been previously stabilized and restored by another project. The Eureka Interconnect project, the electric powerline, and the Wick M&R Project would overlap geographically and temporally. Specifically, the Project area is fully within land that would be previously disturbed by the Eureka Interconnect project. Although Rover would need to contract with the local electric company to provide electric power from Wick Road to the new station, Rover has determined that only 4-5 poles would be needed to electrify the station and would be installed on previously disturbed Eureka-owned land. These projects would be required to implement similar measures to prevent erosion and stabilize disturbed areas, and with these measures the cumulative impacts would not be significant.

Land Use and Visual Resources

The Project would permanently convert about 0.9 acre of open land to industrial land use. The conversion of land to a developed land use would result in cumulative impacts on land use. However, this impact would be minor as the Project area is located adjacent to existing right-of-way and is on land owned by the customer. The pre-construction land uses of temporary construction areas could resume once restoration of the projects are complete. As stated above in soil resources, the Project area is fully within land that would be previously disturbed by the Eureka Interconnects project. The majority of the Eureka facilities would be located within a large Equitrans/Eureka-owned property. Further, the Project only involves minor new aboveground facilities with a limited number of new utility poles required to power these facilities. Therefore, we

conclude that the impacts of this Project would not contribute to significant cumulative impacts on land use and we do not anticipate any significant cumulative land use impacts.

Removal of herbaceous vegetation and the presence of heavy equipment would create minor impacts on visual resources during active construction of the proposed Project. These impacts would be cumulative with construction activities for the Eureka interconnect project and the powerline project, as the timeframe for all three projects would overlap. These impacts would be minor and temporary and would cease once construction is complete. The long-term visual impacts resulting from the Eureka interconnect project, powerline project, and the proposed Project would be permanent but minor. Eureka's interconnect project primarily involves installations below grade and visual impacts would be minor following restoration. While forest impacts from Eureka's project would be long-term, they would not be cumulative with the proposed Project, as the Wick M&R station would not require forest removal. Permanent visible features would include the presence of 4-5 utility poles, new permanent access roads, and the aboveground facilities associated with Rover's M&R station. We have recommended that Rover implement visual screening methods to mitigate impacts on the viewshed. Overall, we conclude the projects would represent a minor cumulative visual alteration in the Project area.

Cumulative Impact Conclusion

Overall, cumulative impacts 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.

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 at the intended interconnect point. It is reasonable to assume the customer could 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 customer 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.

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.

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 during scoping 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. 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 constructs and operates 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;
 - 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, EIs, 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 locations shall be as shown in the EA, as supplemented by filed alignment sheets and maps. **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 workspace rearrangements 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 Commission's *Upland Erosion Control, Revegetation, and Maintenance 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:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. Rover shall employ at least one EI for the Project. 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

- d. 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 **monthly** 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 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.
12. Rover shall file noise surveys with the Secretary **no later than 60 days** after placing the Wick Meter and Regulator Station in service. If the noise attributable to the operation of the station exceeds an Ldn of 55 dBA at any nearby NSAs, Rover shall file a report with the Secretary on what changes are needed and shall install the additional noise controls to meet the level **within 1 year** of the in-service date. Rover shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.
13. **Prior to construction**, Rover shall file with the Secretary, for review and written approval by the Director of OEP, a visual screening plan for the Wick Meter and Regulator Station. The plan shall identify the locations of facility components and the location, type, quantity, and height of vegetation to be planted, or other equivalent screening, to minimize permanent visual impacts to residences. The plan shall include measures to inspect, maintain, and replace vegetation screening if mortality occurs. The plan shall also address nighttime lighting and include measures to mitigate nighttime visual impacts to adjacent residences.

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F. LIST OF PREPARERS

Wazaney, Brad – Project Manager, Cultural Resources

Ph.D., Anthropology, 2006, Washington State University

M.A., American Studies, 2001, University of Wyoming

B.A., History, 1996, Old Dominion University

Jensen, Andrea – Geology, Soils, Groundwater Resources

B.S., Environmental Geology, 2012, College of William and Mary

McDaniel, Nina - Air Quality, Noise, Safety and Reliability

M.S., Engineering Management, 2012, University of New Orleans

B.S., Civil Engineering, 2010, University of New Orleans

Plummer, Amber – Surface Water, Vegetation and Wildlife

M.S., Environmental Biology, 2020, Hood College

B.S., Environmental Science and Studies, 2016, Towson University