UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590

SEP 01 2016

REPLY TO THE ATTENTION OF:
E-19J

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St., N.E., Room 1A
Washington, DC 20426

Re: Final Environmental Impact Statement (FEIS) for the Rover Pipeline Project, Panhandle Backhaul Project, and Trunkline Backhaul Project (FERC Docket Nos. CP15-93-000, CP15-94-000, CP15-96-000, Respectively) (CEQ No. 20160181)

Dear Ms. Bose:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the United States Environmental Protection Agency (EPA) has completed its review of the Federal Energy Regulatory Commission's (FERC) FEIS for the Rover Pipeline Project, Panhandle Backhaul Project, and Trunkline Backhaul Project (Projects), proposed by Rover Pipeline, LLC (Rover), Panhandle Eastern Pipe Line Company, LP (Panhandle), and Trunkline Gas Company, LLC (Trunkline), respectively.

Rover, Panhandle, and Trunkline (Projects Proponents) request FERC authorization to construct and operate certain interstate natural gas pipeline facilities in Michigan, Ohio, Pennsylvania, West Virginia, Indiana, Illinois, Tennessee, and Mississippi to deliver up to 3.25 billion cubic feet per day (Bcf/d) of natural gas supply from the Marcellus and Utica Shale producers in Pennsylvania, West Virginia, and Ohio through interconnections with existing pipeline infrastructure in Ohio and Michigan to supply interstate natural gas pipelines and storage facilities as well as markets in the Gulf Coast, Midwest, and Canadian regions.

EPA commented on the Draft EIS (DEIS) on April 11, 2016. We rated the DEIS as Environmental Concerns, Insufficient Information (EC-2). Our comments and recommendations called for additional information and analysis to be included in the FEIS regarding water resources, biological resources, environmental justice populations, noise impacts, greenhouse gas emissions and climate change, and mitigation.

This letter represents the coordinated review and consolidated comments by EPA Regional Offices in Region 3 (Philadelphia, with responsibilities for actions in Pennsylvania and West Virginia), Region 4 (Atlanta, with responsibilities for actions in Mississippi and Tennessee), and Region 5 (Chicago, with responsibilities for actions in Illinois, Indiana, Michigan, and Ohio). Our review of the FEIS and FERC's responses to EPA's DEIS comments (FEIS, pages T-16 to

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T-37) indicates that many of our earlier comments and recommendations were considered and addressed. We appreciate the reduction of wetland impacts since the DEIS due to the elimination of the wetland impacts associated with the Burgettstown and Dennison contractor yards. However, the FEIS does not include draft wetland and stream mitigation plans, the Migratory Bird Conservation Plan with forest compensation mitigation commitments, nor emergency response plans. EPA recommends that FERC and the Projects Proponents continue to work closely with the regulatory agencies on permitting issues, the affected communities, and other stakeholders as the proposed Projects proceed.

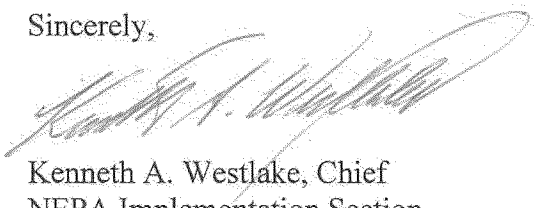
EPA recommends FERC's Record of Decision (ROD) take into consideration and include the Final Migratory Bird Conservation Plan that includes forest compensation mitigation approved and agreed to by the U.S. Fish and Wildlife Service, wetland and stream mitigation plans and emergency response plans. In addition, the cumulative scale of impacts to wetlands and streams is substantial and EPA recommends the Projects should undergo U.S. Army Corps of Engineers, Clean Water Act, Section 404 individual permitting, rather than permitting under Corps Nationwide Permit Number 12. See the enclosure for additional comments.

When FERC issues the ROD, please send paper copies and CDs of the ROD to EPA Regional Offices as follows:

- EPA Region 5: one (1) paper copy and 2 (2) sets of CDs,
- EPA Region 4: one (1) set of CDs, and
- EPA Region 3: one (1) set of CDs.

Thank you for the opportunity to provide comment on the FEIS. If you or your staff have any questions or concerns, I can be reached at 312-886-2910, or contact Virginia Laszewski of my staff at laszewski.virginia@epa.gov or 312-886-7501.

Sincerely,



Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure: EPA FEIS Comments

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U. S. EPA COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS) FOR THE ROVER PIPELINE PROJECT, PANHANDLE BACKHAUL PROJECT AND TRUNKLINE BACKHAUL PROJECT, MICHIGAN, OHIO, PENNSYLVANIA, WEST VIRGINIA, INDIANA, ILLINOIS, TENNESSEE, AND MISSISSIPPI (JULY 29, 2016)
(CEQ NO. 20160181)

Proposed Action
The FEIS (page ES-1) states *"Rover's proposal (the Rover Pipeline Project, referred to as the Rover Project) would involve construction and operation of new 24-, 30-, 36-, and 42-inch-diameter natural gas pipeline in 510.3 miles of right-of-way and associated equipment and facilities in Pennsylvania* [Washington County], *West Virginia* [Marshall and Doddridge Counties], *Ohio,* [Harrison, Monroe, Defiance, Carroll, Wayne, Crawford and Noble Counties] *and Michigan* [Washtenaw, Lenawee and Livingston Counties]. *Rover also proposes to construct and operate aboveground facilities including 10 new compressor stations, 21 new meter stations (11 of which would be located within the new compressor stations), 77 mainline valves, and 11 pig launchers/receivers.*

Panhandle's proposal (the Panhandle Backhaul Project, referred to as the Panhandle Project) would involve modification of piping at four existing compressor stations [Allen, Parke, and Marion Counties, IN and Douglas County, IL] *as well as Modifications at three valve site locations* [Lenawee County, MI, and Vermilion and Hamilton Counties, IN]. *All proposed modifications would be to existing infrastructure to allow for bidirectional flow of natural gas through the Panhandle system as well as to establish the Panhandle-Rover Interconnect near Defiance, Ohio. The Panhandle Project would not involve construction of new pipeline or other associated facilities.*

Trunkline's proposal (the Trunkline Backhaul Project, referred to as the Trunkline Project) would involve modifications of existing piping at the Johnsonville [Wayne County, IL], *Joppa* [Massac County, IL], *Dyersburg* [Dyer County, TN], *and Independence Compressor Stations* [Tate County, MS] *to allow for bi-directional flow of natural gas. The Trunkline Project would also include modifications of the existing Panhandle-Trunkline Interconnect through installation of valves and fittings and modification of piping within the Panhandle-Trunkline Tuscola Compressor Station* [Douglas County, IL], *as well as construction and modifications at the existing Bourbon Meter Station* [Douglas County, IL].

According to Rover, the Rover Project was developed in response to stranded domestic natural gas supply from the Marcellus and Utica Shale producers in Pennsylvania, West Virginia, and Ohio to the Defiance Compressor Station and interconnection with Vector Pipeline, L.P. [Livingston, MI], *and transporting it to interconnections with the existing pipeline infrastructure in Ohio and Michigan supplying interstate natural gas pipelines and storage facilities as well as markets in the Gulf Coast, Midwest, and Canadian regions. Panhandle stated that the purpose of its Project is to construct and operate the system modifications that will allow Panhandle to meet the new demand for east-to-west transportation and still maintain its existing obligations for west-to-east contracts. Trunkline stated that the purpose of its Project is to modify and update*

existing facilities to provide bi-directional transmission of natural gas from the Midwest to the Gulf Coast region."

Geology
General Impacts and Mitigation
Steep Slopes and Landslides
The FEIS (page 4-32) states "*Several areas exist along the Rover Project area that have steep slopes and have a high susceptibility for landslide activity. Rover prepared a geo-hazard evaluation of areas of steep slopes and landslides. Mitigation measures recommended in the report include minimizing the clearing of vegetation, avoiding over-steepening or undercutting of slopes, alterations to the natural drainage, and use of best management practices (BMPs) for stormwater drainage and control. The geo-hazard evaluation also included potential mitigation measures for observed hazards relating to steep slopes and landslides, including:*

- *placing spoils on downslope side of excavation and flattening or reducing slope height should ground movement be observed;*

- *using soil erosion BMPs such as hay bales, silt fence, and channel control for soil erosions;*

- *establishing ditches, positive drainage, and surface grading for surface water runoff;*

- *using sumps, point wells, and vertical and horizontal drains if groundwater seepage is encountered;*

- *using retraining structures and/or angles as well as consulting a geotechnical engineer for steep, angled, or scalloped bedrock; and*

- *avoiding blasting and using specialized equipment in areas where there are boulders.*

However, Rover has not indicated if it would follow these additional measures; therefore, we recommend that: • Prior to construction, Rover should file with the Secretary clarification that it has adopted the mitigation measures outlined in its October 2015 Geohazard Evaluation Report."

Recommendation: EPA recommends FERC require Rover to adopt the mitigation measures outlined in the October 2015 Geohazard Evaluation Report.

Karst Topography
The FEIS (page 4-28) states "*The aerial and follow-up field surveys identified five areas that would require monitoring by a geologist during construction. These areas are found along Mainlines A and B in Seneca, Hancock, Wood, and Henry Counties, Ohio:*

- *MPs 138.70 to 139.20;*
- *MPs 140.80 to 141.50;*
- *MPs 143.00 to 143.70;*

- *MPs 159.22 to 159.30; and*
- *MPs 159.65 to 159.75.*

However, Rover has not indicated if it would have a professional geologist monitor these areas during construction; therefore to adequately assess the impacts on these karst areas, we [FERC staff] *recommend that: • Rover should hire a professional geologist to monitor construction of the Project in the five areas that were identified in the January 2016 Field Reconnaissance of Karst Prone Areas Report."*

> **Recommendation:** EPA recommends FERC require Rover to hire a professional geologist to monitor construction of the Project in the five areas that were identified in the *January 2016 Field Reconnaissance of Karst Prone Areas Report."*

Contaminated Soils (Section 4.2.2.7, pages 4-45 and 4-65)
The FEIS (pages 4-45 and 4-65) incorrectly identifies Pennsylvania as the location of the Kaul Clay brownfields site. The Kaul Clay site is located in Toronto, Jefferson County, Ohio. The FEIS goes on to state "The *site was identified to contain volatile organic compounds, semi-volatile organic compounds, petroleum products, and lead through an EPA brownfield assessment. Assessment of the site was completed in 2012 (EPA, 2015c), but as of February 2016 cleanup activities had not started."*

> **Recommendation:** EPA recommends that ROD identify the correct location of the Kaul Clay site as Toronto, Jefferson County, Ohio.

Water Resources
Groundwater Resources
Monitoring Groundwater Levels/Construction
If the water table is encountered/intercepted during construction, impacts such as turbidity and water level fluctuations to specific discharging points might occur. For example, the Trunkline Project would require excavations of up to 8 feet deep in areas where the water table could occur less than 10 feet below the surface (4.3.1.1).

> **Recommendations**: EPA recommends the use of water table observation wells to forecast the need for dewatering practices, especially in areas where high water table might already be known to occur. Forecasting a need for dewatering can result in a properly designed and constructed retention structure if suitable well-vegetated upland locations are not available. Appropriately built retention structures can encourage more natural non-polluting water infiltration and at the same time can be used to control stormwater runoff. Additionally, the use of trench breakers can help to mitigate the flow of water rushing through the trench consequently following the construction path. Further, the prevention of compacting soils surrounding the area by eliminating the traffic of heavy equipment would diminish the impacts to groundwater.

Contaminated Groundwater
The FEIS (page 4-64) identifies that the proposed location for the Dover Contractor Yard is in close proximity to the Reilly Tar & Chemical Company (Reilly Tar) Superfund site in Dover,

Ohio.

> **Recommendation:** For the most recent information and coordination regarding the Reilly Tar Superfund site, the Project Proponents should contact John Fagiolo, EPA Remedial Project Manager (phone: 312/886-0800).

Wellhead Protection Areas (WHPAs)
West Virginia, Ohio and Michigan (FEIS, page 4-60): One WHPA would be crossed in West Virginia and eight in Ohio. Ten WHPAs would be crossed in Michigan: seven would be crossed by the Market Segment, and three are within the Whitmore Lake Contractor Yard site. The FEIS (FERC responses to EPA's comments) identifies that Rover has not provided FERC with updated information regarding consulting with the water suppliers in the project area, and FERC staff did not contact the water suppliers since the DEIS.

> **Recommendation:** EPA recommends FERC require Rover to contact the relevant water suppliers to discuss any concerns the water suppliers may have regarding the project, and identify additional measures that will be implemented to protect water supplies during project construction and operation.

Surface Water Resources

Potable Water Supply Surface Water Resources
FEIS (page 4-74) states *Rover identified six waterbodies that would be crossed within 3 miles upstream of potable water supply surface water intakes in Ohio (see table 4.3.2-3).*

> **Recommendation:** EPA recommends FERC require Rover to contact the relevant water suppliers to discuss any concerns the water suppliers may have regarding the project and identify additional measures that will be implemented to protect water supplies during project construction and operation.

Hydrostatic Testing (Section 4.42.2.3, page 4-82)

> **Recommendations:** EPA recommends that water used during hydrostatic testing of existing pipeline facilities be sampled before it is discharged to well-vegetated upland areas to ensure that pre-cleaning of test segments sufficiently cleaned the segments and successfully removed residual product from the pipe. Pre-cleaning water and test water contaminated with petroleum product should be hauled off site and disposed of properly. Prior to hydrostatic testing, Rover should confirm that contaminated test water will be taken off site to an approved disposal site. Rover should also disclose the location of the disposal site(s) and volume of water to be disposed. We recommend these concerns be addressed in the form of a testing and disposal plan that is made a condition in the FERC ROD.

Wetlands and Streams/Mitigation/CWA Section 404 Permits
The FEIS (page 4-96) states *"Construction of the Project would impact a total of 160.01 acres of wetland, including 33.35 acres of forested wetlands, 29.29 acres of scrub-shrub wetlands, and*

97.37 acres of emergent wetlands." This is a reduction in wetland impacts subsequent to the DEIS, based on Project changes by Rover regarding the Burgettstown contractor yard and Dennison contractor yard. Both of these yards would no longer result in impacts to wetlands.

However, the FEIS (4.4.5 Compensatory Mitigation, page 4-101) continues to identify that the project proponent did not provide a compensatory mitigation plan as part of its application to the U.S. Army Corps of Engineers for a Clean Water Act Section 404 Nationwide Permit Number 12.

> **Recommendation:** Based on the information available, including the scale of the project, the number of wetland and stream crossings, the temporal and permanent impacts to forested wetlands proposed, and the lack of even draft wetland and stream mitigation plans in the FEIS, EPA recommends that the Rover project be permitted via an individual Section 404 permit.

Compressor Station/Mitigation Measure

> **Recommendation:** EPA recommends the construction of rain gardens for erosion and runoff mitigation while decreasing impervious surfaces to improve surface and groundwater quality. EPA recommends adopting this low-cost easy to achieve recommendation for every compressor station.

Vegetation and Wildlife

Forest/Interior Forest/Migratory Birds/Forest Fragmentation/Habitat

The FEIS (pages 4-104) discloses that the Rover Project would impact 9,251.8 acres of vegetated land during construction and 3,375.4 acres of vegetated land during operation. Of the Rover Project acres affected by construction, 3,000.6 acres are upland forested areas, 763.1 acres are upland open lands, 5,328.0 acres are agricultural lands, and 160.0 acres are wetlands, including 33.4 acres of forested wetlands.

"Rover would cross an estimated 79 miles of interior forest habitat, which includes upland and wetland vegetation communities. Construction activities for the pipeline would impact 1,315.7 acres of interior forest habitat with operation of the pipeline facilities permanently eliminating 585.6 acres of interior forest." (FEIS, page 4-106)

The FEIS (page ES-5) states *"Although Rover has attempted to route its pipeline adjacent to existing disturbed areas and outside forested areas where possible, impacts on forest habitat represent a significant impact, and the migratory birds and other wildlife that use it, with forested land accounting for about 32 percent of the total Project route. Rover is developing a migratory bird conservation plan in consultation with the FWS that would include mitigation for forest habitat impacts."*

The FEIS (page 5-7) states *"We* [FERC staff] *are recommending that Rover provide its final Migratory Bird Conservation Plan which should include details of the FWS' required compensation and mitigation measures. Additionally, we are recommending that Rover restrict all tree clearing to between October 15 and March 31 for the entire project to avoid impacts on*

listed bat species. Because this timing window encompasses the clearing window for Migratory Birds (and is further restrictive) this recommendation would also avoid impacts on Migratory Birds."

Recommendations: EPA recommends FERC consider the Final Migratory Bird Conservation Plan that includes forest compensation mitigation approved and agreed to by the U.S. Fish and Wildlife Service prior to finalizing the ROD.

Noxious Weeds and Other Invasive Plant Species

The FEIS Appendix G-10 includes Rover's Invasive Species Plan. However, FEIS (page 4-18) states *"Measures in the plan focus on post-construction activities and restoration. However, the plan does not provide mitigation measures that would occur during construction of the Rover Project. Given the potential for construction activities to introduce or spread invasive species along the construction right-of-way, additional precautions should be taken during construction to alleviate these concerns and prevent the spread of invasive species.*

Therefore, we [FERC staff] *recommend that: Prior to construction, Rover should revise the Invasive Species Plan, in consultation with the appropriate federal, state, and local agencies, to include mitigation measures that would be taken during construction to prevent the spread of invasive species. Mitigation may include, but is not limited to: training of workers in the recognition of invasive species and to be familiar with locations where invasive species were identified during surveys, cleaning of equipment prior to entering the right-of-way, or setting up wash stations to remove invasive species from vehicles, equipment, and materials in areas identified as having an invasive species present. Rover should file the revised plan with the Secretary, for review and written approval of the Director of OEP."*

Recommendation: EPA recommends Rover's Invasive Species Plan be revised per FERC staff recommendations, approved by the appropriate federal state and local agencies, submit to FERC staff for concurrence, and made part of FERC's ROD.

Air Quality

Recommendation: EPA has issued three final rules that together will curb emissions of methane, smog-forming volatile organic compounds (VOCs) and toxic air pollutants such as benzene from new, reconstructed and modified oil and gas sources, while providing greater certainty about Clean Air Act permitting requirements for the industry. To comply with these rules please go to: https://www3.epa.gov/airquality/oilandgas/actions.html.

Emergency Generators

The FEIS identifies emergency generators at compression stations for the Rover Project. The FEIS does not identify whether emergency generators exist or may be replaced at the compressor stations associated with the Panhandle and Trunkline Projects.

Recommendation: EPA wants to make you aware that there are two specific rules for new source engines. One of these rules would apply to generators at compressor stations.

In order to learn and comply with these rules please visit: http://www.epa.gov/region1/rice.

Compressor Stations/Mitigation Measure

Recommendations: EPA recommends the use of low maintenance trees and vegetation to reduce pollutants from compressors' emissions and from maintenance activities. For example, the location of the Independence Compressor Station has a large unvegetated area that may be conducive for such targeted plantings. EPA recommends adopting this low-cost easy to achieve recommendation for every compressor station.

Construction/Mitigation Measures

Recommendations: EPA recommends that for new equipment utilize contract specifications requiring advanced pollution controls and clean fuels: http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf and http://www.epa.gov/cleandiesel/technologies/index.htm.

Implement diesel controls, cleaner fuel, and cleaner construction practices for on-road and off-road equipment used for transportation, soil movement, or other construction activities, including:

- Strategies and technologies that reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and strict enforcement of idling limits; and,

- Use of clean diesel through add-on control technologies like diesel particulate filters and diesel oxidation catalysts, repowers, or newer, cleaner equipment.

For more information on diesel emission controls in construction projects, please see: http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf

Reliability and Safety

DEIS (page 4-225) states *"Rover would prepare an emergency response plan that would provide procedures to be followed in the event of an emergency that would meet the requirements of 49 CFR 192.615."*

Recommendation: EPA recommends Rover's Emergency Response Plan is taken into consideration during FERC's decision making process.

Greenhouse Gas Emissions

The FEIS includes a discussion of the greenhouse gas (GHG) emissions associated with construction of the project, and annual emissions from the operation of the compressor stations, but does not include estimates of the GHG emissions associated with the production and combustion of the natural gas transported by this project. FERC should consider and disclose GHG emissions levels in its NEPA analyses, as outlined in CEQ's August 1, 2016 Final

Guidance on the Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA reviews. For example, on the topic of direct and indirect GHG emissions, the CEQ guidance states: "If the direct and indirect GHG emissions can be quantified based on available information, including reasonable projections and assumptions, agencies should consider and disclose the reasonably foreseeable direct and indirect emissions when analyzing the direct and indirect effects of the proposed action."

In the FEIS, FERC includes comparisons of project-level greenhouse gas emissions to statewide emissions levels. This type of comparison is not appropriate, and EPA recommends it be removed from the FEIS. As CEQ stated in its finalized Guidance, such comparisons are "not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact."[1]

Methane Leakage

FERC has included GHG estimates from methane leakage from the proposed action, but the FEIS does not describe potential mitigation for methane leakage. EPA has compiled useful information on technologies and practices that can help reduce methane emissions from natural gas systems, including specific information regarding emission reduction options for natural gas transmission operations that could improve future NEPA documents. This information can be found at: (http://www.epa.gov/gasstar/methaneemissions/onshore_transmission_storage.htm)

> **Recommendation:** EPA recommends the ROD for this project should commit to appropriate measures to avoid, minimize, and mitigate project-related methane leakage.

[1] CEQ Final Guidance on the Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, pg.11.