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Texas Eastern Transmission, LP

Docket No. CP20-37-000

Lilly Compressor Units Replacement Project

Environmental Assessment



Washington, DC 20426

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TECHNICAL ACRONYMS AND ABBREVIATIONS

APE	Area of Potential Effects
AQCR	Air Quality Control Region
ATWS	Additional temporary workspace
BMP	Best Management Practices
Certificate	Certificate of Public Convenience and Necessity
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO&A	Consent Order and Adjudication
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalents
Commission	Federal Energy Regulatory Commission
CS	Compressor station
dB	Decibel
dBA	A-weighted decibel
DOT	U.S. Department of Transportation
E&SCP	Erosion and Sediment Control Plan
EA	environmental assessment
ECD	Erosion Control Devices
EI	environmental inspector
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FDCP	Fugitive Dust Control Plan
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
g	Gravity
GHG	greenhouse gas
GWP	global warming potential
HAP	hazardous air pollutants
hp	Horsepower
HUC	Hydrologic Unit Code
L _{eq}	equivalent sound level
L _{dn}	day-night sound level
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NGA	Natural Gas Act
NNSR	Nonattainment New Source Review
NO ₂	nitrogen dioxide

NO _x	nitrogen oxides
N ₂ O	nitrous oxide
NOI	<i>Notice of Intent to Prepare an Environmental Assessment for the Proposed Lilly Compressor Units Replacement Project and Request for Comments on Environmental Issues</i>
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSA	noise sensitive area
OEP	Office of Energy Projects
PADEP	Pennsylvania Department of Environmental Protection
PAR	permanent access road
PCB	polychlorinated biphenyl
PADCNR	Pennsylvania Department of Conservation and Natural Resources
PEM	palustrine emergent
PNDI	Pennsylvania Natural Diversity Inventory
PFO	palustrine forested
PGC	Pennsylvania Game Commission
Plan	<i>FERC's Upland Erosion Control, Revegetation, and Maintenance Plan</i>
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to 10 microns
Procedures	<i>FERC's Wetland and Waterbody Construction and Mitigation Procedures</i>
Project	Lilly Compressor Units Replacement Project
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
Secretary	Secretary of the Commission
SHPO	State Historic Preservation Officer
SO ₂	sulfur dioxide
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Service
VOC	volatile organic compound

A. PROPOSED ACTION

1.0 INTRODUCTION

The staff of the Federal Energy Regulatory Commission (Commission or FERC) has prepared this environmental assessment (EA) to assess the environmental effects of the natural gas pipeline facilities proposed by Texas Eastern Transmission, LP (Texas Eastern) in Cambria County, Pennsylvania. On January 10, 2020, Texas Eastern filed an application with the Commission in Docket No. CP20-37-000 for the Lilly Compressor Units Replacement Project (Project) under section 7 of the Natural Gas Act (NGA) and part 157 of the Commission's regulations.

We¹ prepared this EA in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality's regulations for implementing NEPA (Title 40 of the Code of Federal Regulations [CFR], Parts 1500-1508 [40 CFR 1500-1508]), and the Commission's regulations for implementing NEPA (18 CFR 380). The assessment of environmental impacts is an important and integral part of the Commission's decision-making process. As such, we prepared this EA to assess the environmental impacts that would likely occur as a result of the proposed Project. We have developed and incorporated measures into this EA that we believe would appropriately and reasonably avoid, minimize, or mitigate environmental impacts associated with the Project activities.

2.0 PURPOSE AND NEED

Texas Eastern stated that the Project purpose is to replace the four compressor units currently in the Lilly Compressor Station (CS) with two new, more efficient gas turbine units to comply with future air emission reduction requirements of the Commonwealth of Pennsylvania and the terms of the existing Title V permit, which requires that the existing compressor units be permanently shut down by January 1, 2024.

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 impacts.

Section 7(b) of the NGA specifies that no natural gas company shall abandon any portion of its facilities subject to the Commission's jurisdiction without the Commission first finding that the abandonment will not negatively affect the present or future public convenience and necessity.

3.0 PROPOSED FACILITIES

The Project would entail replacing the four existing gas turbine units totaling 34,800 horsepower (hp) with two new, more efficient, 18,100 hp gas turbine units. Software controls would be installed on the two new units to limit the total station hp to 34,800 hp, keeping the

¹ "We", "us", and "our" refer to the environmental staff of the Office of Energy Projects.

delivery capacity at the station the same. The Project also entails the construction of a new compressor building to house the two new compressor units. The existing units are currently in two separate buildings, both of which would be removed from service but remain in place. Additional facilities to be updated or installed include a generator building, an electrical control building, a service entrance building, and an auxiliary building as well as installation of four filter separators. The Project would also require installation of a new stormwater management retention basin.

These locations are depicted in figure 1.

4.0 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 interest. Occasionally, proposed 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, such as a power plant at the end of a jurisdictional pipeline, or they may be minor, non-integral components of the facilities under the Commission’s jurisdiction.

There are no non-jurisdictional facilities associated with construction of the Project.

5.0 PUBLIC REVIEW AND COMMENT

On February 25, 2020, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the Proposed Lilly Compressor Units Replacement Project and Request for Comments on Environmental Issues* (NOI). The NOI was mailed to affected landowners, federal, state, and local government representatives and agencies; elected officials; Native American tribes; environmental and public interest groups; and newspapers and libraries in the Project area. The NOI requested written comments from the public on the scope of the analysis for the EA. The public scoping period closed on March 25, 2020. We received no comments in response to the NOI. In preparing this EA, we are fulfilling our obligation under NEPA to consider and disclose the environmental impacts of the Project. This EA addresses the impacts that could occur on a wide range of resources, should the Project be approved and constructed.

6.0 PERMITS, APPROVALS, AND REGULATORY CONSULTATIONS

Table 1 provides a list of known federal, state, and local permits for the Project, as well as any responses that have been received to date. Texas Eastern would be responsible for obtaining all permits and approvals required for the Project, regardless of their listing in table 1.

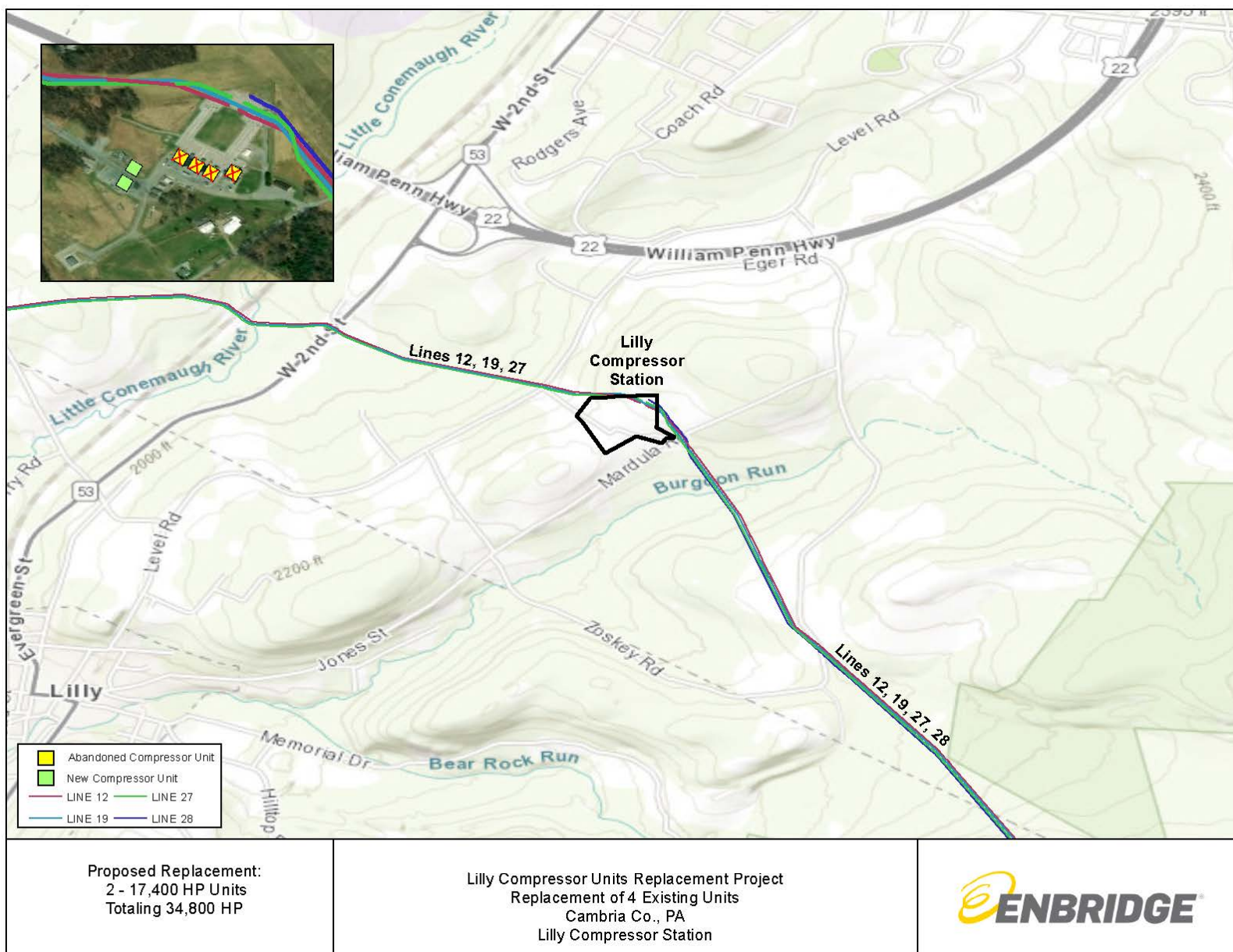


Figure 1
General Location Map

Table 1 Applicable Major Permits, Authorizations, and Clearances		
Agency	Permit/Approval Title	Status
Federal		
FERC	Certificate of Public Convenience and Necessity	Submitted January 2020- Pending
U.S. Fish and Wildlife Service (FWS)	Endangered Species Act, Section 7 Consultation	Completed November 19, 2019
Commonwealth of Pennsylvania		
Pennsylvania Department of Environmental Protection (PADEP), Bureau of Clean Water	Temporary Discharge Permit for Construction Activities	To be submitted 2 nd quarter 2020
	National Pollutant Discharge Elimination System General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines	To be submitted 2 nd quarter 2020
PADEP, Regional Permit Coordination Office	Section 401 Water Quality Certification	To be submitted 2 nd quarter 2020
PADEP, Bureau of Clean Water and Cambria County Conservation District	Erosion and Sediment Control General Permit for Earth Disturbance Associated With Oil and Gas Exploration, Production, Processing, Or Treatment Operations or Transmission Facilities	To be submitted 2 nd quarter 2020
PADEP, Bureau of Air Quality	Plan Approval to Construct, Modify, or Reactivate an Air Contamination Source	Filed December 31, 2019- Pending
PA Natural Heritage Program PA Game Commission PA Department of Conservation and Natural Resources (PADCNR) PA Fish and Boat Commission	Pennsylvania Natural Diversity Inventory review	Completed August 7, 2019
PA Historical and Museum Commission; State Historic Preservation Office	Consultation under Section 106, National Historic Preservation Act	Completed December 4, 2019

7.0 CONSTRUCTION, OPERATION, AND MAINTENANCE

Texas Eastern would construct, operate, and maintain the Project in compliance with all applicable federal and state permit requirements, regulations, and environmental guidelines, including the U.S. Department of Transportation (DOT) under 49 CFR 192 - *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*. During all phases of the Project, Texas Eastern would follow the applicable Occupational Safety and Health Administration Requirements.

Texas Eastern anticipates that construction of the Project would begin in March 2021 with an in-service date of November 1, 2021. Construction activities would occur during daytime hours of 7:00AM to 7:00PM Monday through Saturday, with intermittent nighttime and Sunday work when required for activities such as hydrostatic testing, and tie-in activities.

During construction and restoration of the Project, Texas Eastern would implement the measures contained in the following plans, in addition to other federal, state, and local permit requirements:

- FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan);²
- FERC's *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures);³
- Spill Prevention Control and Countermeasures Plan (SPCC Plan);
- Procedures Guiding the Discovery of Unanticipated Historic Properties and Human Remains;
- Erosion and Sediment Control Plan (E&SCP); and
- Fugitive Dust Control Plan (FDCP).

FERC's Plan and Procedures are baseline construction and mitigation measures developed to minimize the potential environmental impacts of construction on upland areas, wetlands, and waterbodies. Texas Eastern does not propose any modifications to FERC's Plan and Procedures.

During construction and restoration, Texas Eastern would use at least one full-time environmental inspector (EI) during construction of the Project. The EI would be on site during construction activities to ensure compliance with the construction procedures contained in the Plan and Procedures. Texas Eastern would conduct environmental training sessions in advance of construction to ensure that all individuals working on the Project are familiar with the environmental mitigation measures appropriate to their jobs and the EI's authority. FERC staff

² The FERC Plan can be viewed on the FERC website
<http://www.ferc.gov/industries/gas/enviro/plan.pdf>.

³ The FERC Procedures can be viewed on the FERC website
<https://www.ferc.gov/industries/gas/enviro/procedures.pdf>.

would also maintain oversight of Texas Eastern's compliance with any environmental conditions attached to FERC's Order Issuing Certificate (Order).

Prior to commencement of any construction-related activities, survey crews would stake the limits of the construction work areas and access roads. Texas Eastern would avoid sensitive areas by flagging or fencing the resource, as appropriate. Texas Eastern would contact the national "one-call" system to identify and mark buried utility lines prior to ground disturbance. Construction work areas would be cleared of existing vegetation and graded, as necessary, to create level surfaces for the movement of construction vehicles. In accordance with the FERC Plan, temporary erosion and sediment control measures would be installed following initial ground disturbance.

During Project operation, Texas Eastern would operate and maintain the proposed facilities in compliance with the Commission's regulations in 18 CFR 380.15 and the maintenance requirements in the FERC's Plan and Procedures. Project facilities would be marked and identified in accordance with applicable DOT regulations. In accordance with 49 CFR 192, the facilities would be inspected for leaks as parts of scheduled operations and maintenance.

Following construction, gravel would be removed from the additional temporary workspace (ATWS) and topsoil would be replaced. The ATWS would be restored to pre-existing conditions and stabilized in accordance with the E&SCP. No blasting would be required for construction of the Project. The stormwater basin would be permanently maintained after construction.

8.0 LAND REQUIREMENTS

Construction of the Project facilities would temporarily impact 31.8 acres of land, and of this, 15.6 acres are located within the existing fenceline of the Lilly CS. Approximately 16.0 acres of ATWS is outside the station fenceline. The new 0.2-acre permanent stormwater retention basin would be located within the ATWS. The majority of the ATWS is actively maintained pipeline right-of-way. The fenceline would remain in the same location. The new retention basin is the only new permanent facility located outside the station fenceline. All workspace is located on property owned by Texas Eastern. No additional land would be required to construct and operate the Project facilities.

Approximately 100 to 120 workers would be required for construction of the Project facilities.

B. ENVIRONMENTAL ANALYSIS

The following sections discuss the Project's potential direct and indirect impacts on environmental resources. When considering the environmental consequences of the Project, the duration of any potential impacts are described below according to the following four levels: temporary, short-term, long-term, and permanent. Temporary impacts generally occur during construction, with the resources returning to pre-construction conditions almost immediately. Short-term impacts could continue for up to three years following construction. Long-term impacts would require more than three years to recover, but eventually would recover to pre-construction conditions. Permanent impacts could occur because of activities that modify resources to the extent that they may not return to pre-construction conditions during the life of the Project, such as with the construction of an aboveground facility. An impact would be considered significant if it would result in a substantial adverse change in the physical environment.

1.0 GEOLOGY

The Project would be in the Allegheny Mountain section of the Appalachian Plateaus physiographic province. The Allegheny Mountain section is characterized by rounded to linear hills rising by steps to an escarpment, and hills cut by narrow valleys. Local relief in this section is moderate to high, ranging from 540 to 2,980 feet above mean sea level (PADCNR, 2018). At the Project site, topographic elevations range from 2,106 to 2,274 feet above mean sea level.

Texas Eastern is in the process of completing geotechnical investigations to characterize the site-specific subsurface geology and will file the results with the FERC upon completion. Based on publicly available information, subsurface geology at the Lilly CS is anticipated to consist of unconsolidated materials (i.e., sand, gravel, clay) that overlie bedrock comprised of cyclic sequences of shale, sandstone, thin limestone, and coal (Martino, 2004; Berg et al., 1980).

Mineral Resources

A review of the U.S. Geological Survey (USGS) and state databases was completed to identify historic, current and proposed mineral resources within 0.25 mile of the Project (USGS, 2011; Pennsylvania State University, 2014; PADEP, 2020a, 2020b, 2020c, 2020d, 2020e). Three historic mining operations were identified: one reclaimed surface coal mine located approximately 1,000 feet east; one abandoned underground coal mine located approximately 300 feet west; and one abandoned underground coal mine located approximately 75 feet south of the proposed Project workspace. The closest active mine is a subsurface coal mine approximately 0.5 mile northwest of the Project.

Active, historic, and proposed oil and gas exploration or extraction were not identified within 0.25 mile of the Project; with the exception of one natural gas well. This well is active but is 1,200 feet south of the Project site (PADEP, 2020f). Given limited anticipated depths of excavation, as well as the distance from active mining and oil and gas extraction facilities, we conclude that the Project would not affect 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 and ground subsidence (including karst terrain). The Project area is not within the 100- or 500-year floodplain as determined by the Federal Emergency Management Agency and is therefore not anticipated to be significantly impacted by flood hazards.

Seismicity

The shaking during an earthquake can be expressed in terms of the acceleration as a percent of gravity (g). USGS Seismic Hazard Probability Mapping shows that for the Project area, there is a 2 percent probability of an earthquake with an effective peak ground acceleration (PGA) of 4 to 6 percent g; and a 10 percent probability of an earthquake with an effective PGA of 1 to 2 percent g being exceeded in 50 years (USGS, 2018). For reference, a PGA of 10 percent g (0.1g) is generally considered the minimum threshold for damage to older structures or structures that are not constructed to resist earthquakes. Based on the USGS Quaternary Fold and Fault Database, no active faults were identified in the vicinity of the Project site (USGS, 2020). Given the low seismic risk in the area, we conclude that there is a low potential for prolonged ground shaking, ground rupture, or soil liquefaction to significantly affect Project facilities.

Landslides and Slope Stability

The Project area is relatively flat or gently sloping and the majority has been previously graded. Therefore, and based on the limited scope of the Project, we conclude that the Project would not significantly contribute to or be impacted by landslides or slope instability.

Ground Subsidence

Minimal oil and gas extraction occur in the Project vicinity and the Project does not overlie an aquifer with elevated susceptibility to ground subsidence from excessive pumping. There are no mapped karst-related features at the Project site (PADCNR, 2020; 2015). As described above, two abandoned subsurface coal mines are located 75 and 300 feet, respectively, from the Project area. No underground mine resources were identified within the Project workspace and all underground mine resources identified within 0.25 mile would be avoided during construction activities. Given this and the limited scope of Project activities that would involve shallow ground disturbance and no new facility construction outside of the existing fenceline, we conclude that the Project would not be significantly impacted by subsidence hazards.

Based on the above analysis, we conclude that Project construction and operation would not significantly affect or be affected by geologic resources or hazards.

2.0 SOILS

The Natural Resources Conservation Service (NRCS) Web Soil Survey provides descriptions of the soil series crossed by the Project (2019). Project area soils have low to moderate compaction potential and are not highly erodible by wind. Approximately half of Project

area soils are considered to be highly water erodible (14.9 acres). Approximately 22.4 acres of the Project area have poor revegetation potential, and approximately 9.5 acres are classified as farmland of statewide importance. Approximately 7.9 acres are classified as underlain by shallow bedrock (bedrock within 60 inches of the ground surface).

Construction activities such as clearing, grading, excavation, backfilling, heavy equipment traffic, and restoration have the potential to adversely affect natural soil characteristics such as water infiltration, storage and routing, and soil nutrient levels, thus reducing soil productivity. Clearing also removes protective vegetative cover and exposes soil to the effects of wind and water which potentially increases soil erosion and the transport of sediment to sensitive resource areas.

Because the Lilly CS is an existing facility, new impacts on farmland of statewide importance would be limited to areas outside of the existing fenceline. The ATWS outside of the existing Lilly CS overlies 7.8 acres of farmland of statewide importance. No Project area is currently in agricultural use and ATWS classified as farmland of statewide importance would be returned to pre-construction conditions in accordance with Texas Eastern's E&SCP. Therefore, we conclude that new impacts on farmland of statewide importance would be temporary and not be significant.

If bedrock removal becomes necessary, it would be done with mechanical methods; blasting is not anticipated. To minimize the introduction of stones or rocks to surface soil layers in the ATWS outside of the existing fenceline, Texas Eastern would excavate up to 12 inches of topsoil for segregation purposes. Segregated topsoil would be stored within the ATWS and upon completion of Project construction activities, topsoil would be replaced. Disturbed area within the fenceline would be returned to pre-construction conditions (gravel surfacing or maintained lawn). Therefore, the Project would not significantly impact surficial soils.

To minimize or avoid potential impacts due to soil erosion, Texas Eastern would implement its E&SCP and the FERC Plan. Temporary erosion controls would be installed immediately following land disturbing activities. Texas Eastern would inspect these devices on a regular basis and after each rainfall event of 0.5 inch or greater to ensure proper function. Texas Eastern would additionally utilize dust-control measures, as outlined in its FDCP, including routine wetting of the construction workspace, as necessary, where soils are exposed. Temporary erosion control devices would be maintained until the Project area is successfully stabilized/revegetated.

Project areas would be stabilized with gravel cover or revegetated with seed mixes recommended by the PADEP's Pennsylvania Erosion and Sediment Pollution Control Program Manual and/or the Cambria County Conservation District. Therefore, permanent impacts due to soil erosion or poor revegetation potential are not anticipated.

Soil Contamination

Texas Eastern reviewed the U.S. Environmental Protection Agency's (EPA) Facility Registry Service database and PADEP's interactive online viewer (EPA, 2019a; PADEP, 2020g) to identify documented soil and groundwater contamination within 0.5 mile of the Project. Two sites were identified, the nearest of which is approximately 0.2 mile west of the Project area.

Given the distance from the Project area, Project activities are not anticipated to encounter existing soil or groundwater contamination originating from either site.

The station is also listed on the EPA Facility Registry Service database and has known polychlorinated biphenyl (PCB) soil and groundwater contamination on-site. PCBs have been remediated in accordance with a Consent Order and Adjudication (CO&A) between Texas Eastern and the Pennsylvania Department of Environmental Resources (presently the PADEP), and a Federal Consent Decree between Texas Eastern and the EPA. Texas Eastern successfully completed all requirements of the CO&A and Federal Consent Decree in 2002; however, PCBs remain in station soils. Specifically, remediated areas generally contain PCBs at concentrations of less than 10 parts per million (ppm), and no sample contained concentrations in excess of 25 ppm. The CO&A and Federal Consent Decree additionally defines “bedrock limitation areas,” where no further remediation was required if the following limiting factors were encountered during initial excavation/remediation of impacted soils: “bedrock which cannot be readily penetrated by a conventional backhoe bucket; groundwater; or an excavation depth of twenty-five (25) feet below the ground surface.” Two such bedrock limitation areas are present within the construction workspace. Texas Eastern states that soils above bedrock in these areas have been remediated per the CO&A and Federal Consent Decree and bedrock is not anticipated to be removed for the Project; therefore, no additional remediation is required and the soils in these areas can be treated in the same manner as other PCB remediation areas. Known PCV groundwater contamination is discussed in section B.3.1.

Texas Eastern would follow its Soil and Groundwater Management Plan during construction, which specifies handling, management, and disposal requirements for soil and groundwater disturbed during Project activities. Specifically, soils in previously remediated areas, including bedrock limitation areas, would be sidecast adjacent to the excavation or stockpiled and segregated within the construction workspace in designated areas on Texas Eastern property. These soils must be kept separate from the soils excavated from outside of previously remediated areas. Soil materials determined to be suitable for on-site reuse would be returned to the same remediated areas where they were generated, with the top 2 feet of segregated soil replaced last. Soil stockpiles from the remediated areas would be placed on a polyethylene liner and covered with a polyethylene liner overlapped and weighted to form a continuous waterproof barrier over the material prior to inclement weather and at the end of each workday. If dust suppression becomes necessary during the soil stockpiling, exposed soils would be wetted.

In the event that excavated materials are not suitable for use as backfill/engineering purposes, or if excess soils are generated, these soils would be managed for disposal in conformance with applicable federal, state, and local regulations.

In February 2020, a turbine oil leak was discovered at the Lilly CS. Texas Eastern reported the spill to PADEP and initiated cleanup activities (identification and repair of the source of the turbine oil leak and the removal of impacted soil), which are ongoing. Texas Eastern states that the February 2020 event is not expected to impact the Lilly Compressor Units Replacement Project. Any contaminated soil or potentially contaminated groundwater encountered during construction would be managed in accordance with Texas Eastern’s Unanticipated Discovery Plan for Contaminated Environmental Media and its Soil and Groundwater Management Plan.

Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could also adversely affect soils. Measures outlined in Texas Eastern's SPCC Plan would be implemented to reduce potential impacts on soils from spills of fuel and hazardous materials used during construction. These measures include regularly inspecting equipment to ensure it is in good working order, properly training employees on the handling of fuels and other hazardous materials, implementing appropriate clean-up protocols, and promptly reporting any spills to the appropriate agencies, if applicable.

Given the minimization and mitigation measures described above, we conclude that soils would not be significantly affected by Project construction and operation.

3.0 WATER RESOURCES

3.1 Groundwater

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, 2019b).

The wellhead protection program in Pennsylvania is deployed voluntarily at a local level, and a publicly available database outlining the wellhead protection areas is not available. Texas Eastern consulted with Cresson Township and determined that it does not participate in the wellhead protection program.

Texas Eastern identified six springs/seeps within the proposed workspace, all within delineated surface water resources that would be avoided during construction. Delineated wetlands and waterbodies would be protected by erosion control devices that would be installed around their boundaries to minimize impacts. None of the identified springs/seeps are used as a water source for any landowner and no other springs were identified within 150 feet of the proposed workspace.

There may be private water wells, but not springs within 150 feet of the proposed Project workspace (PADEP, 2020g; PADCNR, 2020b). Texas Eastern is currently working with landowners to identify water supply wells within 150 feet of its property boundary, but, based on a review of state water well inventories, Texas Eastern states that there may be private water wells within 150 feet of the proposed Project workspace (PADEP, 2020g; PADCNR, 2020b). Texas Eastern has committed to file updated information regarding the location, use, and status of any public and private water wells within 150 feet of the proposed Project workspace. There are no water supply wells within the station fenceline, which is connected to a public water supply line.

Texas Eastern would offer pre- and post-construction testing for both water quality and yield to owners of all water supply wells within 150 feet of the Project workspace, if any are identified. Should any damage to a well or impact to water quality or yield occur as a result of construction, Texas Eastern would coordinate with the landowner to seek a remedy, including a temporary source of potable water and repair or replacement of the water supply.

The Lilly CS has known PCB contamination on-site. PCBs in soils have been remediated in accordance with a CO&A between Texas Eastern and the Pennsylvania Department of Environmental Resources (presently the PADEP) and a Federal Consent Decree between Texas Eastern and the EPA. Texas Eastern successfully completed all requirements of the CO&A and Federal Consent Decree in 2002; however, PCBs remain in station soils (refer to section B.2.0). Further, Texas Eastern completed groundwater analysis which identified a PCB groundwater plume at the site. This plume is within the northwestern quadrant of Texas Eastern's property and contamination is limited to groundwater within overburden and shallow bedrock. Texas Eastern entered into a Long Term Groundwater Monitoring Program with PADEP which was terminated in 2002 given demonstration that the plume was stable and that PCB concentrations were decreasing. At the time, a maximum PCB concentration of 3 parts per billion was reported in site groundwater. Texas Eastern states that ground disturbance is proposed within the eastern area of the PCB plume.

Texas Eastern is in the process of completing geotechnical investigations for the Project. During the initial investigations, boreholes were drilled to a depth of 85 feet below the ground surface and groundwater was not encountered, however, based on our review of site monitoring well logs obtained from the PADCNR, shallow groundwater may be encountered at the site at depths of approximately 10 feet below the ground surface (PADCNR, 2020b).

Should groundwater be encountered during construction, it would be managed in accordance with Texas Eastern's Soil and Groundwater Management Plan and Temporary Discharge Permit. Specifically, Texas Eastern's Soil and Groundwater Management Plan requires that all water pumped from open excavation areas, decanted hydrovac water, and hydrostatic test water would be pumped through a filtration treatment system to remove potential contaminants. The water must be pumped directly into fractionation tanks, prior to treatment. After passing through the fractionation tank, the water would be treated and discharged to the ground surface within a constructed dewatering basin and in accordance with the terms and conditions of its Temporary Discharge Permit with the PADEP.

Texas Eastern would collect a weekly pre-treatment water sample and post-treatment water sample to verify compliance with permit discharge standards. If the post-treatment water sample exceeds permit thresholds, the treatment system would be maintained accordingly (e.g., change filters, replace carbon media) and the water would be recirculated through the treatment system to meet compliance, or the water would be transported to a licensed off-site disposal facility. The treated construction water is proposed to be discharged within southwestern Project area limits, which would not be within or immediately up-gradient of any area of PCB-impacted soils.

Groundwater contamination could also occur from accidental spills of fuels, solvents, and lubricants used during construction. Texas Eastern would minimize spill-related impacts through implementation of the measures included in its SPCC Plan. In addition, Texas Eastern would prohibit the refueling and storage of hazardous materials within 200 feet of any well.

Project construction has the potential to impact groundwater. Effects include alteration of overland flow and groundwater recharge resulting from clearing of vegetation, grading, development of the stormwater retention basin, and excavation activities. However, these impacts would be highly localized and minor.

Given its short-term construction, the anticipated depth to shallow groundwater, and use of Texas Eastern's proposed measures described above, we conclude that the Project would not have a significant impact on groundwater resources.

3.2 Surface Water

The Project is located within the Bens Creek-Little Conemaugh River Watershed (hydrologic unit code [HUC] 050100070502). Texas Eastern conducted surveys in July and October 2019 and identified two minor⁴ ephemeral waterbodies (both unnamed tributaries to Little Conemaugh River) within the Project area. These waterbodies lack continuous flow and are not capable of supporting fisheries; therefore, fisheries would not be impacted. Further, these waterbodies would be avoided during construction and would not be directly impacted.

Texas Eastern would implement its E&SCP to minimize erosion of disturbed soils and to prevent transportation of sediments out of the limits of disturbance and into the waterbodies within Project workspaces. This includes the use of erosion control devices, such as silt fence. Additionally, Texas Eastern would adhere to its SPCC Plan, which addresses the handling of construction fuel and other materials to avoid or minimize impacts from inadvertent spills or leaks. Specific measures include not storing construction fuels or refueling equipment within 100 feet of a wetland or waterbody, properly maintaining equipment, and checking for leaks daily. Per PADEP standards, post-construction excess runoff from the station would be channeled to the new 0.2-acre stormwater retention basin for scrubbing and removal of soluble nutrients prior to emptying into the existing on-site stormwater channel.

Additionally, Texas Eastern identified two drainage features (D-KH-01-NJD and D-KH-02-NJD) that are not considered jurisdictional by the U.S. Army Corps of Engineers (USACE) or the Commonwealth of Pennsylvania. Neither feature had perceptible flow at the time of surveys. D-KH-01-NJD is a manmade stormwater drainage ditch located at the southern perimeter of the existing station that conveys stormwater through a series of culverts that ultimately carries flow offsite and under the adjacent Mardula Road. Texas Eastern does not propose to disturb D-KH-01-NJD during construction and would install erosion control devices to keep sediment from entering the channel during construction.

D-KH-02-NJD is the result of surface water runoff emanating from the developed compressor station site during rain events and is considered an erosion issue. Texas Eastern proposes excavation of the workspace in the area of D-KH-02-NJD to install piping for the station's emergency shutdown system. Given that D-KH-02-NJD is considered a stormwater runoff erosion issue, Texas Eastern does not intend to maintain this drainage. Post-construction,

⁴ Per FERC Procedures, minor waterbodies include any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing that is less than or equal to 10 feet wide at the water's edge.

Texas Eastern would implement stormwater management measures in accordance with the Erosion and Sediment Control General Permit–3 (ESCGP-3), which are designed to correct this occasional runoff issue by moving water from the station to a constructed stormwater facility. Texas Eastern would conduct the work within D-KH-02-NJD when the EI verifies that water is unlikely to flow between initial disturbance and stabilization of the drainage during construction.

Given Texas Eastern’s proposed measures, we conclude that the Project would not result in significant impacts on surface water resources.

Hydrostatic Testing and Dust Control

Prior to placing the new Project facilities into service, the gas piping would be hydrostatically tested to meet DOT standards. Texas Eastern would source water from a non-potable water supplier and it would be trucked to the site. Texas Eastern would use storage tanks to temporarily store the water after hydrostatic testing and continuously re-use the water for all tests. At the completion of testing the water would be sent through the treatment system before being treated and discharged to a retention basin located in a well-vegetated upland area southwest of the main construction entrance. Texas Eastern would adhere to its E&SCP and would comply with appropriate permits including the PADEP General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines.

Texas Eastern estimates that between approximately 60,000 to 75,000 gallons of water may be needed for dust control and would be obtained from municipal sources. Watering trucks would spray only enough water to control the dust or to reach the optimum soil moisture content to create a surface crust. Therefore, runoff would not be generated during this procedure.

For these reasons, we conclude that hydrostatic testing and dust control would not result in significant impacts.

3.3 Wetlands

Surveys conducted by Texas Eastern in July and October 2019 identified a total of 13 wetlands (about 1.2 acres total) within the Project workspace: 12 are classified as palustrine emergent (PEM) and one wetland system is classified as PEM/palustrine forested (PFO). Four PEM wetlands are located completely or partly within the station fenceline, with the remaining nine wetlands (8 PEM and 1 PEM/PFO) located in ATWS outside of the fence on Texas Eastern property. Wetlands in the Project area were disturbed from previous construction and maintenance activities and/or currently undergo ongoing mowing and livestock grazing practices.

The Project would temporarily impact a total of less than 0.1 acre of PEM wetlands (0.04 acre of W-SRC-02 and 0.03 acre of W-SRC-05), which are both located within the station fenceline. Both wetlands would be crossed using timber mats to facilitate completion of Project construction activities. Following construction, the wetland would be restored to pre-construction contours. All other wetlands within the proposed Project workspace would be avoided during construction and would be protected by erosion control devices, such as silt fence, per its E&SCP. Further, Texas Eastern would implement its SPCC Plan to prevent impacts from potentially hazardous construction materials such as fuels and coolants. The Project would not permanently impact wetlands.

Given Texas Eastern’s proposed measures, we conclude that impacts on wetlands would be temporary and minor.

4.0 VEGETATION, WILDLIFE, AND THREATENED AND ENDANGERED SPECIES

This section discusses wildlife habitats and existing vegetation resources at the Project site, and the federally- and state-protected wildlife species that are known to occur or may potentially occur in the Project vicinity.

4.1 Vegetation

Project workspaces consist of approximately 16 acres of industrial land, about 16 acres of upland herbaceous, and less than 0.1 acre of PEM wetland, presented in table 2. Industrial land is primarily located within the fenceline of the station and consists of gravel and paved surfaces interspersed with mowed grass areas and scattered trees. Herbaceous upland areas consist of grasslands and maintained lawn areas. Wetlands were previously discussed in section B.3.3. No unique or sensitive vegetation types would be affected by the Project. Representative vegetation is described in table 3.

Table 2 Vegetation Impacts		
	Construction (acres)	Operation (acres)
PEM	0.07	0.00
Herbaceous upland	15.80	0.20 ^a
Industrial	16.00	16.00 ^b
Total	31.87	16.20
^a The new 0.2 acre the stormwater retention basin.		
^b Industrial land is land that is currently maintained for the existing station and would continue to be permanently maintained during operation.		

Table 3 Representative Vegetation and Wildlife in Habitat Types in the Project Area		
Habitat Type	Vegetation	Wildlife
PEM Wetland	green bulrush, soft rush, sedge species, foxtail sedge, poverty rush, reed canary grass, spotted jewelweed, arrowleaf tearthumb	Wilson’s snipe, red-winged blackbird, common grackle, swamp sparrow, star-nosed mole, American mink, muskrat, American bullfrog, snapping and painted turtles, northern watersnake, pickerel frog
PEM/PFO Wetland ^a	foxtail sedge, shallow sedge, red maple, red oak, and black cherry trees	Same as above for PEM wetland
Herbaceous upland	Goldenrods, bluegrasses, timothy grass, quackgrass, smooth brome, orchard grass, common chickweed, common evening primrose, old-field cinquefoil, asters, wild strawberry, Queen-Anne’s lace, ragweed, hawkweeds, and dandelion	<u>early successional habitat:</u> ring-necked pheasant, short-eared owl, wild turkey, whip-poor-will, prairie warbler, mice, meadow voles, eastern cottontail <u>early successional edge habitat:</u> blue-winged warbler, field sparrow, eastern towhee, red-tailed hawk, northern harrier, turkey vulture, eastern box turtle
Industrial	maintained lawn; scattered trees and forested areas within the fenceline include red oak, red maple, and saplings	European starling, house sparrow, American robin, American crow, blue jay, northern cardinal, common rat, opossum, striped skunk, red fox, eastern gray squirrel
^a A PEM/PFO wetland is within Project workspaces but would not be impacted.		

Two forested areas and individual trees located within the fenceline would mostly be avoided during construction. One tree would be removed, and minimal tree trimming would be conducted near the western facility entrance to accommodate the new compressor units and auxiliary building. No trees would be cleared outside of the fenceline. Herbaceous upland vegetation within ATWS outside the station would be cut to prepare the area for use during construction. The new 0.2-acre stormwater retention basin would be located outside of the fenceline and permanently maintained for operations and maintenance of the Project facilities. Following construction, all areas temporarily impacted by construction would be restored to preconstruction conditions and revegetated per Texas Eastern's E&SCP. Herbaceous vegetation is expected to recover quickly following restoration of Project workspaces. Given almost all permanent facilities would be within existing industrial land and all temporary workspaces would be restored to preconstruction conditions, we conclude that impacts on vegetation would be minor.

Invasive Species and Noxious Weeds

The PADCNR defines invasive plants as those species that are not native to the state, grow aggressively, and spread and displace native vegetation. Noxious weeds differ from invasive plants in that they are determined to be injurious to public health, crops, livestock, agricultural land, and other properties (NRCS 2020a). Invasive species identified within the Project area include reed canary grass, velvet grass, and moneywort. Multiflora rose was also identified and is considered a noxious weed in Pennsylvania (NRCS 2020b).

The temporary removal of vegetation during construction could result in increased opportunities for invasive species and noxious weeds to spread or become established in the Project workspace. To prevent colonization and spread of invasive species, Texas Eastern would install erosion and sediment control devices in the areas of proposed ground disturbance as appropriate, which would prevent spoil from migrating outside of Project workspaces and help prevent the dispersion of seeds from exotic plant species during construction. Additionally, all temporary workspaces would be quickly revegetated following construction. We find these measures acceptable.

4.2 Wildlife

Wildlife and Migratory Birds

The previously discussed vegetation types within the Project workspaces (upland herbaceous, industrial, PEM wetland) provide habitat for a variety of wildlife species. Representative wildlife species found in the Project area are described in table 3. Because vegetation in the Project area undergoes regular disturbance (mowing for proper operation and maintenance of the facility and grazing activities), the Project workspace likely does not support an abundance of wildlife.

During construction, noise, increased activity, and ground disturbance in work areas could result in impacts on wildlife such as displacement, abandoning reproductive efforts, and disrupting daily routines. Direct mortality to smaller mammals that are less mobile, or which take refuge underground in the work area, could also occur during Project construction activities. The installation of new auxiliary facilities could increase noise during operation. However, similar habitats are present in the surrounding area and following construction, all areas temporarily

disturbed by the Project would be restored to preconstruction conditions and revegetated. Construction could take place during the general nesting season for migratory birds (April 15-August 1), although, any tree removal or trimming can only occur November 15 and March 31 for the protection of federally listed bats. The Project proposes the removal of only one tree and minor tree trimming within the fenceline of the existing station. The herbaceous vegetation within ATWS outside of the station already undergoes regular disturbance. Most of the new permanent facilities for the Project would be constructed within the fenceline of the existing station (only the new 0.2-acre stormwater retention basin would be outside of the fenceline). For these reasons, impacts on wildlife, including migratory birds, would be minor.

Threatened and Endangered Species

Federally listed species

Texas Eastern completed environmental review of the Project using the Pennsylvania Natural Diversity Inventory (PNDI) Conservation Explorer online tool on August 7, 2019. The PNDI includes consultations with all appropriate state and federal wildlife agencies, including the FWS. Texas Eastern also completed review of the Project using the FWS' Information for Planning and Consultation online tool to obtain an official list of federally listed threatened and endangered species that may occur in the Project area. Three federally listed species, presented in table 4 were identified as potentially occurring within the Project area: northern long-eared bat, Indiana bat, and northeastern bulrush.

Table 4 Federally and State-Listed Species Potentially Occurring in the Project Area					
Species	Habitat	Potential Project area?	State Status	Federal Status	Behavior
Northern Long-Eared Bat (<i>Myotis septentrionalis</i>)	Roosts in wooded areas near hibernacula, trees with holes, snags, peeling bark or cracks/crevices	Yes	-	Threatened	Roosts between April 1 to September 30
Indiana Bat (<i>Myotis sodalis</i>)	Roosts in wooded areas near hibernacula, trees with holes, snags, peeling bark or cracks/crevices	Yes	Endangered	Endangered	Roosts between April 1 to September 30
Northeastern Bulrush (<i>Scirpus ancistrochaetus</i>)	Acidic to circumneutral natural ponds, shallow sinkholes, vernal pools, isolated palustrine emergent wetlands, and wet meadows and marshes with seasonal water level fluctuations	Yes	Endangered	Endangered	Flowers from mid- June to July; fruits between July and September

Texas Eastern proposes to remove one deciduous hardwood tree and conduct minor tree trimming for the Project. These activities would be completed during the non-active season for Indiana and northern long-eared bats (between November 15 and March 31), per avoidance

measures outlined in the Project's PNDI receipt. Therefore, the Project would have no effect on the northern long-eared bat and Indiana bat. The Project would impact one PEM wetland (<0.1 acre), during construction activities and no occurrences of northeastern bulrush were documented on-site during wetland delineation surveys. Therefore, the Project would have no effect on the northeastern bulrush. No further consultation with the FWS is required.

State-listed species

The PNDI determined that the Project would have no known impact and that additional consultation with the PADCNr and the Pennsylvania Fish and Boat Commission was not required. However, the PNDI review included comments from the Pennsylvania Game Commission (PGC) and listed required avoidance measures from the FWS. The PGC stated that state and federally listed species that are under the jurisdiction of both the PGC and FWS may be affected as a result of the Project; however, PGC defers comments on potential impacts to federally listed species to FWS. As such, no further consultation with PGC is necessary. As previously discussed, Texas Eastern has committed to the FWS avoidance measures that require that any tree cutting take place between November 15 and March 31 to prevent potential impacts on the Indiana bat and northern long-eared bat. Therefore, we conclude that the Project would not adversely impact state-listed species.

5.0 CULTURAL RESOURCES

In addition to accounting for impacts on cultural resources under NEPA, Section 106 of the NHPA, as amended, requires FERC to take into account the effects of its undertakings on historic properties listed, or eligible for listing on the National Register of Historic Places (NRHP), and to afford the Advisory Council on Historic Preservation an opportunity to comment. Texas Eastern as a non-federal party, is assisting FERC in meeting our obligations under Section 106 and its implementing regulations at 36 CFR 800. The Section 106 process is coordinated at the state level by the State Historic Preservation Office (SHPO), represented in Pennsylvania by the Pennsylvania Historical and Museum Commission.

5.1 Area of Potential Effects

The area of potential effects (APE) is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16(d)). The direct APE as the Project area, including areas within or immediately adjacent to the existing station fenceline. The direct APE is contained within property owned by Texas Eastern and measure approximately 31.8 acres in size. Since the Project would decrease existing noise impacts (see section B.7.2), the potential indirect effects of the Project would be visual in nature and limited to the impact that the proposed new construction might have on the setting of historic properties. Accordingly, Texas Eastern recommends that APE for indirect effects be defined as the area within the visual range of the Lilly CS up to 0.25 mile. (Public Archaeology Laboratory 2020).

5.2 Cultural Resources Investigations

In an effort to identify historic properties within the APE and to account for any effects to those properties by the Project, Texas Eastern conducted a cultural resources investigation which

included background research and a historic architectural survey (Public Archaeology Laboratory 2020). During field investigations for the Project area, no precontact, or historic period artifacts, or archaeological features, were observed in the Project area. There is one historic district adjacent to the Project area, the Allegheny Portage Railroad of the Pennsylvania Canal, which is listed on the National Register of Historic Places. During previous investigations within the APE, no significant archaeological resources were identified within or in the immediate vicinity; no aboveground features or other historic architectural resources are within the APE or viewshed.

On November 8, 2019, Texas Eastern recommended that the Project would have no effect on the Allegheny Portage Railroad and recommended that no historic properties would be affected by the Project. On December 4, 2019, the SHPO concurred with Texas Eastern's that no historic properties will be affected by the Project. We agree.

5.3 Tribal Consultation

Texas Eastern contacted the following Native American tribes regarding the proposed Project: Absentee Shawnee Tribe of Oklahoma, Cayuga Nation, Delaware Nation of Oklahoma, Delaware Tribe of Indians, Eastern Shawnee Tribe of Oklahoma, Oneida Indian Nation, Oneida Nation of Wisconsin, Onondaga Nation, Seneca Nation of Indians, Seneca-Cayuga Tribe of Oklahoma, Shawnee Tribe of Oklahoma, St. Regis Mohawk Tribe, Stockbridge-Munsee Community Band of Mohican Indians, Tonawanda Seneca Nation, and the Tuscarora Nation. On November 8, 2019, Texas Eastern provided to the tribes a Project information package, a cultural resources assessment, and a draft unanticipated discoveries plan. FERC sent the NOI to these same tribes.

On December 6, 2019, the Oneida Indian Nation (Nation) responded by email, writing that "[b]ased upon our review of the documentation that you provided, it appears that the Project should not affect historic properties significant to the Nation." The Delaware Nation responded by letter on December 17, 2019, writing that "The location of the proposed project does not endanger any known cultural, or religious sites of interest to the Delaware Nation." Concerned about the potential for discovery of unknown resources, they asked to be informed of any new finds. There have been no additional comments to date.

5.4 Unanticipated Discoveries Plan

Texas Eastern developed a Project-specific plan titled: Procedures Guiding the Discovery of Unanticipated Historic Properties and Human Remains: Post-Review Discoveries (36-CFR 800.13), Lilly Compressor Units Replacement Project, Cresson Township, Cambria County, Pennsylvania – November 7, 2019, which outlines the procedures to follow, in accordance with state and federal laws, in the event that unanticipated cultural resources or human remains are discovered during construction of the Project, including consultation with FERC, the SHPO, and tribes regarding discoveries. The plan was submitted to the SHPO and to FERC. On December 4, 2019, the SHPO responded by letter that the plan was acceptable. We agree.

5.5 Compliance with the National Historic Preservation Act

FERC has completed its compliance requirements with Section 106 of the NHPA for the proposed Project.

6.0 LAND USE, RECREATION AND VISUAL RESOURCES

Land use in the Project area would consist of developed industrial land and open upland. Overall land use for the Project is presented in table 5.

Table 5 Summary of Land Use for the Project						
Facility	Open Land ^a		Industrial ^b		Total	
	Const. ^c	Operation ^d	Const.	Operation	Const.	Operation
Cambria County, Pennsylvania						
Existing facility ^e	0.0	0.0	15.6	15.6	15.6	15.6
Stormwater retention basin ^f	0.2	0.2	0.0	0.0	0.2	0.2
ATWS ^g	15.6	0.0	0.4	0.4	16.0	0.4
Total	15.8	0.2	16.0	16.0	31.8	16.2
^a . Includes maintained existing pipeline right-of-way, other utility rights-of-way, open fields, vacant land, herbaceous and scrub-shrub uplands, non- forested lands. ^b . Includes developed and paved areas, existing roads, and commercial or retail facilities, including all facilities located within the existing fenceline of the Station. This also includes the select trees that will be removed within the fenceline of the existing facilities. ^c . Total construction workspace includes the total acreage of land impacted during construction. ^d . Total operation workspace includes all areas that would be maintained after construction of the Project. ^e . Includes all workspaces within the fenceline and the existing gravel access drive. ^f . The retention basin would be unavailable as open space during construction but can be classified as open land after construction. ^g . Approximately 0.4 acre of the ATWS are the existing gravel/paved drives, which is considered industrial and would be maintained post-construction.						

Aboveground Facilities

The Project would involve construction of new compressor building to house the new units, which would occur within the existing fenceline. Two existing access roads within the Project area, Texas Lane and a gravel drive totaling approximately 0.4 acre, and additional 0.2 acre of new permanently maintained area would be required for the retention basin.

Recreation

Project modifications would not be located within 0.25 mile of any National Park System Unit, which includes national parks, monuments, preserves, historic sites, historical parks, memorials, battlefields, military parks, cemeteries, recreation areas, seashores, lakeshores, rivers, parkways, trails, and other designations. No natural, recreational, or scenic areas are identified within 0.25 mile of the aboveground facilities. Based on the location and nature of construction activities, we conclude the Project would have no adverse impact on recreational areas.

Residential Areas

There are several residential properties adjacent to the Texas Eastern property. No residences are located within 50 feet of the Project; the closest resident being 600 feet from the Lilly CS.

Visual Resources

The proposed Project would not be located within any federal, state, or locally designated scenic areas. Visual impacts during construction would be limited to construction equipment and storage within designated temporary workspaces. There are no visually sensitive areas within the viewshed of access roads. Visual impacts due to construction would be temporary.

Once complete, visual impacts for the Project would be limited to modifications to the existing site and construction of a new compressor building for the two new units. The 0.2 acre retention pond would be located outside the Lilly CS fenceline, but within land currently owned by Texas Eastern.

Project modifications would not change the overall visual landscape at the Lilly CS site. Based on the minimal change in site layout and existing industrial nature of the facilities, we conclude that impacts on visual resources would be minimal due to the similar characteristics of the Project area.

Coastal Zone Management Areas

Coastal Zone boundaries for Pennsylvania were identified from the National Oceanic and Atmospheric Administration and Coastal Zone Resource Management Program and PADEP resources and maps. Work associated with the Project would not occur within any protected coastal zone management areas.

The Project was designed to minimize impacts to land uses, with facility modifications being completely within land currently owned by Texas Eastern. No hazardous waste sites were identified within 0.25 mile of the Project. Based on the nature and location of Project activities, we conclude that the Project construction and operational activities would not adversely affect land use in the area.

7.0 AIR QUALITY AND NOISE

7.1 Air Quality

Air quality would be affected by construction and operation of the Project. During construction, short-term emissions would be generated from the usage of equipment, land disturbance, and increased traffic from worker and delivery vehicles for all locations. Operational emissions sources would include the proposed turbine units, auxiliary piping fugitives, emergency generator and gas heaters.

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)⁵ 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

⁵ The current NAAQS are listed on EPA's website at <https://www.epa.gov/criteria-air-pollutants/naaqs-table> .

(SO₂). The PADEP have the authority to implement permit programs under the CAA for the proposed 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 6 presents the NAAQS.

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. The Project lies within the Central Pennsylvania Intrastate Ozone Transport Region, and the Project would occur within areas that are designated as attainment for all criteria pollutants, with the exception of maintenance for PM_{2.5}.

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 PADEP administer the PSD and NNSR permitting programs in their state. A plan approval application for the Lilly CS was submitted to PADEP on December 31, 2019 for the Project. The station is an existing major stationary source. After the Project is complete, the facility would be reclassified as a minor source with potential emissions dropping below the 250 tons per year (tpy) emission threshold, therefore these programs do not apply to the Project.

Table 6
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	
	3-hour ^b	--	0.5 ppm 1300 µg/m ³
	Annual ^{a,m}	0.03 ppm 80 µg/m ³	--
	24-hour ^{b,m}	0.14 ppm 365 µg/m ³	--
	PM ₁₀	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) 100 µg/m ³	0.053 ppm (53 ppb) 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.

Title V Permitting

Title V is an operating air permit program run by each state for each facility that is considered a “major source.” The Lilly CS is an existing Title V facility (permit #11-00258); following the Project, the facility would be reclassified from a major Title V facility to a minor source subject to a state only operating permit. Texas Eastern would apply for the permit once the Project is complete.

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.

Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) would apply to the new combustion engines at the Lilly CS.

Subpart KKKK (Standards of Performance for Stationary Combustion Turbines) would apply to the stationary combustion turbine at the Lilly CS.

Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Production Transmission and Distribution) would apply to the collection of fugitive emissions components at the compressor site. Texas Eastern would be required to develop a fugitive emissions monitoring plan and performance of emissions monitoring surveys of fugitive emissions components at the Lilly CS.

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 National Emission Standards for Hazardous Air Pollutants. The National Emission Standards for Hazardous Air Pollutants 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.

Subpart ZZZZ- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines would apply to the new engine, but only need to meet the requirements of NSPS part JJJJ.

State and County Regulations

This section discusses the potentially applicable state and local air regulations for the proposed Project.

Particulate Emissions: Processes

Title 25 of the Pennsylvania Code, Chapter 123.13 defines particulate matter emissions limitations for processes. The proposed compressor units and emergency generator are subject to these requirements.

Sulfur Compound Emissions: General and Combustion Units

Title 25 of the Pennsylvania Code, Chapter 123.21 limits the concentration of sulfur oxides in the effluent gas to 500 ppm on a dry volume basis or less. The proposed compressor units and emergency generator are subject to these requirements.

Title 25 of the Pennsylvania Code, Chapter 123.22 states that a person may not permit the emissions into the outdoor atmosphere of sulfur oxides from a combustion unit in excess of 4 pounds per million British thermal units of heat input over a one-hour period (MMBTU/hr). The proposed fuel gas heaters would be subject to these requirements.

Visible Emissions: Limitations and Measuring Techniques

Title 25 of the Pennsylvania Code, Chapter 123.41 states that a facility may not emit visible emissions equal to or greater than 20 percent for a period aggregating to more than three minutes in any one hour. Title 25 of the Pennsylvania Code, Chapter 123.43 specifies measuring techniques for visible emissions. These standards apply to the station.

Plan Approval Requirements

The Lilly CS is subject to the Plan Approval to Construct, Modify, or Reactivate an Air Contamination Source Permit requirements of Title 25 of the Pennsylvania Code, Chapter 127.11-127.51.

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. Section 176(c)(1) states that a federal agency cannot approve or support any activity that does not conform to an approved State Implementation Plan. Conforming activities or actions should not, through additional air pollutant emissions:

- cause or contribute to new violations of the NAAQS in any area;
- increase the frequency or severity of any existing violation of any NAAQS; or
- delay timely attainment of any NAAQS or interim emission reductions.

The General Conformity Rule entails both an applicability analysis and a subsequent conformity determination, if deemed necessary. A General Conformity Determination must be completed when the total direct and indirect emissions of a project would equal or exceed the specified pollutant thresholds on a calendar year basis for each nonattainment or maintenance area.

As noted earlier, the Project facilities would be constructed and operated in Cambria County, Pennsylvania. The Project lies within the Central Pennsylvania Intrastate Ozone Transport Region, and the Project would occur within areas that are designated as attainment for all criteria pollutants, with the exception of maintenance for PM_{2.5}. An emissions analysis for PM_{2.5} shows levels would be below the applicable general conformity applicability thresholds.

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 (CO_{2e}), 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)⁶. 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 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 CO_{2e} 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 proposed Project are expected to be well below the 25,000 metric tons reporting threshold. Operational emissions from the proposed facilities are likewise not expected to exceed this threshold and be reported to the EPA. 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

⁶ 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.

GHG emissions equal to or greater than 100,000 tpy and significant net emission increases in units of CO_{2e} 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).

Texas Eastern 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, utilize non-road engines either retrofitted with best available technology or certified to meet EPA's Tier IV Exhaust Emission Standards without need for retrofitting, and limit idling of diesel and gasoline powered on-road vehicles and non-road construction equipment operating at, or visiting, the construction site. Fugitive dust emissions during construction would be mitigated by measures outlined in the FDCP, which we have reviewed and find acceptable. These measures include spraying water on unpaved areas subject to frequent vehicle traffic, limit vehicle speeds to 5 miles per hour in unpaved areas, and covering loads during transport.

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. These emission-generating activities would include earthmoving, construction equipment exhaust, on-road vehicle traffic, and off-road vehicle traffic. Texas Eastern conservatively utilized emission factors from EPA's AP-42 along with EPA's NONROAD2008a emission modeling software.

Construction is estimated to occur between March 2021 and November 2021. The air quality impacts of Project construction would be considered short-term and would be further minimized by Texas Eastern's implementation of fugitive dust control measures outlined in the FDCP. Following construction, air quality would transition to operational phase conditions. Construction emissions for the Project are presented in table 7.

Table 7 Estimated Construction Emissions (tons per year)								
Year and Source	CO	NO_x	SO₂	VOC	Total HAPs	PM₁₀	PM_{2.5}	GHG (CO_{2e})
Non-Road and On-Road Construction Vehicles	6.9	1.5	0.006	0.3	0.095	0.2	0.1	921.1
Blowdown	-	-	-	5.8	-	-	-	1,484.3
Fugitive Dust	-	-	-	-	-	25	2.85	-
Project Total	6.9	1.5	0.006	6.1	0.095	25.2	2.95	2,405.4
General Conformity Thresholds	-	100	-	50	-	-	-	-

Given the temporary 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 Emissions

The Project would entail replacing all the units, four existing gas turbine units totaling 34,800 hp, with two new, more efficient, 18,100 hp gas turbine units at the Lilly CS. The four existing units would be removed from service, but remain in place. Texas Eastern would use SoLoNox™ combustion technology to control NO_x and CO emissions from the proposed new turbines on the two new units to limit the total station hp to 34,800 hp, keeping the delivery capacity at the station the same. The Project would also ensure Texas Eastern's compliance with the existing Title V Permit for the station, which requires the existing compressor units be permanently shut down by January 1, 2024. Specifically, the PADEP published a final-form rulemaking amending Title 25 of the Pennsylvania Code, Chapter 129: Standards for Sources – Additional Reasonably Available Control Technology (RACT) Requirements for Major Sources of NO_x and VOCs (RACT II Rule) in the Pennsylvania Bulletin on April 23, 2016. The RACT II Rule requires emission reductions to existing major NO_x-emitting facilities such as the two units at the Station. Operational emissions would be lowered from existing station emissions due to the installation of the new efficient turbine units, and the turbines would be equipped with oxidation catalysts to further reduce CO, VOC, and HAP emissions. Operational emissions from the Project are presented in table 8.

Table 8
Operational Emissions Associated with the Project

Unit Description	VOC (tpy)	NO_x (tpy)	CO (tpy)	PM/PM₁₀/PM_{2.5} (tpy)	SO₂ (tpy)	CO₂e (tpy)	Total HAP (tpy)
New Units:							
New 9 ppm Titan 130 with Oxidation catalyst	3.58	24.97	18.45	4.68	9.92	83,983	0.86
New 9 ppm Titan 130 with Oxidation catalyst	3.58	24.97	18.45	4.68	9.92	83,983	0.86
New VGF24GLV Waukesha 585 bhp Emergency Generator	0.58	0.64	1.29	0.01	0.02	287	0.35
Heater (0.080 MMBTU/hr output)	0.00	0.04	0.02	0.003	0.01	52	0.0008
Heater (0.084 MMBTU/hr output)	0.00	0.04	0.02	0.003	0.01	54	0.0008
Heater (0.750 MMBTU/hr output)	0.18	0.49	0.74	0.04	0.07	596	0.04
Heater (0.750 MMBTU/hr output)	0.18	0.49	0.74	0.04	0.07	596	0.04
Separator Vessel - 83 gal (accumulation)	0.03					1.36	0.002
Separator Vessel - 83 gal (accumulation)	0.03					1.36	0.002
Separator Vessel - 185 gal (accumulation)	0.76					20.68	0.05
Storage Tank (1,880 gal) - Pipeline Liquids	0.37					19.75	0.02
Storage Tank (3,550 gal) - Oil	0.01						
Storage Tank (12,690 gal) - Oily Water	0.05						
Modified Sources:							
Gas Releases	25.92					23,725	0.73
Piping Components	8.05					1,164	0.69
Potentially Affected Units:							
Separator Vessel - 33 gal (accumulation)	0.02					0.88	0.001
Separator Vessel - 33 gal (accumulation)	0.02					0.88	0.001
Truck Loading Area - Pipeline Liquids	0.02					1.23	0.001
Truck Loading Area - Oil	0.00						
Truck Loading Area - Oily Water	0.00						
Total	43.40	51.64	39.72	9.45	20.02	194,486	3.66

As detailed in the Plan Approval Application provided in Appendix 9A of Resource Report 97, the Project would result in an overall reduction of potential emissions for all criteria pollutants, HAPs, and CO_{2e}, including potential reductions for NO_x, CO, VOC, and HAPs. Therefore, we conclude the Project would not result in significant impacts on air quality but would result in pollutant emissions' reductions and would generally improve existing ambient air quality in the Project area.

7.2 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 (Leq) and the day-night sound level (Ldn). The Leq 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 Ldn takes into account the duration and time the noise is encountered. Specifically, in the calculation of the Ldn, 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 Ldn is approximately 6.4 dB above the measured Leq.

The EPA has indicated that an Ldn 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 5 dBA change is clearly noticeable, and a 10 dBA change is perceived as either twice or half as loud.

There are no applicable county, or local noise regulations associated with the Project.

Construction Noise

Noise would be generated during construction of the Project. Construction activities throughout the Project site would last up to the estimated eight months on an intermittent basis. Texas Eastern would conduct the majority of construction activities from 7:00 am until 7:00 pm,

⁷ Ascension no. 20200110-5252 filed January 10, 2020.

Monday through Saturday. However, Texas Eastern anticipates that the following activities may need to be completed overnight or over the weekend due to specific construction requirements or when other construction crews are demobilized:

- hydrostatic and/or pneumatic pressure testing;
- welding;
- x-ray activities including non-destructive testing of welds;
- depressurization of pipelines; and
- miscellaneous electrical or similar work inside building structures.

Construction noise associated with the above listed activities is expected to be short-term, intermittent, and is not expected to result in significant noise impacts on nearby NSAs. Texas Eastern is planning to perform the limited activities such as hydrostatic testing, X-ray, instrumentation and electrical installation work inside of the compressor station building during nighttime hours. These activities are expected to be well below the noise threshold limits of 55 dBA and would not impact nearby NSA's.

To mitigate construction noise levels during general construction activities (including daytime and nighttime activities), Texas Eastern would ensure standard sound muffling devices are kept in good working order. Based on the temporary nature of construction activities, Texas Eastern's commitment to conduct the majority of construction activities during daytime hours, and the mitigation measures Texas Eastern would employ during both daytimes and nighttime activities, we conclude that construction noise would not result in significant noise impacts on residents or the surrounding communities.

Operation

The proposed modifications would generate noise on a continuous basis (i.e., up to 24 hours per day) when operating. The noise impact associated with the Project would attenuate with distance. Noise generated at the Lilly CS would result primarily from the following operational noise sources:

- new turbine/compressor units;
- turbine exhaust and exhaust duct;
- gas piping and associated components;
- outdoor lube oil cooler; and
- air intake systems.

The results of the ambient sound survey were used in determining the proposed Project's noise impacts on nearby NSAs. Based on manufacturers' data, Texas Eastern determined the noise levels due to operation of the new proposed equipment at the Lilly CS. The results of the existing sound survey were then combined with the predicted noise impacts from the proposed new equipment to determine the noise impacts from operation of the Lilly CS at each NSA. The results of the operational noise analysis are provided below in table 9.

Lastly, Texas Eastern committed to the following noise control measures, as recommended by their noise consultant:

- enclosing the new turbine compressor units inside an acoustically-insulated metal building, constructed from appropriate building materials;
- installing an adequate silencer system on each turbine air intake and exhaust system;
- covering outdoor aboveground gas piping with acoustical pipe insulation;
- installing a low-noise lube oil cooler for each new turbine compressor unit; and
- installing a silencer on the new blowdown separator.

Table 9
Noise Analysis for the Proposed Modifications at the Lilly CS

NSA	Distance/Direction from New Units	Ambient Sound Level Ldn (dBA)	Estimated Existing Station Ldn (dBA)	Estimated Station Sound Level after Modifications Ldn (dBA)	Potential Decrease (dBA)
NSA 1	950 feet/ E	61.7	63.1	44.9	-18.2
NSA 2	600 feet/ S	52.4	53.8	51.0	-2.8
NSA 3	1,200 feet/ W	53.4	54.8	48.6	-6.2
NSA 4	950 feet/ NW	50.1	51.5	50.8	-0.7

The operational noise analysis in table 9 indicates that both the noise contribution from the new turbine compressor units and the total noise would be less than 55 dBA Ldn at all NSAs. Additionally, table 9 indicates that following Project modifications, the total noise from the Lilly CS during full load operation would be reduced from existing levels.

While the analysis above shows that noise impacts at the NSAs from the Project modifications at the Lilly CS would be below our 55 dBA requirement, to verify compliance with the FERC's noise standards, **we recommend that:**

Texas Eastern should file noise surveys with the Secretary of the Commission (Secretary) no later than 60 days after placing the modified Lilly CS into service. If a full power load condition noise survey is not possible, Texas Eastern should file an interim survey at the maximum possible load within 60 days of placing the modified station into service and file the full load survey within 6 months. If the noise from all the equipment operated at the Lilly CS under interim or full power load conditions exceeds an L_{dn} of 55 dBA at any nearby NSA, Texas Eastern should:

- a. **file a report with the Secretary, for review and written approval by the Director of the Office of Energy Projects (OEP), or the Director's designee, on what changes are needed;**
- b. **install additional noise controls to meet that level within 1 year of the in-service date; and**
- c. **confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the Secretary no later than 60 days after it installs the additional noise controls.**

Blowdown events generate noise at compressor stations and occur when pressure in the compressor casing, piping, or the entire station must be released in a controlled manner. Blowdown events cause a temporary increase in sound levels that would typically last for about 1 to 5 minutes. Because of the short duration and infrequent occurrence, we do not believe that blowdown events would be a significant contributor to operational noise from the Project.

Based on the predicted noise impacts at the Lilly CS, which would result in an overall decrease in noise levels in the Project vicinity, the sound mitigation measures proposed by Texas Eastern, and the recommendation stated above, we conclude that the Project would not result in significant noise impacts on residents or the surrounding communities.

8.0 RELIABILITY AND SAFETY

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

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

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

The operator must also establish a continuing education program to enable customers, the public, government officials, and those engaged in excavation activities to recognize a gas pipeline emergency and report it to appropriate public officials.

Facilities associated with the Project must be designed, constructed, operated, and maintained in accordance with DOT standards, including the provisions for written emergency

plans and emergency shutdowns. Texas Eastern would provide the appropriate training to local emergency service personnel before the facilities are placed in service.

The Project purpose is to meet the Pennsylvania regulations to reduce NO₂ emissions. We are confident that with the options available in the detailed design of Texas Eastern's facilities, that they would be constructed and operated safely.

Polychlorinated Biphenyls

Texas Eastern has previously conducted site characterization and remediation activities for PCB impacted soils at the Lilly CS as part of the requirements of a Consent Order and Adjudication between Texas Eastern and the PADEP and a Federal Consent Decree between Texas Eastern and the EPA. Texas Eastern successfully completed all requirements of the Consent Order and Adjudication and the Consent Decree. Texas Eastern would follow the procedures in accordance with EPA regulations found in 40 CFR 781 for removal, disposal, or storage of facilities impacted by PCBs. Impacted soils encountered during construction of the facilities for this Project would be managed in accordance with the Consent Order and Adjudication and Federal Consent Decree, and any other applicable federal and state regulations.

9.0 CUMULATIVE IMPACTS

In accordance with NEPA and with FERC policy, we identified other actions in the vicinity of the proposed Project 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. 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.

Actions outside the Project's geographic scope, as defined below in table 10, and timeframe were generally not evaluated because their potential to contribute to a cumulative impact would diminish with increasing distance and time from the Project.

Table 10	
Geographic Scope of Potential Impact of the Project	
Resource	Geographic Scope
Geological Resources and Soils	Limits of Project disturbance
Water Resources	Watershed boundary (Hydrologic Unit Code [HUC]-12)
Vegetation, Wildlife, and Special Status Species	HUC-12
Land Use, Recreation, and Visual Resources	1 mile
Cultural Resources	area of potential effects
Air Quality	Construction: 0.25 mile Operation: 31.07 miles (50 kilometers)
Noise	Construction: 0.25 mile for general construction activities, Operation: 1 mile

The EA analyzed the Project impacts on geology and soils; water resources; vegetation and wildlife; cultural resources; land use and visual resources; and air quality and noise. As described earlier in section B of this EA, the Project-related construction and operational impacts would not impact fisheries, cultural resources, or visual resources. Therefore, the project would not contribute to cumulative impacts within the geographic and temporal scope on these resources and they will not be discussed further. No projects were identified within the geographic and temporal scope for geology, soils, land use, construction air quality or noise. Therefore, these resources will not be discussed further. In addition, because the Project would result in an overall reduction in operational pollutant emissions and operational noise, it would not contribute negatively to cumulative impacts for operational air quality or noise, and as such, cumulative impacts on these resources were not considered in the cumulative impact analysis.

Texas Eastern obtained information about present and future planned developments by consulting federal, state, and local agency and municipality websites, reports, and direct communications; permit applications with various agencies; and online database searches. The projects identified as occurring within the resource-specific geographic scopes are discussed in table 11.

Table 11
Recently Completed, Current, and Reasonably Foreseeable Projects Affecting Resource Areas of Impact Affected by the Lilly Compressor Units Replacement Project

Name	County	Description	Construction Status	Distance to Project (mile)	Potentially Affected Resource Areas
US 22 Interchange Concrete Rehabilitation	Cambria	Pavement restoration	Under development	0.4-1.6	Wetlands, Waterbodies, Vegetation and Wildlife
Scalp Ave. Signal Improvements	Cambria	Signal improvements	Under development	1.3-1.7	Wetlands, Waterbodies, Vegetation and Wildlife
Mount Aloysius to Downtown Sidewalk Installation	Cambria	Sidewalk installation	Under construction	1.3	Wetlands, Waterbodies, Vegetation and Wildlife
PA 53 Lilly Burgoon Run Culvert	Cambria	Bridge rehabilitation	Under construction	1.5	Wetlands, Waterbodies, Vegetation and Wildlife
Penn Cambria High School	Cambria	Minor Source Operating Permit	Permit pending	1.7	Wetlands, Waterbodies, Vegetation and Wildlife
PA 53 Cassandra Culvert	Cambria	Bridge rehabilitation	Under construction	3.3	Wetlands, Waterbodies, Vegetation and Wildlife
Fuel Recovery Inc/ Sonman Refuse Site	Cambria	Minor Source Operating Permit	Unknown	3.9	Wetlands, Waterbodies, Vegetation and Wildlife
N RR Ave. to Blair Co. Line Resurfacing	Cambria	Roadway resurfacing	Under development	5.5	Wetlands, Waterbodies, Vegetation and Wildlife
Pets After Life SVC/Portage	Cambria	Minor Source Operating Permit	Unknown	6.6	Wetlands, Waterbodies, Vegetation and Wildlife
South Whilmore Little Conemaugh River Culvert	Cambria	Bridge rehabilitation	Under development	7.5	Wetlands, Waterbodies, Vegetation and Wildlife

Groundwater

Localized groundwater impacts may occur due to trenching, dewatering, and installation of the stormwater retention basin; however, the majority of these impacts would be short-term, and minimized by mitigation measures. Given this, and Texas Eastern's implementation of its SPCC Plan and Soil and Groundwater Management Plan, we do not expect the Project's minor additive impacts on groundwater would contribute to any significant cumulative impacts associated with groundwater quality or withdrawal and depletion.

Surface Water and Wetlands

As previously discussed in sections B.3.2 and B.3.3, any impacts on surface water resources would be minimized per our Procedures and impacts are expected to be short term and minor. The Project would temporarily impact less than 0.1 acre of PEM wetland located within the existing station fenceline and would be restored and transition relatively quickly back to a community with functionality similar to that of the preconstruction state (typically within 1 to 5 years).

Cumulative impacts would be limited primarily to the waterbodies and wetlands that are affected by other actions within the same HUC-12 watershed that are constructed in a similar timeframe as the Project. Ten other projects were identified within the same geographic scope that are estimated to be recently completed, are currently under development, or have unknown timelines, so it's possible that they could occur during a similar time as the Project. These include road improvements (culverts, bridges, signal improvements, resurfacing), sidewalk installation, and construction activities at a high school, a refuse site, and a Pet's After Life location. However, the nearest identified project (US 22 Interchanges Concrete Rehabilitation) is located 0.4 mile from the Project and would not impact the wetland or waterbodies in the Project area. Given the proposed activities and the localized nature of the wetland and waterbodies that could be affected, the Project, when combined with the other identified projects would not result in cumulative impacts on wetlands and surface water resources.

Vegetation and Wildlife

As previously discussed in section B.4.1 and B.4.2, the Project's primary impacts on vegetation and wildlife would be from clearing, grading, and temporary removal of vegetation and associated wildlife habitats that could potentially lead to displacement of wildlife, disrupting daily routines, and abandoning reproductive efforts. However, these impacts would be limited primarily to the duration of construction (about 8 months) and would be restored to previous conditions following construction.

Cumulative impacts on vegetation and wildlife could occur if other projects occur within the same geographic scope, and within a similar timeframe. Ten other projects were identified within the same geographic scope that are estimated to be recently completed, are currently under development, or have unknown timelines, so it's possible that they could occur during a similar time as the Project. These include road improvements (culverts, bridges, signal improvements, resurfacing), sidewalk installation, and construction activities at a high school, a refuse site, and a Pet's Afterlife Services location. The nearest identified project (US 22 Interchanges Concrete Rehabilitation) is about 0.7 mile from the Project. It is assumed that the other identified projects

occur in areas that are already disturbed and would implement best management practices and adhere to permit conditions similar those required for the Project, including minimizing vegetation clearing and restoring temporary workspaces to preconstruction conditions as much as practicable. Because impacts on vegetation and wildlife are expected to be primarily short-term, cumulative impacts on vegetation and wildlife, when combined with the other identified projects, are expected to be temporary and minor.

Conclusion

The cumulative impacts review as part of the NEPA process evaluates the incremental effects of a proposed project and multiple similar projects in the same region at the same time, or in a similar timeframe, to determine whether the additive effect of those projects would result in significant impacts to the regional environment. As discussed previously, the Project and other projects in the area would have or have had minimal cumulative impacts because the other projects are predominately outside the cumulative impact area and those projects in the area are likely to occur in areas that are already developed. As a result, no significant cumulative impacts are anticipated when combining the Project with other identified projects.

Additionally, we identified planned activities in the Project area that met the criteria for inclusion in the cumulative impact analysis. Implementation of best management practices and proposed mitigation plans would minimize environmental impacts and when the impacts of the Project are added to those from the other identified projects, the cumulative impacts would be minimal. We conclude that impacts would be temporary in nature and no significant cumulative impacts would be incurred from the Project.

C. ALTERNATIVES

In accordance with NEPA and Commission policy, we considered and evaluated alternatives to the proposed action, including the no-action alternative and system alternatives. These alternatives were evaluated using a specific set of criteria. The evaluation criteria applied to each alternative include a determination whether the alternative:

- meets the objective of the proposed project;
- is technically and economically feasible and practical; and
- offers a significant environmental advantage over the proposed project.

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 general workspace requirements. Where appropriate, we also use site-specific information (e.g., field surveys or detailed designs). Our environmental analysis and this evaluation consider quantitative data (e.g., acreage) and uses common comparative factors such as total length, amount of collocation, and land 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 a 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., the third evaluation criterion). 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.

One of the goals of an alternatives analysis is to identify alternatives that avoid significant impacts. In section B, we evaluated each environmental resource potentially affected by the Project and concluded that constructing and operating the Project would not significantly impact these resources. Consistent with our conclusions, the value gained by further reducing the (not significant) impacts of the Project when considered against the cost of relocating the facilities to a new set of landowners was also factored into our evaluation.

No Action Alternative

Under the no-action alternative, the proposed facilities would not be constructed, and the environmental impacts associated with the Project would not occur. However, the Project's objectives would not be met. The no-action alternative would prevent this portion of the Texas Eastern system from remaining in compliance with the Title V Permit for the Station (#06-05033), which specifically requires that the four existing compressor units be permanently shut down by January 1, 2024. This would prevent Texas Eastern from continuing operations of the pipeline and allowing delivery of natural gas to existing customers. Additionally, without replacement of the compressor units Texas Eastern would not be able to meet the Pennsylvania regulations to reduce NO₂ emissions. The no-action alternative would not meet the Project's purpose and need and would not result in lower NO₂ emissions. Therefore, we have dismissed this alternative as a reasonable alternative to meet the Project objectives.

System Alternatives

System alternatives are alternatives to the proposed action that would make use of existing, modified, or proposed Project(s) systems to meet the stated objective of the Project. System alternatives involve the transportation of the equivalent amount of natural gas by the modification or expansion of existing pipeline systems or by other new pipeline systems. Any other systems would not meet the purpose and need of the Project to reduce emissions and meet the Pennsylvania

regulations. Additionally, we have not identified other systems that would be able to meet the transportation needs of this project. Therefore, this alternative has been removed from further consideration.

Site Alternatives

As discussed in section B above, the majority of construction would occur within existing Station facilities and previously disturbed areas. Our review of the Project found that environmental impacts associated with the Station have been minimized, therefore identification of an alternative site location would not serve to meet the purpose of the project or further minimize impacts.

Conclusion

Based on the limited environmental impact associated with this Project, we did not identify any unresolved resource conflicts that would present a need to examine further alternatives. Additionally, no comments were received regarding resources that would be impacted by the Project. Because the impacts associated with the proposed Project are not significant, we did not evaluate additional alternatives. Therefore, we conclude that the proposed Project is the preferred alternative to meet the Project objectives.

D. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in this EA, we have determined that if Texas Eastern constructs and operates the proposed facilities in accordance with its application and supplements, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment. We recommend that the Commission's Order contain a finding of no significant impact and include the mitigation measures listed below as conditions to any Certificate the Commission may issue.

1. Texas Eastern 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. Texas Eastern 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 OEP, or the Director's designee, **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 the 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**, Texas Eastern 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 Project figures. **As soon as they are available, and before the start of construction**, Texas Eastern shall file with the Secretary any revised detailed survey alignment maps/figures 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 Project figures.

5. Texas Eastern shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/figures/aerial photographs. Each area must be approved in writing by the Director of OEP, or the Director's designee, **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 Certificate and before construction begins,** Texas Eastern shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. Texas Eastern must file revisions to their plan as schedules change. The plan shall identify:
 - a. how Texas Eastern 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 Texas Eastern 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 Texas Eastern 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 Texas Eastern's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Texas Eastern will follow if noncompliance occurs; and
 - h. for each discrete facility, 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. Texas Eastern shall employ at least one EI for the project. The EI shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
 - d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - e. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Texas Eastern shall file updated status reports for the Project with the Secretary on a **biweekly basis until all construction and restoration activities are complete**. On request, these status reports will also be

provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

- a. an update on Texas Eastern's efforts to obtain the necessary federal authorizations;
 - b. the construction status of the project, work planned for the following reporting period and any scheduled 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 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 Texas Eastern from other federal, state, or local permitting agencies concerning instances of noncompliance, and Texas Eastern's response.
9. Texas Eastern must receive written authorization from the Director of OEP, or the Director's designee, **before commencing construction of any Project facilities**. To obtain such authorization, Texas Eastern must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
 10. Texas Eastern must receive written authorization from the Director of OEP, or the Director's designee, **before placing the modified facilities into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the areas affected by the Project are proceeding satisfactorily.
 11. **Within 30 days of placing the authorized facilities in service**, Texas Eastern 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 Texas Eastern 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. Texas Eastern shall file noise surveys with the Secretary **no later than 60 days** after placing the modified Lilly CS into service. If a full power load condition noise survey is not possible, Texas Eastern shall file an interim survey at the maximum possible load **within 60 days** of placing the modified station into service and file the full load survey **within 6 months**. If the noise from all the equipment operated at the Lilly CS under interim or full power load conditions exceeds an L_{dn} of 55 dBA at any nearby NSA, Texas Eastern shall:
- a. file a report with the Secretary, for review and written approval by the Director of OEP, or the Director's designee, on what changes are needed;
 - b. install additional noise controls to meet that level **within 1 year** of the in-service date; and
 - c. confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

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Appendix A

Project Map

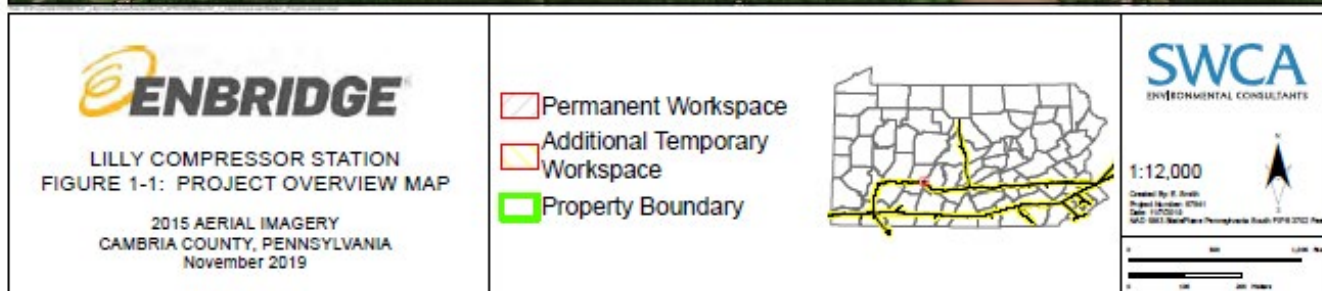


Figure 2
Project Overview Map